SAADHAK UPSC

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Indian Polity

Social Issues

Government Schemes

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JULY 2024
TO
MARCH 2025

Places in News

International Relations

Art and Culture

Environment & Ecology

Science & Technology

MASTER YOUR MIND
MAXIMISE YOUR STRATEGY

Editor's Note

Dear Aspirants,

With *UPSC Prelims 2025* set for **May 25**, the countdown to one of the most defining milestones in your journey has begun. This exam is more than a test of knowledge—it is a challenge of **precision, perspective, and strategic preparation**. Success does not depend on how much you know alone, but on how **effectively** you apply that knowledge. This is where *Saadhak* steps in.

More than just a magazine, *Saadhak* is a **philosophy**—one that embodies the **spirit of perseverance, discipline, and unwavering commitment**. A *Saadhak* is every aspirant who dares to **strive, overcome challenges, and relentlessly pursue excellence**. With this **inaugural edition**, we bring you a **structured, exam-focused compilation** of current affairs, designed to help you **connect the dots, recognize emerging patterns, and think like the examiner**—ensuring that every effort you invest translates into meaningful progress.

Our mission remains clear: to equip you with **clarity, context, and the tools** to **conquer the UPSC battlefield**—so you mark the **right dots in Prelims**. Covering current affairs from **July 2024 to March 31, 2025**, *Saadhak* serves as both a **stepping stone for Prelims** and a **comprehensive last-minute revision resource**, streamlining your preparation for maximum efficiency.

To further strengthen your approach, our upcoming editions will feature **integrated infographics to simplify complexity** and a **question-answer bank to sharpen your retention and application skills**—ensuring that your learning is not just passive but **active and impactful**.

Yet, beyond strategies and resources, remember this: **LBSNAA is not just a destination—it is the beginning of a lifelong commitment to service and leadership**. The journey to it is demanding, but **those who dare to persevere will find their place among the nation's finest**.

Let *Saadhak* be your **companion and guide** in this journey.

Wishing you clarity and success,

Ishrat kashafi
Editor-in-Chief,
Saadhak

About the Editor-in-Chief

Ishrat Kashafi, the COO of BYOL Academy and Editor-in -Chief of *Saadhak*, is a dedicated scholar and leader with a deep understanding of the civil services journey, shaped by her own experience of appearing in the UPSC and JKPSC Mains exams. She holds a Master's in Life Sciences, an MBA in Digital Business, a Master's in Women and Gender Studies, and a B.Ed. Her academic depth, combined with firsthand exposure to the challenges of competitive exams, allows her to curate *Saadhak* as more than just a magazine—it is a guiding light for aspirants. With a passion for education and empowerment, she strives to make quality knowledge accessible, helping candidates navigate their path to success—one step closer to *LBSNAA* and their dream of serving the nation.

"
To
The Aspirants, The Seekers

Forged by Trials, Destined to Shine

The river begins in mountains steep,
Through stone and storm, its waters leap.
It twists, it turns, yet carves its way,
Until it meets the sea one day.

The diamond glows, so pure, so rare,
Forged by trials none could bear.
And gold must burn in fire's embrace,
Before it shines with timeless grace.

The hawk first falls before it flies,
It braves the winds, it claims the skies.
Through storms it soars, through trials grand,
To rule the heavens, bold and planned.

So fear no fall, nor trials grim,
They are the steps that make you win.
For every soul that dares to fight,
Will rise and shine with boundless light.

✍ **Ishrat Kashafi**

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Prologue

The **countdown to UPSC Prelims 2025** has begun, and with it, the challenge of navigating an ocean of information. Success in this exam is not just about how much you study—it is about how **strategically you prepare**. The difference between an aspirant and an achiever lies in the ability to **filter the essential from the irrelevant, to recognize patterns, and to think like an examiner**.

Saadhak is not just a magazine; it is a **refined tool of preparation**, designed to help you **connect the dots, anticipate trends, and sharpen your analytical edge**. Every insight, every analysis, and every perspective presented here serves a singular purpose—to **maximize your efficiency and accuracy in the exam hall**.

The journey to *LBSNAA* is rigorous, demanding more than just knowledge. It calls for **perseverance, clarity, and a relentless pursuit of excellence**. *Saadhak* stands with you in this pursuit—helping you not just prepare, but prepare with precision.

Stay strategic. Stay focused. *LBSNAA* **awaits those who dare to persevere.**
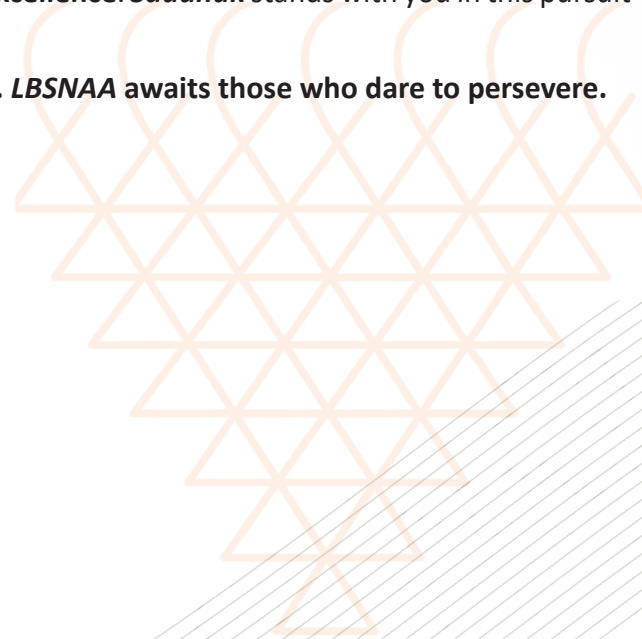
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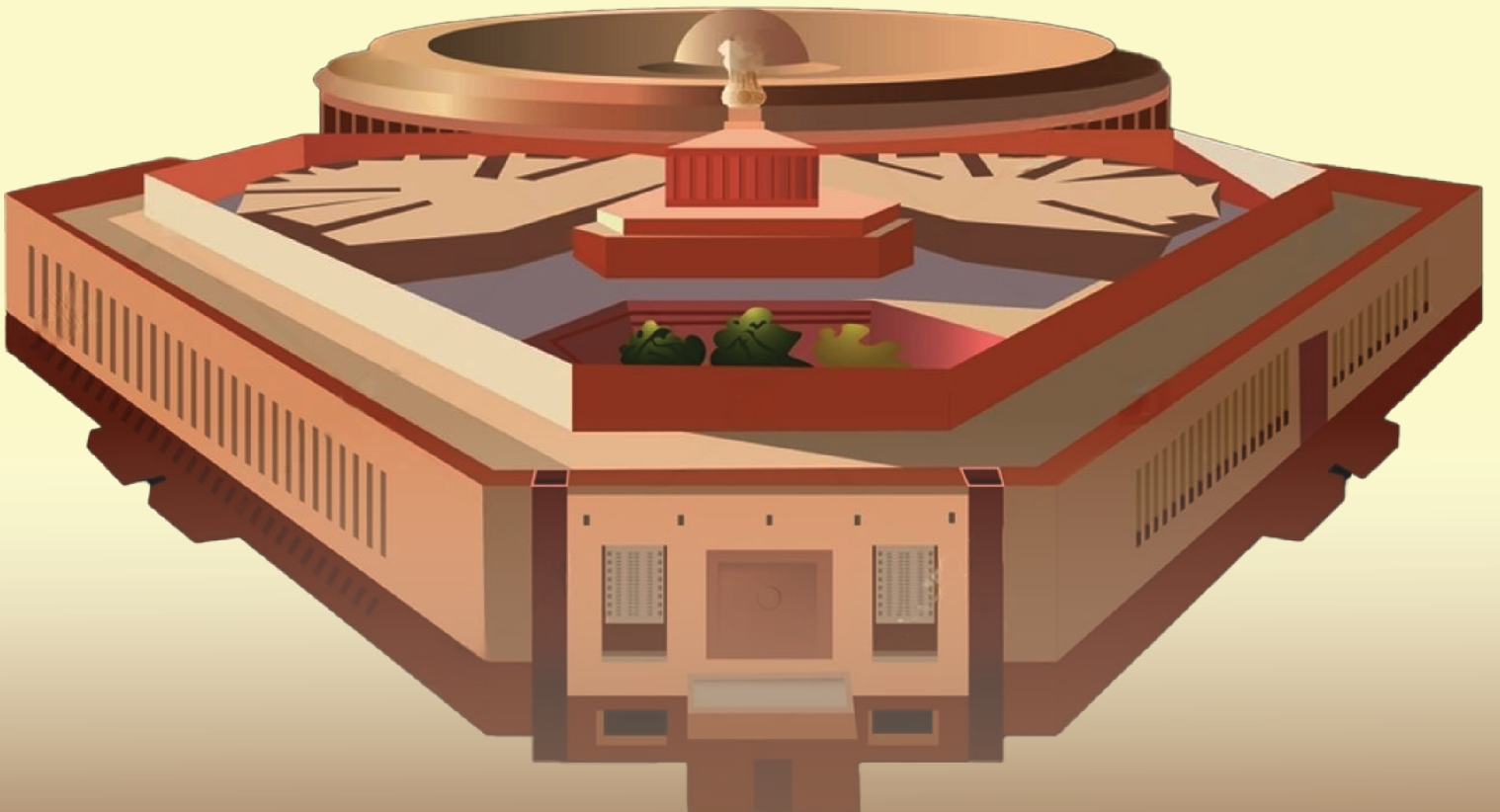
ONE NATION, ONE ELECTION

Current Context

- The Union Cabinet has approved the "One Nation, One Election (ONOE)" plan, which seeks to align state assemblies and Lok Sabha elections across the country. Based on recommendations from a commission led by former President Ram Nath Kovind, the plan seeks to amend the constitution to allow for the gradual introduction of simultaneous elections, a substantial change in India's electoral system.

Evolution of Simultaneous Elections in India

- The concept of simultaneous elections began with the Government of India Act of 1935, which partially coordinated parliamentary elections. Following independence, this tradition began with the **1952 General Election,** in which all state assemblies and the Lok Sabha were elected simultaneously, maintaining political stability through **1957, 1962,** and **1967**. This cycle was broken, though, by the early dissolution of the State Assembly **(1968–1969)** and the Lok Sabha **(1970)**, which led to different election schedules.

Efforts to Reintroduce One Nation, One Election (ONOE) Plan

- In order to minimize expenses and disturbance, **the Law Commission (1999)** recommended holding elections simultaneously.
- **The Parliamentary Standing Committee (2015)** emphasized the benefits of ONOE in terms of cost savings and continuity of governance.
- **NITI Aayog (2017)** proposed a path for restoring ONOE.

Advantages of One Nation, One Election

- **Cost Savings:** Simultaneous elections can significantly cut costs for security officers, poll workers, and election materials. The cost of Lok Sabha elections has gone up from ₹**10.5 crore** in **1951–52** to ₹**55,000** crore in **2019** and ₹**1,00,000** crore in 2024 due to the growing scale and complexity of the electoral process. Cutting back on elections might save between ₹**7,500** and **12,000** crore, which could then be used for infrastructure, healthcare, and education.

- **Reduced Disruptions:** Increased Voter Participation: Repeated elections lead to voter fatigue and lower turnout in by-elections. The **2024** Lok Sabha election saw a turnout of **65.79%**. Consolidating elections may alleviate fatigue, reenergize voter participation, and improve turnout by **5–10** percent.
- **Increased Participation of Voters:** Voter fatigue and decreased by-election turnout are two effects of repeated elections. The turnout for the **2024** Lok Sabha election was **65.79%.** Consolidating elections could boost turnout by **5–10%,** relieve fatigue, and increase voter engagement.
- R**educing Electoral Malpractices:** Frequent elections can lead to vote-buying, resource misuse, and illegal money power. During the **2024** state assembly elections in Maharashtra and Jharkhand, enforcement agents recovered almost ₹**1,000** crore in cash, freebies, etc. ONOE would improve monitoring and reduce electoral malpractices.
- **Economic Stability:** Frequent elections, like Karnataka's ₹**150** crore loss in **2023** due to disruptions in transport and sales, hinder local economies. ONOE would reduce such interruptions, ensuring stability and growth. The Kovind Committee projects a **1.5%** GDP boost and a **17.67%** increase in public spending driving economic growth.

Challenges with Implementation of One Nation, One Election Plan

- **Constitutional and Legal Complexities:** A number of constitutional provisions, such as Articles **83, 85, 172,** and **356** that regulate the term and dissolution of legislatures, must be amended in order to implement ONOE. In some state assemblies, duration may need to be changed in order to synchronize state elections, which raises questions about their democratic legitimacy. Furthermore, synchronized terms could be disrupted by the abuse of Article **365** (the President's Rule).
- **Possible Danger to Federalism:** Opponents contend that ONOE may erode state sovereignty by elevating national concerns above regional ones. For example, in the **2019** simultaneous Lok Sabha and **Odisha** Assembly elections, state-specific concerns like unemployment in tribal areas and agricultural poverty in Odisha received little attention.Excessive centralization could undermine cooperative federalism, according to the Sarkaria Commission **(1988).**

- **Democratic Accountability Disruption:** Regular elections are an essential tool for holding the public accountable. For instance, voter discontent during the **2022** Punjab Assembly elections resulted in a regime change. This **system of periodic inspections may be weakened by ONOE's reduction in election frequency,** giving governments more time to put off dealing with pressing issues until the end of their term.
- **Political Opposition and Lack of Agreement:** A number of political groups, particularly regional ones, oppose ONOE because they worry about becoming irrelevant in a synchronized system. During consultations led by former President Ram Nath Kovind, **15** parties opposed the plan, despite **32** parties supporting it.
- **Disruption from Early Dissolutions:** The synchronized election cycle may be disturbed if a state or the federal government dissolves too soon. For instance, unscheduled elections resulted from the overthrow of the governments of Maharashtra in **2022** and Karnataka in **2019.** The cost-effectiveness of ONOE would be compromised if election schedules were synchronized, as this would necessitate either conducting interim elections or frequently reimposing the President's Rule.

Global Examples of One Nation, One Election Model

- In **2019**, **Indonesia** implemented the "One Nation, One Election" model, with elections for the President, Vice President, and national and regional legislative bodies held on the same day. This idea was further tested in **2024**, with approximately **200 million** voters participating in five stages of elections, making it the world's largest single-day election.
- Similarly, **South Africa** has simultaneous elections for the National Assembly and Provincial Legislatures, with municipal elections held on a separate five-year cycle. **Sweden**, on the other hand, uses a proportional electoral system, with elections for Parliament and local councils every four years and municipal elections every five years.

Way Forward

- **Pilot Implementation & Flexible Election Cycles:** In line with these global examples, India's ONOE implementation could begin with pilot projects. Prior to scaling up, test the ONOE model in union territories such as Delhi, Puducherry, and Chandigarh. Implement flexible election cycles regionally (North, South, East, and West) over a **5- to 10-year** period to address governance or security

challenges without disrupting national elections.
- **Digital Electoral System and AI Integration:** Create a digital platform that uses blockchain technology to automate voter lists, polling, candidate filing, and results management. Use AI to optimise resource allocation, anticipate voter participation, and identify high-risk locations for better election management.
- **Conditional Financial Incentives and Contingency Fund:** Provide financial incentives to states that coordinate their election cycles with the ONOE, encouraging collaboration without requirements. Create a contingency election fund to cover unforeseen elections, maintaining financial stability, and preventing delays in the ONOE timeline.
- **Citizen Engagement and Participatory Democracy:** Use participatory methods like online surveys, public consultations, and mid-term reviews to ensure accountability and citizen participation throughout the election process.
- **Digital Voting for Inclusivity:** Gradually introduce digital voting for urban migrants and NRIs to reduce administrative complexity and increase participation, hence improving electoral inclusivity.

Conclusion

The "One Nation, One Election" concept aims to boost electoral system efficiency, lower costs, and enhance governance in India. Its successful implementation will require careful planning, modifications to the law, and balancing federal authority with national interests. By using a staged approach and taking lessons from other countries, India can ensure that the reforms lead to a more unified and efficient system.

UPSC Mains Model Question

Q. In India, "One Nation, One Election" is being contemplated as a possible electoral reform. Talk about the benefits and difficulties of putting this plan into place while taking administrative, political, and constitutional factors into account. Draw insights from global examples of similar models and suggest measures for its implementation in India.(250 words)

GOVERNOR: DEFENDER OF THE CONSTITUTION OR MERE FIGUREHEAD?

Current Context

Recently, in an unexpected turn of events, **Tamil Nadu Governor R. N. Ravi** exited the state Assembly, citing a breach of protocol due to the omission of the national anthem at the commencement of the session. The episode has escalated tensions between the Governor and the state government, igniting fresh debate regarding constitutional propriety and political maneuvering.

The governor of a state in India is an **independent constitutional office** and is not under the control of the central government, but the role of the Governor in Indian federalism has long been debated—w**hether they serve as protector and defender of the Constitution or merely as an instrument of the central government.**

About the post of Governor

- A Governor serves as the **constitutional head of a state in India**, appointed by the **President of India.** The Governor possesses considerable ceremonial authority, but their executive powers are predominantly exercised based on the counsel of the Chief Minister and the Council of Ministers.
- **Article 153** of the Indian Constitution states that each state will have a Governor and permits a single individual to be appointed as the Governor for more than one states.
- The Governor's duties encompass supervising the establishment of the state government, granting approval to legislation, convening and dismissing the state legislature, and issuing ordinances when the legislature is not in session.
- With powers outlined in Part VI of the Constitution, the Governor is the constitutional head and top executive of the state. Apart from that, the Governor serves as a representative of the central government, therefore fulfilling a dual function that makes the post indispensable in the state executive.

The Role of the Governor in India

In India, the Governor functions as the constitutional head of a state, representing the President of India at the state level.

Although the role is predominantly ceremonial, the Governor possesses substantial responsibilities and authority that facilitate the effective operation of the state's governance.

1. **Appointment and Tenure:** The Governor is appointed by the President of India and serves at the President's discretion, signifying that the President can dismiss the Governor at any moment. The Governor's function is intended to be neutral, as they embody the central power within the state. Although each state has a single Governor, there are instances where a Governor may assume extra responsibilities for multiple states.

2. **Key Responsibilities**

- **Establishment of the State Government:** A primary responsibility of the Governor is to facilitate the formation of a government in the state following an election. The Governor designates the Chief Minister (the head of the majority party) and other ministers who constitute the state government.
- **Summoning and Proroguing the Legislature:** The Governor possesses the ability to convene and prorogue the state legislature. The Governor may dissolve the state legislative assembly if necessary.
- **Assenting to Bills:** Following passage by the state legislature, a bill is forwarded to the Governor for assent. The Governor may either grant assent to the bill or refuse it. In some instances, the Governor may withhold the bill for the President's endorsement.

3. **Authority of the Governor**

- **Executive Powers:** The Governor possesses executive powers, which encompass the authority to select officials like the Advocate General, State Election Commissioner, and members of the State Public Service Commission. The Governor is responsible for appointing judges in state courts.
- **Legislative Powers:** The Governor plays a crucial role in the legislative process. They possess the authority to address the state legislature, dissolve the assembly, and convene fresh sessions. The Governor possesses the right to withhold some bills for the President's endorsement.
- The Governor possesses the authority to give pardons or mitigate the sentences of guilty individuals under specific circumstances. This authority may be exercised upon the counsel of the state administration or under exceptional circumstances.

4. **Discretionary Authority:** While the Governor's position is predominantly ceremonial and they typically operate on the counsel of the Council of Ministers, there are occasions when they may use discretion.
- **President's Rule:** In the event of state government failure or a breakdown of constitutional machinery, the Governor may propose the imposition of President's Rule pursuant to Article 356 of the Constitution, enabling the central government to assume control of the state.
- **Formation of Government:** In the event that no party achieves a definitive majority post-elections, the Governor is required to exercise discretion in inviting the party or coalition deemed capable of establishing a stable government.

Dual Role of Governor

The Governor in India possesses a distinct dual function, both as the constitutional head of a state and as a representative of the central government. This dual role is fundamental to India's federal framework, equilibrating the authority of the state and the Union.

1. **Function as the Constitutional Head of State**
- **Executive Powers:** The Governor, as the constitutional head of a state, executes ceremonial and administrative duties to facilitate the efficient operation of the state government. The Governor operates based on the counsel of the Council of Ministers led by the Chief Minister.
- **Legislative Powers:** Responsibilities encompass convening and adjourning the legislature, granting assent to legislation, and ensuring compliance of laws and government with the Constitution. The Governor supervises the selection of essential state officials, including the Advocate General and the State Election Commissioner.
2. **Function as the Representative of the Central Government**
- The Governor serves as the intermediary between the state and the federal government. This duty enables the Union government to oversee the operations of state administration and guarantee adherence to constitutional mandates. The Governor may present reports to the President of India regarding significant matters in the state, including law and order or political instability.
- The Governor possesses the right to propose President's Rule (pursuant to Article **356**) if the state government does not operate in accordance with constitutional standards.

3. **Reconciling the Dual Function**
   The Governor's dual position frequently necessitates the preservation of a precarious balance:
- The Governor must maintain the autonomy of the state government while serving as a neutral constitutional authority.
- Conversely, the Governor must guarantee that the state machinery functions within the parameters of the Constitution and adheres to central laws and policies.

Challenges in the Dual Role

1. **Political Allegiances:** The President's nomination of the Governor, based on the central government's counsel, occasionally prompts debates over impartiality, particularly during disputes with the state government.
- **West Bengal 2024: Governor C.V. Ananda Bose** and **CM Mamata Banerjee** disagreed in 2024, with Banerjee accusing the Governor of aligning with the **central government's policies.** This conflict raised concerns about the **impartiality** of governors, given their **president-appointed role**, often seen as influenced by the central government.
2. **Misuse of Power:** The **Governors Committee (1971)** highlighted the governor's duty to submit regular updates on the political situation and to make sure the state's administration does not fall apart because of political instability. However, the central government has regularly abused the imposition of President's Rule (Article 356), which is meant to apply for constitutional failures in the state.
- **Maharashtra (2019):** Following a political crisis, **President's Rule** was established in November 2019 in Maharashtra. Despite the **Shiv Sena-NCP-Congress alliance** holding a majority, the **Governor's decision** to invite the BJP to form the government gave rise to accusations of political bias and abuse of power, with views of **central government influence** weakening the state's constitutional process.
3. **Federal Tensions:** The dual position frequently engenders conflict between the state and the central government, especially when the governing parties at both tiers are politically divergent.
- **Tamil Nadu (2021):** Strains emerged between Governor R.N. Ravi and Chief Minister M.K. Stalin about matters such as NEET and state autonomy, accompanied by accusations of the Governor's alignment with central government policy.

4. **Misuse of Discretionary Authority:** The Governor's discretionary power to invite the leader of the largest party or alliance to form the government following an election has frequently been misused to benefit a particular political party.

- Examples from Goa **(2017)**, Meghalaya **(2018)**, Manipur **(2017)**, and Karnataka **(2018)** highlight the necessity of establishing appropriate checks and balances to expedite the operation of this office in the current political environment.

Way Forward

- P**rudent and Unbiased Function of the Governor:** For the effective operation of a democratic government, it is essential that the Governor employs their discretion and judgment with fairness, impartiality, and efficiency. The Governor must operate in a manner that upholds democratic principles and guarantees transparency in decision-making.

- **Requirement for Checks and Balances:** It is essential to include explicit checks and balances to optimize the operations of the Governor's office. This would uphold accountability and guarantee that the office fulfills its constitutional function efficiently.

- **Explicit Appointment Protocols and Fixed Tenure:** The process for appointing Governors must be explicitly defined, and the terms of their appointment should provide a fixed duration of service. This would safeguard Governors from the excessive influence of the central government and furnish them with the stability required to operate autonomously.

- **Guaranteeing Autonomy of Action:** It is essential to empower the office of the Governor with the requisite autonomy to act independently of the national government. This will eliminate superfluous "instructions" in the office and enable Governors to execute their responsibilities impartially.

- **Robust Reforms:** The recommendations of the Sarkaria and Punchhi Commissions should be adhered to in their genuine essence. These commissions have offered significant reforms to enhance the Governor's position and preserve the equilibrium between state and central governments.

Conclusion

The Governor's role is essential for the effective functioning of constitutional democracy, but reforms are necessary to ensure impartiality and integrity in carrying out their duties. The government should implement the recommendations of the **Sarkaria and Punchhi Commissions** regarding the appointment and removal of governors. While the Supreme Court has affirmed that Governors are independent and not subordinate to the central government, there have been instances of perceived bias towards the center. To preserve the integrity of the office, Governors must impartially balance state and central authority, ensuring the free and fair functioning of democracy.

Indian Polity

VISHVASYA-BLOCKCHAIN TECHNOLOGY STACK

Current Context
- The **Ministry of Electronics and Information Technology** launched the **Vishvasya-Blockchain Technology Stack** to provide Blockchain-as-a-Service with a geographically distributed infrastructure. The infrastructure is hosted across National Informatics Centre Data Centers in **Bhubaneswar, Pune, and Hyderabad.**

Key Features
- Blockchain-as-a-Service allows organizations to use blockchain technology without developing their own networks.
- Permissioned blockchain ensures restricted access for security and controlled participation.
- Supports developers, infrastructure providers, and organizations for blockchain deployment.

Benefits
- Enhances transparency and trust by providing a single source of truth.
- Strengthens security by preventing **data tampering.**
- **Reduces dependency on skilled manpower for blockchain implementation.**
- Enables efficient and tamper-proof digital record management.

Applications in India
- **E-Governance:** e-Stamps, judiciary applications, Indian Police Service training records.
- **Cybersecurity:** Pramanik for mobile application verification, Internet of Things device security.
- **Digital Certificates:** Domicile, caste, property, and education certificate management.
- **Agriculture:** Cotton bale tracking using barcode-based identification.

PORT BLAIR RENAMED AS SRI VIJAYA PURAM

Current Context
- **Port Blair**, capital of **Andaman and Nicobar Islands**, renamed **Sri Vijaya Puram** to **remove colonial legacy** and honor the region's **freedom struggle**.

Key Facts
In 2018, three islands were renamed from the Union Territory-
- Ross Island → Subhash Chandra Bose Dweep
- Neil Island → Shaheed Dweep
- Havelock Island → Swaraj Dweep

Process of Renaming a City
- **Proposal Submission** – Initiated by a **Member of the Legislative Assembly (MLA)**.
- **State Legislature Approval** – Debated and passed by **simple majority**.
- **Submission to Ministry of Home Affairs (MHA)** – Consults agencies like **Survey of India, Railways, Intelligence Bureau**.
- **No Objection Certificate (NOC)** – Issued after clearance.
- **Official Gazette Notification** – State government officially validates the name change.
- **Public Implementation** – Updates maps, government IDs, signage, and official records.

Significance
- **Removes colonial names** and restores **cultural identity**.
- **Recognizes historical contributions** of Andaman and Nicobar Islands.
- **Aligns with India's nationalistic approach** to place naming.

IMPACT OF EMERGENCY PROVISIONS ON CENTRE-STATE RELATIONS

Current Context
- Violence in **Manipur** has reignited debate on **Centre-State relations** and the use of **Articles 355 and 356**. These provisions grant the **Centre authority** to intervene in **State affairs**, impacting India's **federal structure**.

Emergency Provisions & Their Impact
- **Article 355:** Mandates the **Centre** to protect **States** from **external aggression** and **internal disturbances** while ensuring constitutional governance.
- **Article 356:** Allows **President's Rule** if a **State government fails** to function as per the Constitution, transferring control to the **Centre**.

Judicial Safeguards Against Misuse
S.R. Bommai Case (1994):
- **President's Rule should be a last resort** and requires a **floor test** before dismissing a government.
- **Judicial Review** can revoke misuse of **Article 356**.

Expanded Scope of Article 355:

- Later rulings allowed **Centre's intervention** through **deployment of forces** without invoking **President's Rule** (e.g., **Sarbananda Sonowal Case, 2005**).

Key Recommendations

Sarkaria, Punchhi, and Other Commissions:

- **Use Article 356 only in extreme emergencies**.
- **The Governor's role should be neutral**, with reports subject to **public scrutiny**.
- **Inter-State Councils should resolve conflicts** before invoking **President's Rule**.

JUDICIAL REVIEW OF DELIMITATION COMMISSION

Current Context

- The **Supreme Court**, in Kishorchandra Chhaganlal Rathod Case (2024), ruled that **constitutional courts** can review **Delimitation Commission orders** if found **manifestly arbitrary**.

Understanding the Delimitation Commission

- **Purpose:** Determines **constituency boundaries** and **seat allocation** for **Lok Sabha** and **State Assemblies**.
- **Legal Framework:**
  - **Article 82:** Empowers **Parliament** to regulate **delimitation**.
  - **Constituted Four Times** – **1952, 1963, 1973, 2002**.
  - **Statutory Body** with independent authority.
- **Finality of Decisions: Not subject to judicial challenge**, except on grounds of **manifest arbitrariness** and Orders are presented to **Lok Sabha and State Assemblies**, but **cannot be modified**.

HOME VOTING: ENHANCING ELECTORAL ACCESSIBILITY

Current Context

- The **Election Commission of India (ECI)** introduced home voting for the first time in the 2024 elections, ensuring greater electoral accessibility under its motto, **"No voter is left behind."**

Home Voting Facility

- **Process: Postal ballot voting** conducted at the voter's residence and **Polling staff and security personnel** ensure **secrecy and procedural integrity**.
- **Beneficiaries: Persons with Disabilities (PwDs)** with **40% benchmark disability** and **Senior citizens** aged **85 years and above**.

Other Measures for Inclusive Voting

- **Abolition of Form-M:** Simplifies voting for **Kashmiri migrants** in **Jammu and Udhampur**.
- **SVEEP (Systematic Voter's Education and Electoral Participation):** Aims to **educate and engage PwDs**, their **families**, and **polling officials**.
- **Proposed Remote Electronic Voting Machine (RVM):** Allows **migrant voters** to vote from their **current place of residence**.
- **Postal Ballot:** Available to **special voters, service voters, election duty personnel, and detainees**.
- **Proxy Voting: Service voters** can **nominate a representative** to vote on their behalf.

CITIZENSHIP (AMENDMENT) RULES, 2024

Current Context

- The **Ministry of Home Affairs (MHA)** has notified the **Citizenship (Amendment) Rules, 2024**, implementing the **Citizenship Amendment Act (CAA), 2019**.

Eligibility for Citizenship by Registration/Naturalization

- Person of Indian origin
- Spouse of an Indian citizen
- Minor child of an Indian citizen
- Person with parents registered as Indian citizens
- Person or either parent was a citizen of Independent India
- Overseas Citizen of India (OCI) cardholder

Application Process

- Applications must be submitted **electronically** under **Section 6B of the Citizenship Act, 1955**.
- Processed by **Empowered Committees** via **District Level Committees** as per **Central Government notification**.

Documents and Requirements

- **Proof of Nationality: 20** accepted documents, including **visas, residential permits, Aadhaar cards, and census slips**.

Citizenship by Naturalization

- **Affidavit verifying statements** in the application.
- **Affidavit by an Indian citizen** verifying the applicant's character.
- **Knowledge of one of the languages** in the **Eighth Schedule**.

Renunciation of Foreign Citizenship

- Applicants must declare **irrevocable renunciation** of previous citizenship.

HIGH COURT COLLEGIUM & SUPREME COURT RULING

Current Context

- The **Supreme Court** has ruled that the High **Court Collegium** must take a **collective decision** regarding the elevation of judges, ensuring that no single individual, including the Chief Justice, can act unilaterally. The Court also stated that while the **content of consultation** is beyond judicial review, the **process of consultation** can be scrutinized.

Case Background

- The ruling came in response to a case involving the **Himachal Pradesh High Court Collegium**, where the promotion of **District Judges Chirag Bhanu Singh and Arvind Malhotra** was under review.
- The Supreme Court emphasized that **all Collegium members must be involved in the decision-making process** to maintain transparency and fairness.

Collegium System: Structure & Function

The **Collegium** plays a crucial role in recommending the appointment and elevation of judges in the **Supreme Court and High Courts**.

- **Supreme Court Collegium:**
  - **Composition**: **Chief Justice of India (CJI) + four senior-most Supreme Court judges.**
  - **Function**: Recommends appointments to the Supreme Court and transfers of High Court judges.
- **High Court Collegium:**
  - **Composition**: **Chief Justice of the respective High Court + two senior-most High Court judges.**
  - **Function**: Recommends appointments and promotions of High Court judges.

Legal Framework for Judicial Appointments

Appointments Authority: Judges are appointed by the **President of India** based on Collegium recommendations.
Key Constitutional Provisions:

- **Article 124** – Deals with the appointment of Supreme Court judges.
- **Article 217** – Governs the appointment of High Court judges.
- **Article 50** – Mandates the separation of the judiciary from the executive.

INDIAN INSTITUTE FOR IMMERSIVE CREATORS (IIIC) – NATIONAL AVGC-XR CENTRE

Current Context

- **The Union Cabinet approved** the establishment of **National Centre of Excellence (NCoE) for AVGC-XR** in **Mumbai**

Named **Indian Institute for Immersive Creators (IIIC)** to promote **Animation, Visual Effects, Gaming, Comics, and Extended Reality (AVGC-XR)**.

Key Features

- **First-of-its-kind institute** in India, modeled after **IITs and IIMs**.
- Focus on **training, research, and startup support** in **AVGC-XR**.
- Promotes **indigenous IP creation and cultural content**.
- Aims to position **India as a global content hub**.

Significance

- Boosts **employment opportunities** in the **AVGC-XR sector**.
- Aligns with **Atmanirbhar Bharat** by enhancing **self-reliance in digital content**.
- Attracts **foreign investments** in the media and entertainment industry.

PREVENTIVE DETENTION & SUPREME COURT'S CLARIFICATION

Context

- The **Supreme Court in Jaseela Shaji vs Union of India (2024)** ruled that failure to provide necessary documents to a detainee violates their right to challenge preventive detention under **Article 22(5)**.

What is Preventive Detention?

- **Preventive detention without trial** based on suspicion that a person may **threaten public order or national security**.
- Unlike **punitive detention** (after conviction), it is used as a **preventive measure**.

Constitutional Provisions

- **Article 22(3):** Allows preventive detention but limits certain fundamental rights.
- **Article 22(5):** Mandates authorities to inform detainees of reasons and allow representation.

Key Preventive Detention Laws

- **National Security Act (NSA), 1980**
- **Unlawful Activities (Prevention) Act (UAPA), 1967**
- **COFEPOSA, 1974** (For economic offenses)
- **PBMSECA, 1980** (To curb black marketing)

Grounds for Detention

- **Threat to national security or foreign relations**
- **Disturbance of public order**
- **Essential supply disruptions**

23RD LAW COMMISSION OF INDIA

Current Context

- The **Union Government has constituted the 23rd Law Commission**, which will function until **August 31, 2027**, to review and recommend legal reforms.

Key Details

- Comprises a **Chairperson, 4 full-time members, and 5 part-time members** (yet to be appointed).
- Functions under the **Ministry of Law and Justice**.

Mandate & Responsibilities

- **Review Obsolete Laws:** Identify and recommend outdated laws for repeal.
- **Legal Simplification:** Propose measures to streamline laws and remove inconsistencies.
- **Economic & Social Impact:** Assess legal provisions in areas like **food security, employment, and globalization**.
- **Alignment with Constitutional Goals:** Suggest legal amendments to implement **Directive Principles of State Policy**.
- **Gender Justice:** Evaluate laws to promote **women's rights and equality**.

About the Law Commission

- **Non-statutory advisory body** set up by the **Ministry of Law and Justice**.
- Recommends legal reforms, though its proposals are **not binding** on the government.

Structure

- **Chairperson:** Typically a **retired Supreme Court or High Court judge**.
- **Full-time members:** 4 (including a **member-secretary**).
- **Part-time members:** Up to 5.
- **Ex-officio members:** Secretaries of Legal Affairs & Legislative Departments.
- **Appointments made by: Appointments Committee of the Cabinet (ACC), chaired by the Prime Minister**.

SARTHIE 1.0

Current Context

- **SARTHIE 1.0**, a joint initiative of the **Department of Social Justice and Empowerment (DoSJE)** and the **National Legal Services Authority (NALSA)**, launched to **empower marginalized communities** through legal awareness and assistance.

Key Facts

- **Full Form: Social Awareness and Reform Through Holistic and Inclusive Education**
- **Launched by: DoSJE + NALSA**
- **Aim: Awareness + Assistance = Empowerment**
- **Target Beneficiaries:**
  - **SCs, OBCs, EWS**
  - **Transgender persons, senior citizens**
  - **Sanitation workers, waste pickers**
  - **Victims of substance abuse, beggars**

Objectives

- **Increase legal awareness** among vulnerable groups.
- **Bridge the information gap** regarding **legal rights & welfare entitlements**.
- **Facilitate access** to government social welfare schemes.

Implementation Mechanism

- **NALSA's legal services network** (State, District, and Taluka levels).
- **Awareness camps, legal aid seminars, and information dissemination programs.**

Alignment with Sustainable Development Goals (SDGs)

- **SDG 1 (No Poverty)** – **Target 1.3** (Social protection measures for all).
- **SDG 10 (Reduced Inequalities)** – **Target 10.4** (Social protection and wage policies).

LADY JUSTICE STATUE AT SUPREME COURT

Current Context

- The **Supreme Court of India** recently **unveiled a new statue of Lady Justice** with unique features. It signifies **decolonization of India's legal system** and aligns with recent **legal reforms**.

Key Features of the New Statue

- **Design:** A **six-foot-tall** statue placed in the **judges' library** at the Supreme Court.
- **Distinctive Features:**
  - **No blindfold:** Represents that **law is not blind but sees all equally**.
  - **Holding the Constitution of India instead of a sword:** Symbolizes **justice through constitutional principles** rather than brute force.
  - **Wears a saree:** Reflects **Indian tradition**, replacing Western legal imagery.

Historical Background of Lady Justice

- **Greek Mythology: Themis** – Goddess of **justice and wisdom**, depicted with **scales and a sword**.
- **Roman Influence: Justitia (Iustitia)** – Institutionalized justice as a **civic virtue** under Emperor **Augustus (27 BCE-14 CE)**.
- **Renaissance (14th century): Blindfold added** as a **critique of legal corruption**, later reinterpreted to mean **impartiality**.

Lady Justice in India

- **Adopted during British rule** (Common Law system).
- **Examples of existing statues:**
  - **Calcutta High Court (1872):** Both blindfolded and open-eyed depictions.
  - **Bombay High Court:** Lady Justice without a blindfold.
- **Supreme Court Mural:** Shows **Mahatma Gandhi and Lady Justice** beside a **chakra**, with **Lady Justice holding scales and a book (not a sword)**.

Why the Change?

- **Decolonization of the legal system:** Aligns with **Article 51A** (Fundamental Duties) – to **preserve India's cultural heritage**.
- **New Interpretation:**
  - **No blindfold** → Law recognizes **social diversity and challenges**.
  - **Constitution replaces sword** → **Emphasis on constitutional justice over force**.
  - **Saree instead of robe** → **Indianizing legal symbols**.

CHIEF JUSTICE OF INDIA (CJI) APPOINTMENT

Current Context

- Chief Justice of India (CJI) **D.Y. Chandrachud** has retired on **November 10, 2024**. **Justice Sanjiv Khanna** has been appointed as the **51st Chief Justice of India**.

Appointment Process of Chief Justice of India (CJI)

- The appointment of the CJI follows the **seniority principle**, where the **senior-most judge** of the Supreme Court is chosen.
- As per the **Memorandum of Procedure (MoP)**, the **Law Ministry** seeks a recommendation from the outgoing CJI regarding their successor.
- The **President of India** appoints the new CJI after receiving the recommendation.
- The Chief Justice serves **until the age of 65**, after which the process repeats for the next appointment.
- Apart from seniority, factors such as **judicial competence, integrity, and experience** also play a crucial role in the selection.

Constitutional & Legal Framework

- **Article 124(2)** of the Indian Constitution governs the **appointment of Supreme Court judges**, including the CJI.
- The practice of appointing the senior-most judge follows **constitutional conventions**, ensuring stability and continuity in the judiciary.

SC'S PUSH FOR PRISONER RIGHTS: LEGAL AID ENHANCEMENTS

Current Context

- The Supreme Court has directed **Legal Services Authorities (LSAs) to enhance free legal** aid for prison inmates.

Supreme Court's Directives for Legal Aid

- Strengthen **Legal Services Authorities (LSAs)** to implement and upgrade SOP-2022.
- Improve monitoring of **Prisoner Legal Aid Clinics (PLACs)** through regular reviews.
- Use **data-driven reforms** to identify gaps and improve legal aid services.
- Conduct **inspections of Legal Aid Defence Counsels** to assess their performance.
- Increase **awareness campaigns** using local languages and innovative outreach methods.
- Facilitate **regular interactions** between inmates, Jail Visiting Lawyers (JVLs), and Para Legal Volunteers (PLVs).
- Ensure **digital submission of reports** from DLSAs to SLSAs and then to NALSA.

Legal Basis for Free Legal Aid in India

Constitutional Provisions

- **Article 21** – Right to life and personal liberty includes the right to legal representation.
- **Article 39A** – Ensures **Equal Justice and Free Legal Aid**, added by the 42nd Constitutional Amendment, 1976.

Statutory Provisions

- **Legal Services Authorities Act, 1987** – Establishes NALSA, SLSAs, and DLSAs to provide free legal services and conduct Lok Adalats.
- **Bhartiya Nagarik Suraksha Sanhita, 2023** (Replaces CrPC) – Section 341 mandates **state-funded legal aid** for those who cannot afford a lawyer.

Who is Eligible for Free Legal Aid?

- Women and children.
- Scheduled Castes (SCs) and Scheduled Tribes (STs).
- Industrial workers.
- Victims of natural disasters, violence, and industrial accidents.
- Persons with disabilities.

- Prisoners and individuals in protective homes or psychiatric hospitals.
- People with an annual income below the prescribed limit.
- Victims of human trafficking and bonded labour.

Role of the National Legal Services Authority (NALSA)
- Designs policies, guidelines, and legal aid schemes.
- Monitors and evaluates legal aid programs nationwide.
- Organizes **Lok Adalats** for quick and affordable dispute resolution.

Government Initiatives for Strengthening Legal Aid
- **DISHA Scheme** – Strengthens pre-litigation mechanisms.
- **Tele-Law** – Provides free legal advice via digital platforms.
- **Nyaya Bandhu** – Encourages lawyers to offer **pro bono legal services** to the underprivileged.
- **Nyaya Mitra** – Aims to resolve **long-pending cases** in courts.
- **Lok Adalats** – Offers a cost-free and time-efficient way to settle disputes.

UNIFORM CIVIL CODE (UCC) IN INDIA

Current Context
- **The Prime Minister**, in his **Independence Day speech**, emphasized the importance of implementing a **Uniform Civil Code (UCC)** to replace religion-based personal laws.

What is the Uniform Civil Code?
- UCC refers to a **common legal framework** governing matters such as **marriage, divorce, inheritance, adoption, and succession**, applicable to all citizens regardless of religion.
- Currently, personal laws vary based on religious affiliation, except in **Goa**, which follows the **Portuguese Civil Code of 1867**. **Uttarakhand** became the first state to adopt UCC in **2024**.

Constitutional and Legal Basis
- **Article 44** (Directive Principles of State Policy) urges the government to work toward a uniform set of civil laws.
- **Article 14** guarantees **equality before the law**, strengthening the case for UCC.
- The **21st Law Commission (2018)** suggested **gradual reforms** in personal laws rather than immediate UCC implementation.

Why is UCC Important?
- **Gender Justice:** Uniform laws would ensure equal rights for women in matters like marriage, divorce, and property inheritance.

- **Legal Clarity:** A single legal framework would simplify disputes and promote efficiency in the justice system.
- **Social Harmony:** A uniform code would help **reduce communal divisions** and strengthen national unity.
- **International Commitments:** Aligning legal structures with global human rights standards would enhance India's credibility.

Key Supreme Court Rulings
- **Shah Bano Case (1985):** Emphasized the need for gender justice in maintenance rights.
- **Sarla Mudgal Case (1995):** Addressed misuse of religious conversion for polygamy.
- **Shayara Bano Case (2017):** Declared **instant triple talaq** unconstitutional.

Uttarakhand Implements Uniform Civil Code (UCC)
- **Uttarakhand became the first state in India to implement a Uniform Civil Code (UCC)** on January 27, 2024. The code standardizes laws on marriage, divorce, inheritance, and live-in relationships across all religions. However, it has drawn criticism for being intrusive and increasing state control over personal matters.

Challenges to UCC Implementation
- **Religious Sensitivities:** Some communities view UCC as an infringement on religious freedom under **Article 25**.
- **Lack of Consensus:** Differing views across religious and social groups make implementation complex.
- **Federalism Issues:** Since personal laws fall under the **Concurrent List**, both **States and the Centre** must collaborate.

FROM 1923 TO 2024: THE EVOLUTION OF BOILER REGULATIONS IN INDIA

Current Context
- The **Boilers Bill, 2024** was introduced in **Rajya Sabha** to modernize and streamline boiler regulations by **repealing the Boilers Act, 1923**.

Background
- **Boilers Act, 1923** aimed to ensure **safety standards and uniform regulations** across India.
- The **Indian Boilers (Amendment) Act, 2007** allowed **third-party inspection and certification**.
- In **2023**, a review under the **Jan Vishwas (Amendment of Provisions) Act** led to the **decriminalization of minor offenses**.

Key Features of the Bill

- **Competent Authority:** Recognized institutions will be responsible for **certifying welders** for boiler manufacturing and maintenance.
- **Strict Penalties:** Unauthorized **alteration, addition, or renewal** of a boiler without **Chief Inspector's approval** will lead to:
  - **Up to 2 years imprisonment** or
  - **Fine up to ₹1 lakh**, or both.
- **Central Government Oversight:**
  - Can resolve **implementation challenges** within **three years** of enforcement.
  - Establishes a **Central Boilers Board** to regulate **design, manufacturing, and operation** of boilers.

Objectives of the Bill

- **Ensure Industrial Safety:** Prevent **boiler explosions** that pose risks to life and property.
- **Regulatory Uniformity:** Standardizes **inspection, registration, and certification** of boilers across India.
- **Enhanced Compliance:** Mandates **accident reporting** and prohibits the use of **unregistered boilers**.

Significance of Industrial Boilers

- Boilers are crucial in **power generation, manufacturing, and processing industries**.
- They involve **high-temperature operations, large-scale fuel burning, and high-energy steam production**.

CENTRAL BUREAU OF INVESTIGATION (CBI)

Current Context

- The Supreme Court upheld **West Bengal's case** against the Union government, stating that CBI cannot investigate cases in the state without its consent (Article 131).

About CBI

- **Established: 1963** (on recommendation of Santhanam Committee).
- **Ministry:** Ministry of Personnel, Public Grievances & Pensions.
- **Legal Status:** Not a constitutional or statutory body; governed by the **Delhi Special Police Establishment (DSPE) Act, 1946**.
- **Functions:** Investigates **corruption, economic crimes, special crimes (murder, terrorism, etc.), and cases of national importance**.

State's Consent for CBI

- **General Consent:** Given by states for CBI to operate without repeated permissions.

- **Specific Consent:** Required when **general consent is withdrawn**.
- **Current Issue:** Nine states, including West Bengal, Punjab, and Telangana, have revoked **general consent**, restricting CBI's jurisdiction.

Key Supreme Court Judgments

- **Common Cause v. Union of India (2019):** Appointment of CBI Director requires approval from PM, Leader of Opposition, and CJI.
- **Vineet Narain Case (1997):** Struck down a government rule that shielded officials from CBI investigation.
- **CPIO CBI v. Sanjiv Chaturvedi (2024):** CBI **not fully exempt from RTI Act**.

NITI AAYOG RESTRUCTURED

Current Context

- NITI Aayog was reconstituted following the formation of the **New Union Government in June 2024, as its term (except for the CEO) is co-terminus with the government.**

About NITI Aayog

- **Established: 2015**, replacing the Planning Commission through a resolution of the Union Cabinet.
- **Nature:** Government think-tank for policy formulation and strategic planning.

Composition of NITI Aayog

- **Chairperson:** Prime Minister of India.
- **Governing Council:**
  - PM, Chief Ministers of all States & UTs with legislatures, and Lt. Governors of other UTs.
  - **Ex-Officio Members:** Up to 4 Union Ministers nominated by the PM.
  - **Special Invitees:** Experts and specialists with domain knowledge, nominated by the PM.
- **Regional Councils:** Formed to address inter-state and regional issues.
- **CEO:** Appointed by the PM for a fixed tenure, with the rank of Secretary to the Government of India.

Mandate of NITI Aayog

- **Monitor and implement Sustainable Development Goals (SDGs).**
- **Foster competitive and cooperative federalism** to enhance governance across States and UTs.

VALIDITY OF 'SOCIALIST' & 'SECULAR' IN THE PREAMBLE

Current Context

- The **Supreme Court** upheld the inclusion of **"Socialist"** and **"Secular"** in the **Preamble** via the **42nd Amendment Act, 1976**, rejecting pleas that these terms were added undemocratically during the **Emergency (1975-77)**.

About the 42nd Amendment Act (1976)

- Known as the **"Mini-Constitution"**, it made **major changes** to the Indian Constitution:
  - **Preamble:** Added **"Socialist," "Secular,"** and **"Integrity."**
  - **7th Schedule:** Shifted subjects like **Education, Forests, and Wildlife Protection** from the **State List** to the **Concurrent List**.
  - **Emergency Provisions:** Allowed **Emergency declaration** in **specific regions**, not just nationwide.
  - **New DPSPs Added:**
  - **Article 39A** – Free legal aid.
  - **Article 43A** – Workers' participation in industries.
  - **Article 48A** – Environmental protection.
  - Introduced **Fundamental Duties (Part IV-A)** and **Administrative Tribunals (Part XIV-A).**

SC Observations on 'Socialist' & 'Secular'

- **Amendments to the Preamble are Valid** under **Article 368** (Amendment Power of Parliament).
- **Socialism:** Ensures a **welfare state** and **equal opportunities** for all citizens.
- **Secularism:** Maintains **state neutrality** towards religion, upholding **equality & religious freedom**.

Understanding Indian Secularism & Socialism

Feature	Indian Model	Western Model
Secularism	State **regulates** religious affairs & ensures **equal treatment** of all faiths.	Strict **separation** of religion & state.
Socialism	Follows a **mixed economy,** balancing **state welfare & private enterprise**.	Strict **state control over industries** (e.g., Communist countries).

- The SC ruling reinforces that the **Constitution evolves** with time.
- **Socialism & Secularism** are deeply embedded in India's governance framework, ensuring **equity, justice, and religious harmony**.

75TH ANNIVERSARY OF THE INDIAN CONSTITUTION

Current Context

- India celebrates the **75th anniversary** of its **Constitution** in **November 2024**, reflecting on the ideals set by the **Constituent Assembly**. Its spirit of **dialogue**, **consensus-building**, and **nation-building** provides important lessons for today's **Parliament**.

Key Insights

- **Dialogue and Consensus:**
  - The **Constituent Assembly** comprised members from diverse backgrounds who engaged in **respectful dialogue**, forming a unified vision for India. This is in stark contrast to today's **polarised** and **disruptive** parliamentary atmosphere.
- **Decline in Parliamentary Culture:**
  - **Sittings** have declined: The **17th Lok Sabha** met for only **274 days**.
  - **Legislative scrutiny** has weakened, with **16%** of bills reviewed by committees (down from **71%**).
  - **Budget debates** have shortened from **120 hours** to **35 hours**.
- **Disruptions and Erosion of Productivity:**
  - **Disruptions** in Parliament have led to significant loss of productive time, weakening **law-making** and diminishing **public trust**.

INDIA'S FIRST CONSTITUTION MUSEUM: A TRIBUTE TO CONSTITUTIONAL LEGACY

Current Context

- India has recently inaugurated its **first-ever Constitution Museum** at the **O.P. Jindal Global University** in **Sonipat**, celebrating the **75th anniversary** of the adoption of the **Indian Constitution** (**November 26, 1949**). The museum aims to educate visitors about the **history**, **philosophy**, and **legacy** of the Constitution, using modern interactive technologies.

Key Features of the Museum

- **Interactive Experiences**
  - **Talking Hologram**: Visitors can interact with a hologram of **Dr. B.R. Ambedkar**, one of the Constitution's key architects.
  - **Time-Travel Radio**: Offers an audio journey through significant events in Indian history, focusing on the drafting of the Constitution.
  - **Robotic Tour Guide**: An automated guide to enhance the visitor experience.

- **Constitutional Heritage**
  - **Photolithographic Reproductions**: Displays **1,000** copies of the Constitution.
  - **Busts of Constituent Assembly Members**: Features **300 busts**, including **B.N. Rau**, who contributed significantly to the drafting.
- **Engaging Activities**
  - **Recreate the Oath Ceremony**: A photo station where visitors can mimic the **August 14, 1947 oath ceremony**.
  - **Digital Quizzes**: Sections to test knowledge of **fundamental rights** and other constitutional aspects.
- **Audio-Visual Features**
  - **Samvidhaan Theatre**: Shows films and documentaries related to the **Indian Constitution**.
  - **Armour-Cabled Headphones**: Play speeches from the **Constituent Assembly** and explain constitutional philosophy.
- **Art and History**
  - Features artwork depicting **judges** and **jurists** and a gallery tracking the **Constitution's evolution** through key **judgments** and **amendments**.

MUNICIPAL CORPORATIONS IN INDIA: REVENUE GENERATION AND GOVERNANCE ISSUES

Current Context

- The **Reserve Bank of India (RBI)** released a report titled **"Own Sources of Revenue Generation in Municipal Corporations: Opportunities and Challenges"** highlighting the financial and governance issues faced by municipal corporations (MCs) in India.

Overview of Municipal Corporations in India

- **Urban Population Growth:** India's cities, housing over **400 million** people, are projected to surpass **800 million** by **2050**. Despite covering only **3%** of the land, cities contribute more than **60%** to the national GDP.
- **74th Constitutional Amendment (1992):** The amendment formalized local governance and granted municipalities constitutional status, empowering them with 18 functions to manage urban planning, land-use, and infrastructure, as detailed in the **12th Schedule**.

Revenue Generation and Fiscal Powers

- **Own Tax Revenue:** Property tax, water benefit tax, etc.
- **Non-tax Revenue:** User charges, developmental charges.
- **Assigned Revenue:** Entertainment tax (subsumed under GST), professional tax.

- **Grants-in-aid:** Central and State Finance Commission (SFC) transfers.
- **Borrowings:** Loans from state/central governments and banks.

Challenges in Revenue Generation

- Indian municipalities generate only **0.6% of GDP** (2023-24), much lower than central (**9.2%**) and state (**14.6%**) governments.
- **Tax Collection Inefficiencies:** Municipal corporations collect just **56% of the property tax demand**.
- **Dependence on Transfers:** Municipalities are heavily reliant on **delayed** and **insufficient** government transfers. The grants from Central and State governments saw a rise of **24.9%** and **20.4%** in 2022-23, respectively.

Municipal Borrowing & Bonds

- Borrowing has increased, from ₹**2,886 crore** in 2019-20 to ₹**13,364 crore** in 2023-24.
- Municipal bond markets remain underdeveloped, with **Green Bonds** still in nascent stages.

Key Challenges Faced by Municipal Corporations

- **Financial Constraints:**
  - **State Finance Commission (SFC) Delays:** Many states fail to implement SFC recommendations on time, impeding financial autonomy.
  - **Low Absorptive Capacity:** In 11 of 18 states, **Urban Local Self Governments (ULSGs)** utilized only **61% of allocated funds**.
- **Governance Challenges:**
  - **Limited Devolution of Powers:** Despite the **74th Amendment**, many states have not fully devolved critical powers (urban planning, land-use regulation) to municipalities.
  - **Election Delays:** Municipal elections, such as those in **Bengaluru,** have faced long delays, disrupting local governance.
  - **Human Resource Shortage:** A significant percentage of positions in municipal corporations remain vacant (3**0-40%** vaca**Urban Planning & Service Delivery:**
  - A significant portion of municipal spending (**29%**) is not directed toward urban development, affecting infrastructure quality and growth.

LADAKH'S DEMAND FOR SIXTH SCHEDULE

Current Context

- The recent detention of climate activist **Sonam Wangchuk while protesting for Ladakh's inclusion in the Sixth Schedule** highlights the demand for **greater autonomy**

in Ladakh, aimed at preserving local cultures, political autonomy, and ecological integrity.

Historical Background

- **Fifth & Sixth Schedules:** Originated during British rule to protect tribal areas, ensuring self-governance and cultural preservation.
- **Fifth Schedule:** Provides protection for tribals in specific areas across **10 states**.
- **Sixth Schedule:** Provides more autonomy, especially in northeastern states like **Assam, Meghalaya, and Tripura,** through Autonomous District Councils (ADCs).

Ladakh's Demand for Sixth Schedule

- **Political Autonomy:** Ladakh lacks its own legislature since its 2019 reorganization, leading to bureaucratic governance.
- **Employment Issues:** Absence of a local public service commission hampers job creation.
- **Cultural Preservation:** Tribal groups like Gujjars and Changpas seek protection of their cultural identity.
- **Ecological Protection:** The region's fragile ecosystems need legal safeguards from mining and industrial threats.
- **Domicile Safeguards:** Concerns over an influx of non-locals due to changing policies.

Advantages of Sixth Schedule

- **Decentralization:** Empowers local governance through ADCs.
- **Cultural & Tribal Land Protection:** Ensures safeguarding of local customs and rights.
- **Financial Support:** Greater central funds for development.
- **Sustainable Development:** Focus on region-specific needs.

SUPREME COURT'S RULING ON ALTERING SCHEDULED CASTES LIST

Current Context

- The **Supreme Court** ruled that **states** cannot alter the **Scheduled Castes (SC)** list under **Article 341**. Bihar's 2015 attempt to include the Tanti-Tantwa community in the SC list was challenged.
- The Court reaffirmed that only **Parliament** can modify the SC list, not state governments, and directed that the community revert to its original classification.

Supreme Court Ruling

- **Article 341 of the Constitution**:

- Allows the President to specify castes, races, or tribes as Scheduled Castes in consultation with the state governor.
- Any inclusion or exclusion from the SC list must be done through an **Act of Parliament**, not state legislation.
- **Bihar's Notification (2015)**:
  - Bihar's attempt to include the **Tanti-Tantwa community** in the **SC list** was **ruled invalid** by the Supreme Court.
  - The notification was termed "**mala fide**," and the community was reverted to its original classification as **Extremely Backward Class (EBC)**.
- **Court's Decision**:
  - The **Supreme Court** reaffirms that only **Parliament** can modify the SC list, ensuring **uniformity** and consistency across states.
  - Members of the Tanti-Tantwa community who benefited from the notification will now be accommodated under the **EBC** category.
- **Procedure for Changes to the SC List**:
  - The process to include or exclude communities from the SC list begins with a proposal from the **state government**.
  - It is then reviewed by the **Ministry of Social Justice and Empowerment**, the **Registrar General of India**, and the **National Commission for Scheduled Castes**.
  - The final recommendation goes to **Parliament**, where an **Act** is passed to make the change.

GOVERNANCE AND AI

Current Context

- India recently launched its first **Artificial Intelligence (AI) Data Bank** to support innovation by providing researchers, startups, and developers with access to diverse datasets for AI-driven solutions.

Potential of AI in Transforming Governance in India

- **Efficient Service Delivery**
  - **Education:** Personalized learning, smart content, and automated assessments.

    Example: **National Council of Educational Research and Training (NCERT)**'s **National Repository of Open ducational Resources (NROER)** repository tagsmetadata for better accessibility.
  - **Healthcare:** AI enhances accessibility, especially through telemedicine.

    Example: **National Institution for Transforming India (NITI)Aayog** and **Department of Biotechnology (DBT)**'s AI-based cancer diagnosis initiative.

- **Agriculture:** AI-driven insights for weather predictions, pest management, and resource allocation.

  Example: **National Pest Surveillance System (NPSS)** detects crop issues for timely intervention.
- **Inclusivity and Accessibility:** AI-powered **Digital Public Infrastructure (DPI)** helps bridge digital and language barriers.

  Example: **Bhashini** platform offers government services in regional languages.
- **Data-Driven Policymaking:** AI enables evidence-based policymaking, improving transparency and efficiency.

  Example: **India Urban Data Exchange (IUDEX)** optimizes urban services like traffic and waste management.
- **Judicial Efficiency:** AI streamlines legal research, case management, and translation.

  Example: **Supreme Court Vidhik Anuvaad Software (SUVAS)** aids in multilingual legal proceedings.
- **Disaster Management:** AI-driven early warning and rescue systems enhance response to natural calamities.

  Example: **Rapid Action for Humanitarian Assistance (RAHAT)** app predicts disasters like floods and assists in evacuation efforts.

Key AI Initiatives in India

- **National Strategy for Artificial Intelligence (NSAI):** #AIforAll by **NITI Aayog** focuses on AI in healthcare, education, and agriculture.
- **India AI Program:** Initiative by **Ministry of Electronics and Information Technology (MeitY)** for AI research, skill development, and governance.
- **Digital Personal Data Protection Act (DPDPA):** Strengthens AI-related data privacy and security.
- **Global Partnership on AI (GPAI):** India collaborates with international AI governance frameworks.
- **Skill Development Programs:** Responsible AI for Youth, FutureSkills initiatives for AI literacy, especially in **Tier 2 and Tier 3 cities**.
- **International Collaborations: India-US AI Initiative** for joint research in AI applications.

Challenges in AI-Governance Integration

- **Fragmented Data:** Lack of integration across departments; **National Data Governance Framework Policy (NDGFP)** yet to be implemented.
- **Infrastructure Gaps:** Digital divide persists; **Internet and Mobile Association of India (IAMAI)** reports **45%** of India lacks internet access (**2023**).
- **Regulatory Void:** No dedicated AI legislation, unlike the **European Union (EU)**'s **AI Act**.

- **Skill Shortage: National Association of Software and Service Companies (NASSCOM)** estimates a demand-supply gap of 140,000 AI professionals in India.
- **Weak Intellectual Property (IP) Protection:** India ranks **42nd in the 2024 International Intellectual Property (IP) Index**, limiting AI innovation incentives.
- **Bias and Ethical Concerns:** AI systems trained on biased data can produce discriminatory outcomes.

IMPEACHMENT OF JUDGES

Current Context

- The Opposition in **Rajya Sabha (RS)** is considering an impeachment motion against **Justice Shekhar Kumar Yadav** of the **Allahabad High Court (HC)** due to his remarks at a **Vishwa Hindu Parishad (VHP)** event.

Constitutional Provisions for Impeachment

"Although the Constitution of India does not explicitly use the word 'impeachment', the process of removal of judges from office is outlined in Article 124(4) and Article 218 , and is commonly referred to as 'impeachment' due to its similarity with the colonial-era impeachment process."

- **Article 124(4):** Governs the removal of Supreme Court (SC) judges.
- **Article 218:** Applies the same provisions to **High Court (HC)** judges.
- **Judges Inquiry Act, 1968:** Outlines the procedural framework for impeachment.
- Grounds for removal: **"Proven misbehavior"** or **"incapacity"**.

Steps in the Impeachment Process

- **Initiation of Motion:** Requires signatures of **100 Lok Sabha (LS) MPs** or **50 Rajya Sabha (RS) MPs**.
- **Inquiry Committee Formation:**
  - The **Speaker (LS)** or **Chairman (RS)** constitutes a **three-member committee**:
  - **Chief Justice of India (CJI)** or a **Supreme Court judge**.
  - **Chief Justice of a High Court**.
  - **A distinguished jurist** nominated by the presiding officer.
- **Investigation and Report:**
  - The committee examines evidence and submits a report.
  - **If charges are unproven, the process ends.**
  - **If charges are substantiated, the motion proceeds to Parliament.**
- **Parliamentary Approval:**
  - **Both Houses** must pass the motion with:

- A **majority of total membership**.
- At least **two-thirds of members present and voting**.
- Both conditions must be met in **the same session**.
- **Presidential Order:** After Parliament's approval, the **President of India** formally removes the judge.

GOVERNOR'S ASSENT TO BILLS – SUPREME COURT VS TAMIL NADU GOVERNOR

Current Context

- The **Supreme Court** criticized Tamil Nadu Governor **R.N. Ravi** for **withholding assent** to several state Bills without providing reasons or returning them for reconsideration. The court noted that this action violates **Article 200** of the Constitution and delays the legislative process.

Constitutional Provisions: Article 200

When a **State Legislature** passes a Bill and presents it to the **Governor**, the Governor has four options:

- **Give Assent** – The Bill becomes law.
- **Return the Bill for Reconsideration** – If the Assembly **passes it again**, the Governor **must grant assent**.
- **Reserve the Bill for the President's Consideration** – If the Bill contradicts Union laws or raises constitutional concerns.
- **Withhold Assent** – The Governor rejects the Bill outright (**rarely used**).

Supreme Court's Observations

- The **Governor withheld assent** but **did not send the Bills back for reconsideration**, which **blocks** the legislative process.
- Some **Bills were pending for three years** before the Governor **suddenly withheld assent on Nov 10, 2024**, just **three days after** the Supreme Court's **Punjab Governor ruling (Nov 7, 2024)**, which stated that a **Governor cannot indefinitely sit on Bills**.
- The court demanded **documented reasons** for withholding assent rather than a general explanation.
- The **Attorney General (AG)** representing the Governor **failed to provide a clear legal justification** for the delay.

Key Issues in the Governor's Actions

- **Violation of Constitutional Morality**
  - The Governor is **bound by the aid and advice of the Council of Ministers** (**Article 163**).
  - Withholding assent indefinitely is **against the principles of federalism**.
- **Breakdown of Legislative Process**

- Not returning the Bills for reconsideration **stalls governance** and creates a **constitutional deadlock**.
- Delayed Bills affect **public policy implementation**.
- **Governor's Discretion vs. Legislative Supremacy**
  - **The Governor's role is largely ceremonial**, but **withholding assent without reason** amounts to an **overreach of power**.
  - The Supreme Court's 2024 ruling in the Punjab **Governor case** reaffirmed that Governors **cannot act arbitrarily**.

CENTRE OF EXCELLENCE FOR ENERGY TRANSITION (COEET)

Current Context

- The **Bureau of Energy Efficiency (BEE)** under the **Ministry of Power (MoP)** and **The Energy and Resources Institute (TERI)** have signed an **Memorandum of Understanding (MoU)** to establish the **Centre of Excellence for Energy Transition (CoEET)** at TERI's **Institute of Energy Transition (IoET)** in Hyderabad. The initiative aims to enhance research, innovation, and policy development in energy transition.

Key Features

- CoEET will function as a knowledge hub focusing on clean energy technologies, low-carbon solutions, and energy efficiency.
- The centre will conduct studies to reduce **Greenhouse Gas (GHG)** emissions and enhance efficiency in industries, **Micro, Small & Medium Enterprises (MSMEs)**, buildings, transport, and power sectors.
- It will focus on advancing technologies such as **Heating, Ventilation, and Air Conditioning (HVAC)** systems, smart manufacturing, waste heat recovery, and real-time energy monitoring.
- The initiative will support the formulation of building codes, **Energy Performance Standards (EPS)**, and appliance labeling policies.
- The governance of **CoEET** will include representatives from **BEE, MoP**, and **TERI**.
- BEE will provide financial support, while TERI will contribute infrastructure and oversee operational management.

LIQUIDATION OF GO FIRST – NCLT ORDER

Current Context

- The **National Company Law Tribunal (NCLT)** has ordered the **liquidation of Go First** following a request by its

Committee of Creditors (CoC), ending the airline's **20-month insolvency proceedings**.

National Company Law Tribunal (NCLT)

- **Overview**
  - The **National Company Law Tribunal (NCLT)** was constituted by the **Central Government** under **Section 408 of the Companies Act, 2013** and became operational on **June 1, 2016**.
  - It is a **quasi-judicial authority** that adjudicates **corporate disputes** under the **Companies Act, 2013** and oversees the **Insolvency Resolution Process** under the **Insolvency and Bankruptcy Code (IBC), 2016**.
- **Structure**
  - Initially, **11 benches** were established, with the **Principal Bench in New Delhi**.
  - As of now, there are **15 benches** across India with **48 members**.
- **Key Functions**
  - Handles cases under the **Companies Act, 2013**, including mergers, oppression and mismanagement, and corporate disputes.
  - **Adjudicating authority for insolvency resolution** of companies and **Limited Liability Partnerships (LLPs)** under **IBC, 2016**.

DRAFT UGC REGULATIONS 2025

Current Context

- **UGC released draft regulations** for faculty appointments and promotions, aligning with **National Education Policy (NEP) 2020**. Launched by **Education Minister Dharmendra Pradhan**, open for **public consultation** before finalization.

Key Features

- **Flexibility**: Candidates can teach subjects they qualify for via **NET/SET**, even if different from previous degrees. **Ph.D. specialization** prioritized.
- **Promotion of Indian Languages**: Encourages publications and degrees in **Indian languages**.
- **Holistic Evaluation**: Eliminates **score-based shortlisting**, emphasizing **"Notable Contributions."**
- **Diverse Talent Pool**: Special recruitment for **arts, sports, and traditional disciplines**, including **persons with disabilities**.
- **Enhanced Governance**: Transparent **Vice-Chancellor selection**, **streamlined promotions**, and **grievance redressal**.
- **Professional Development**: Focus on **faculty training** and **continuous learning**.

17TH LOK SABHA

Current Context

- The **17th Lok Sabha (June 2019 – Feb 2024)** held **274 sessions (1,354 hours)** with **97% productivity** but faced criticism for rushed bill passages and lack of debate.

Key Achievements

- **Legislation**: Passed **179 Bills**, including:
  - **Women's Reservation Bill, 2023**
  - **J&K Reorganisation Bill, 2019**
  - **Appointment of Chief Election Commissioner (CEC) Bill, 2023**
  - **Three Labour Codes & Three Farm Laws** (later repealed)
  - **Digital Data Protection Bill, 2023**
  - **Three criminal law reform bills** replacing **IPC, CrPC,** and **Evidence Act.**
- **Private Member Bills**: **729** introduced, though only **two were discussed**.
- **Parliamentary Standing Committees**: **691 reports** presented; **69% recommendations** accepted.
- **Digital Integration**: **97% of question notices** submitted electronically.
- **New Parliament Building**: Inaugurated on **Sept 19, 2023**.
- **Parliamentary Questions**:
  - **4,663 starred questions**, **1,116** answered orally.
  - **55,889 unstarred questions** answered in writing.

Key Concerns

- **Fewest Sittings**: **17th Lok Sabha** had fewer sittings than any **full-term** Lok Sabha.
- **Deputy Speaker Not Elected**: **First time in history** since **Article 93** mandates it.
- **Rushed Legislation**:
  - **58% of bills** passed within **two weeks** of introduction.
  - **35% passed with less than an hour of discussion**.
  - **Only 16% referred to committees**, lowest in recent history.
- **Budget Scrutiny Decline**:
  - **80% of the budget** passed without discussion.
  - **2023 Budget passed entirely without debate**.

Private Member's Bill (PMB)

- **Definition**: A bill introduced by a Member of Parliament (MP) who is not a minister.
- **Purpose**: Raises issues or suggests legislative changes outside the government's agenda.
- **Admissibility**: Approved by the **Speaker (Lok Sabha)** or **Chairman (Rajya Sabha)** before introduction.

- **Procedure**:
  - Requires a **one-month notice** before introduction.
  - Can only be discussed on **Fridays**.
  - The MP can **withdraw** it upon ministerial request or push for a vote.
- **Significance**: Rejection **does not impact government stability**.
- **Historical Context**:
  - **14 PMBs** have been passed since independence.
  - The last successful PMB was in **1970**.

JOINT PARLIAMENTARY COMMITTEE (JPC)

Current Context

- The JPC is conducting discussions on the **Constitution (129th Amendment) Bill, 2024** and the **Union Territories Laws (Amendment) Bill, 2024**, engaging with legal experts and various stakeholders.

Key Features of JPC

- **Ad-hoc Committee:** Formed by Parliament for detailed scrutiny of specific Bills or subjects.
- **Bipartisan Composition:** Includes members from both Houses and political parties. The **Lok Sabha Speaker appoints the chairperson**, usually from the ruling party.
- **Flexible Membership:** No fixed number of members; Parliament determines the composition.
- **Advisory Role:** Recommendations are not binding but are often accepted, especially when aligned with the ruling party's stance.
- **Power to Gather Evidence:** Can collect inputs from experts, public bodies, associations, and individuals.
- **Dissolution:** Ceases to exist after completing its assigned task.

LOKPAL FOUNDATION DAY

Current Context

- The first-ever Foundation Day of the Lokpal of India was celebrated on **16th January 2024** at the **Manekshaw Centre, New Delhi**, marking the 10th anniversary of the enactment of the **Lokpal and Lokayuktas Act, 2013**. The Lokpal Chairperson, Justice A.M. Khanwilkar, emphasized the need for **technological advancements, AI-driven corruption tracking, and public awareness** to strengthen the institution's role.

About the Lokpal & Lokayuktas Act, 2013

- The **Lokpal** is an independent anti-corruption institution at the national level.

- Enacted in **2013** and came into force on **16th January 2014**.
- Aimed at investigating **corruption complaints against public officials**, including the **Prime Minister, Ministers, and Group A, B, C & D officers**.
- The **Lokayukta** operates at the **state level** to tackle corruption in state public offices.
- Composition of **Lokpal**:
  - **Chairperson** (retired Chief Justice of India or a Judge of the Supreme Court)
  - **Maximum of 8 members**, with **50% from judiciary** and **50% from SC/ST/OBC, minorities, or women**.
- The Lokpal has the power to **prosecute, conduct preliminary inquiries, direct CBI investigations, and recommend disciplinary actions**.

Constitutional & Legal Aspects

- **Article 14** (Equality before law) ensures fair anti-corruption proceedings.
- **Article 51A(h)** (Fundamental duty) calls for citizens to strive for **excellence in all spheres**, including governance.
- **Prevention of Corruption Act, 1988** provides legal backing for actions against corrupt officials.
- **Central Vigilance Commission Act, 2003** mandates the **CVC's coordination** with the Lokpal.

NATIONAL COMMISSION FOR MINORITY EDUCATIONAL INSTITUTIONS (NCMEI)

Current Context

- The **20th Foundation Day** of **NCMEI** was celebrated in **New Delhi**, with Union Minister **Dharmendra Pradhan** highlighting its role in safeguarding **minority educational rights** under **Article 30(1)**.

About the NCMEI Act, 2004

- Enacted to protect the **educational rights of minorities** under **Article 30(1)** of the Constitution.
- The **NCMEI is a quasi-judicial body** with powers equivalent to a **Civil Court**.
- **Three main roles:**
  - **Adjudicatory** – Resolves disputes over **minority status** of institutions.
  - **Advisory** – Provides guidance on **policy matters** related to minority education.
  - **Recommendatory** – Recommends policy changes to the government.
- **Jurisdiction:**
  - Has **original and appellate jurisdiction** (as per **Sisters of St. Joseph of Cluny v/s State of West Bengal, 2018**).

- **No lower court can entertain cases against NCMEI decisions** (only **High Courts and the Supreme Court** under **Articles 226 & 227** can intervene).
- **Parliamentary supremacy (Articles 246 & 254)** ensures that the **NCMEI Act, 2004 prevails over state laws**.

Powers of NCMEI

- **Granting & Cancelling Minority Status**
  - Decides whether an institution qualifies as a **Minority Educational Institution (MEI)**.
  - Can **cancel** minority status if the institution violates criteria under the Act.
- **Appellate Authority**
  - Institutions **denied minority status or No Objection Certificate (NOC)** by state authorities can appeal to **NCMEI**.
- **Addressing Complaints**
  - Investigates cases of **violation or deprivation of minority educational rights**.
  - Can recommend **disciplinary actions** against officials found guilty of obstructing minority rights.
- **Legal Protection**
  - No **suit, prosecution, or legal proceedings** can be initiated against NCMEI officials **for actions taken in good faith**.
  - **NCMEI provisions override any conflicting laws** (ensured under **NCMEI Act, 2004**).

Constitutional & Legal Provisions

- **Article 30(1)** – Grants **linguistic & religious minorities** the right to **establish and administer educational institutions of their choice**.
- **Article 246 & 254** – Ensure **Parliamentary supremacy** over state laws concerning **minority education**.
- **Articles 226 & 227** – High Courts can **review NCMEI decisions**, but lower courts **cannot interfere**.

ATOMIC ENERGY COMMISSION (AEC) – RECONSTITUTION

Current Context

- The government has **reconstituted the Atomic Energy Commission (AEC),** with Ajit Kumar Mohanty **(Secretary, Department of Atomic Energy)** as Chairman. The notification was issued and published in the Gazette of India on **January 9, 2024.**

About Atomic Energy Commission (AEC)

- **Established: August 1948** under the **Department of Scientific Research**.

- **Department of Atomic Energy (DAE)** was created in **1954**, reporting directly to the **Prime Minister**.
- **Re-established in 1958** under DAE.
- **Role:** Formulates **India's atomic energy policy** and oversees nuclear energy programs.
- **Chairperson:** Secretary of **Department of Atomic Energy (DAE)** (ex-officio).
- **Members:** Appointed annually, approved by the **Prime Minister**.

Reconstitution of AEC (2024)

- **Chairman: Ajit Kumar Mohanty** (Secretary, DAE).
- **Ex-officio Members:**
  - **Ajit Doval** (National Security Adviser).
  - **Pramod Kumar Mishra** (Principal Secretary to PM).
  - **Vikram Misri** (Foreign Secretary).
  - **T.V. Somanathan** (Cabinet Secretary).
  - **Manoj Govil** (Expenditure Secretary).
  - **Pankaj Kumar Mishra** (Member, Finance).
  - **Vivek Bhasin** (Director, Bhabha Atomic Research Centre).
- **Other Members:**
  - **M.R. Srinivasan, Anil Kakodkar** (Former AEC Chairpersons).
  - **P. Rama Rao, Ravi B. Grover, K. Kasturirangan** (Former top scientists and advisors).

BHARATPOL PORTAL – ENHANCING GLOBAL LAW ENFORCEMENT CONNECTIVITY

Current Context

- Union Home Minister **Amit Shah** inaugurated the **BHARATPOL** portal, developed by the **CBI**, at **Bharat Mandapam, New Delhi**. This **real-time digital platform** will connect Indian law enforcement agencies with **INTERPOL**, enabling faster criminal investigations and international cooperation.

About BHARATPOL

- Developed by **CBI** to facilitate **real-time communication** between Indian and international law enforcement agencies.
- Enables seamless exchange of **crime-related data, INTERPOL notices, and investigative references** from **195 countries**.
- Allows **quicker response** to domestic and global requests, aiding in the **apprehension of fugitives**.
- Strengthens **India's capacity to combat cybercrime, terrorism, drug trafficking, and arms smuggling**.

- **Connect:** Integrates Indian agencies with INTERPOL's **National Central Bureau (NCB-New Delhi)**.
- **INTERPOL Notices:** Facilitates **issuance and tracking** of notices (e.g., **Red Corner Notices** for fugitives).
- **References:** Enables quick retrieval of international case data from INTERPOL's **19 global databases**.
- **Broadcast:** Ensures instant communication of alerts across **195 countries** for coordinated law enforcement actions.
- **Resources:** Provides tools for **document management, capacity-building, and training**.

PRAGATI: TRANSFORMING INDIA'S DIGITAL GOVERNANCE

Current Context

- A case study by **Oxford's Saïd Business School**, supported by the **Gates Foundation**, highlights **PRAGATI (Pro-Active Governance and Timely Implementation)** as a **game-changer** in India's digital governance. Since its launch in **March 2015**, PRAGATI has helped **fast-track 340 critical projects worth $205 billion**, significantly boosting infrastructure and social development.

About PRAGATI

- A **technology-driven governance platform** integrating **the PMO, Central Ministries, and State Governments**.
- Uses **video conferencing, geo-spatial mapping, and digital data management** to ensure **real-time issue resolution**.
- The **Prime Minister personally reviews progress**, ensuring **accountability and efficiency**.

Key Achievements (As of June 2023)

- Reviewed **340 projects worth ₹17.05 lakh crore ($205 billion)**.
- Facilitated construction of **50,000 km of National Highways**.
- **Doubled India's airports**, enhancing connectivity and economic growth.
- Focused on **roads, railways, and power projects**, which **maximize GDP returns (₹2.5-₹3.5 per ₹1 invested)**.

Significance of PRAGATI

- **Resolves project delays** through direct PM-led intervention.
- **Fosters cooperative federalism** by bridging **Centre-State coordination gaps**.
- **Strengthens e-Governance and transparency** in public infrastructure development.
- **Drives economic growth** by expediting strategic, high-impact projects.

'BULLDOZER JUSTICE' AND THE RULE OF LAW

Current Context

- The Supreme Court has **halted unauthorized demolitions** of private properties, questioning the **executive's role in bypassing judicial procedures**. A **bench comprising Justices B.R. Gavai and K.V. Viswanathan** has put demolitions on hold till **October 1, 2024**, emphasizing the need for due process and **pan-India guidelines** on property demolitions.

Key Issues

- **Violation of Due Process**: The court questioned how **accusations alone** could justify property demolitions, stressing that even **convicts have legal rights**.
- **Separation of Powers**: The practice of 'bulldozer justice' allows the **executive to act as judge, jury, and executioner**, undermining the judiciary's role.
- **Potential for Political Misuse**: The SC flagged concerns over **ministers making statements justifying demolitions**, especially ahead of **assembly elections** in J&K and Haryana.
- **Selective Enforcement Concerns**: Allegations of demolitions targeting specific communities were raised, though the government denied a communal angle.

Supreme Court's Observations

- **Due process must be followed** – even **convicts** cannot have their property arbitrarily demolished.
- **Outside noise won't influence judicial decisions**, but even a **single illegal demolition** is unconstitutional.
- The court plans to **issue national guidelines** to regulate property demolitions and prevent misuse.

Constitutional & Legal Implications

- **Article 14** (Right to Equality): Selective demolitions raise concerns of **arbitrary state action**.
- **Article 21** (Right to Life & Property): Protects against unlawful deprivation of property without legal recourse.
- **Separation of Powers**: The executive overstepping into judicial functions disrupts **constitutional balance**.

SC RULING: RECRUITMENT RULES CANNOT BE CHANGED MIDWAY

Current Context

- On **November 7, 2024**, a **five-judge Supreme Court bench**, led by **CJI DY Chandrachud**, ruled that **recruitment rules for government jobs cannot be altered once the process begins** unless explicitly permitted.

Key Highlights of the Judgment

- The **"rules of the game"** must remain **unchanged** once the recruitment process starts.
- Selection rules must align with **Article 14 (Right to Equality)** to ensure **fairness and transparency**.
- Candidates should not face **unexpected procedural changes**, which could impact merit-based selection.

Bench Composition

- **Chief Justice DY Chandrachud** (Head)
- **Justices Hrishikesh Roy, PS Narasimha, Pankaj Mithal, and Manoj Misra**

Constitutional & Legal Implications

- **Article 14**: Arbitrary changes violate **equality before the law**.
- **Article 16**: Ensures equal opportunities in public employment.
- Strengthens **transparency & accountability** in recruitment.

DEMOGRAPHIC MAPPING ALONG INDIA-MYANMAR BORDER

Current Context

- Union Home Minister **Amit Shah**, during the **12th {North Eastern Space Applications Centre} NESA Society meeting**, emphasized **demographic mapping** in **Nagaland, Mizoram, and Manipur** to aid **border fencing and curb infiltration** along the **India-Myanmar border**.

Key Takeaways

- **Border Demography Mapping**: A **comprehensive survey** is needed to assist in **border security and fencing efforts**.
- **NESAC's Role in Infrastructure**:
  - **20 waterways** have been developed; more are planned.
  - **Mapping of mineral, oil, and coal reserves** to boost state revenues.
  - **Forest area development** via **comparative mapping** and afforestation initiatives.
  - **Flood mapping** to enhance disaster management.

Strategic Importance

- Strengthens **national security** by identifying **infiltration patterns**.
- Supports **economic development** through **resource mapping**.
- Enhances **environmental sustainability** via **forestry and flood management**.

SUPREME COURT STRIKES DOWN ELECTORAL BONDS SCHEME

Current Context

- In **February 2024**, a **5-judge Constitution Bench** of the Supreme Court declared the **Electoral Bonds Scheme (2018) unconstitutional**. The scheme allowed **anonymous donations** to political parties, raising concerns over **lack of transparency** in political funding.

Key Issues with Electoral Bonds

- **Article 19(1)(a) – Right to Information:** Violated by **denying citizens knowledge** of political funding.
- **Article 14 – Right to Equality:** Favored **ruling parties** due to SBI's access to donor details.
- **Amendments to the Representation of the People Act, 1951 & Companies Act, 2013:** Allowed **unlimited corporate donations**, including from **foreign entities**.

Statutory Changes Post-Verdict

- **All electoral bond transactions must be disclosed publicly.**
- **The Representation of the People Act, 1951, and Companies Act, 2013, need amendments for new political funding laws.**

LABOUR MINISTRY FORMS COMMITTEES FOR SOCIAL SECURITY MODEL FOR UNORGANISED WORKERS

Current Context

- The Union Labour Ministry has constituted three committees, each comprising five states, to design a **comprehensive social security model** focused on unorganised workers, including gig and platform workers. This decision was made during a two-day labour ministers' conference with states and Union Territories.

Key Highlights

- **Objective of Committees:**
  - These committees will develop a **sustainable social security model** for unorganised workers.
  - The proposed model is expected to be presented by **March 2025**.
- **Social Security for Gig and Platform Workers:**
  - Discussions on **funding, data collection, and management** of a dedicated scheme for gig and platform workers.
  - States urged to **share data on unorganised workers** for effective policy implementation.
- **Integration of Digital Platforms:**
  - The **e-Shram** portal is being integrated with:

- **National Career Services (NCS)** – for employment generation.
- **SIDH** – for skill development.
- **Gati Shakti Portal** – to improve **logistics planning** and employment opportunities.
- **Labour Law Reforms:**
  - **Contract labour welfare** and the role of inspectors as **inspector-cum-facilitators** were key agendas.
  - Aim: **Reducing compliance burden** while ensuring decent working conditions and promoting **Ease of Doing Business**.

CONCERNS OVER DRAFT HIGHER EDUCATION COMMISSION OF INDIA (HECI) BILL

Current Context
- A **parliamentary panel** has raised concerns over the draft **Higher Education Commission of India (HECI) Bill**, citing **centralization of power** and **inadequate state representation**. The bill, which is yet to be introduced in Parliament, aims to replace the **University Grants Commission (UGC)** and the **All India Council for Technical Education (AICTE)** with a **single regulatory body**.

Key Concerns Raised by the Panel
- **Excessive Centralization:**
  - The proposed **central government-heavy composition** could **undermine state autonomy** in education.
  - State universities, which educate **over 90% of students**, may face difficulties under a centralized regulator.
- **Impact on Rural Higher Education:**
  - The removal of state control could **lead to the closure of institutions** in rural areas struggling with faculty and infrastructure shortages.
  - Could **indirectly fuel privatization**, making higher education less accessible.
- **Multiplicity of Regulations:**
  - The current system has multiple regulators **(UGC, AICTE, etc.),** causing **inconsistencies in standards and monitoring**.
  - The **draft HECI Bill does not resolve these issues** but instead centralizes control without adequate state participation.
- **HECI's Proposed Powers:**
  - Authority to **grant degree-awarding status** and **shut down institutions** failing to meet standards.
  - The impact of these powers on state universities remains a key concern.

EXTENSION OF NATIONAL COMMISSION FOR SAFAI KARAMCHARIS (NCSK) TENURE

Current Context
- The **Union Cabinet**, chaired by Prime Minister **Narendra Modi**, has approved the **extension of the National Commission for Safai Karamcharis (NCSK) tenure** for **three years** beyond **March 31, 2025**, i.e., until **March 31, 2028**. This extension involves a **financial outlay of ₹50.91 crore**.

Background
- **Established:** August 1994 under the **National Commission for Safai Karamcharis Act, 1993**.
- **Manual Scavenging Ban:** Strengthened under the **Prohibition of Employment as Manual Scavengers and Their Rehabilitation Act, 2013**.
- **Continuing Relevance:** Despite the Act, **manual scavenging-related deaths persist**, necessitating stricter monitoring.

Key Functions of NCSK
General Mandate:
- **Recommending policies** to eliminate inequalities faced by Safai Karamcharis.
- **Monitoring & evaluating** the implementation of welfare schemes.
- **Investigating grievances** related to non-implementation of schemes.
- **Assessing working conditions, health, and wages** of sanitation workers.
- **Providing reports & recommendations** to the Central and State governments.

STANDING COMMITTEE'S REVIEW OF SWACHH BHARAT MISSION (GRAMEEN) PHASE-II

Current Context
- A **parliamentary standing committee** has commended the progress under **Swachh Bharat Mission (Grameen) Phase-II (SBM-G II)**, noting that **5,57,468 villages** out of **5,87,529 villages** have achieved **ODF Plus** status. However, it also highlighted **gaps and challenges** in the implementation of the mission.

Understanding ODF Plus Villages
An **ODF (Open Defecation Free) Plus** village:
- **Sustains Open Defecation Free (ODF) status**.
- Ensures **effective Solid Waste Management (SWM) and Liquid Waste Management (LWM)**.
- Maintains **visual cleanliness** in public spaces.

About SBM-G (Swachh Bharat Mission - Grameen)

- **Launch Date: October 2, 2014** by the **Ministry of Jal Shakti (MoJS)**.
- **Nature: Centrally Sponsored Scheme** (funding shared between Centre and States).
- **Primary Objective: Eliminating open defecation in rural areas**.

SBM-G Phase II (2020-21 to 2024-25)

- **Focus:** Shifting from **ODF status to ODF Plus Model** by ensuring **sustained sanitation** and **waste management**.
- **Key Components:**
  - **Construction of Individual Household Latrines (IHHLs)** & **Community Sanitary Complexes (CSCs)**.
  - **Solid Waste Management (SWM) and Liquid Waste Management (LWM)**.

Challenges Highlighted by the Committee

- **Targets Not Fully Achieved:**
  - **Solid Waste Management (SWM):** Only **35%** of the target achieved.
  - **Liquid Waste Management (LWM): 57%** completion rate.
- **Issues with Swachh Survekshan Grameen (SSG) 2023:**
  - The survey **did not effectively measure key ODF Plus parameters**, raising concerns over **data accuracy**.
- **Financial and Implementation Issues:**
  - **Inadequate Incentive for IHHLs:** The **₹12,000 assistance** for constructing household toilets (IHHLs) has not been **adjusted for inflation**, reducing its impact.
  - **Underutilization of Funds:** Budget allocations remain **underutilized**, slowing down progress.
  - **Decline in IHHL Construction:** A drop in the number of **individual toilets being built** raises concerns about **coverage sustainability**.

INCOME-TAX BILL, 2025: KEY HIGHLIGHTS

Current Context

- The **Income-tax Bill, 2025** was introduced in **Parliament**, aiming to **simplify and restructure** the **Income-tax Act, 1961**, without altering tax policies or rates.

Core Principles of the Bill

- **Textual & Structural Simplification** – Enhanced clarity and coherence.
- **No Major Tax Policy Changes** – Ensuring **continuity & certainty**.
- **No Change in Tax Rates** – Maintaining **predictability** for taxpayers.

Approach to Simplification

- **Elimination of complex language** for better readability.
- **Removal of redundant provisions** to improve navigation.
- **Logical reorganization of sections** for ease of reference.

Consultative Process

- **20,976 online suggestions** were received; relevant inputs were incorporated.
- **Engagement with taxpayers, businesses, and experts** to refine the Bill.
- **Study of international best practices** from **Australia & the UK**.

Qualitative Improvements

- **Simplified language** for easier comprehension.
- **Consolidated amendments**, reducing fragmentation.
- **Elimination of outdated provisions** for greater clarity.
- **Structured presentation using tables & formulae** for better usability.
- **Preserved core taxation principles** while improving accessibility.

RAREST OF RARE DOCTRINE & DEATH PENALTY IN INDIA

Current Context

- Two murder cases have led to contrasting verdicts, highlighting **how Indian courts interpret the 'rarest of rare' principle in awarding the death penalty.**

Understanding the Doctrine

The '**rarest of rare**' principle helps courts decide whether to impose the **death penalty or life imprisonment.**

- **Jagmohan Singh vs. State of U.P. (1972):** The Supreme Court upheld the constitutionality of capital punishment, stating **it does not violate Article 21 (Right to Life).**
- **Bachan Singh vs. State of Punjab (1980):** The doctrine was formally laid down, limiting the death penalty to exceptional cases. However, **it did not define what constitutes 'rarest of rare.'**

Important elements under consideration

Courts assess whether a case falls under 'rarest of rare' using certain guidelines:

- Nature of the crime: The brutality or shocking nature of the act.
- Motive: If committed for political gains, extreme cruelty, or sadistic pleasure.
- Impact on society: If it targets vulnerable groups or creates widespread outrage.

- Scale of crime: Multiple murders or extreme criminality.
- Victim profile: Should the victim be a young child, elderly person, or especially defenceless adult?

Legal Evolution

- **Section 303 of IPC** earlier on s**pecified the death sentence for life offenders who killed someone else.** The Supreme Court struck this down, ensuring that all murder cases are judged under **Section 302,** which allows **judicial discretion between death and life imprisonment.**

Present Scenario

- **Although rare application of the death sentence is still constitutional.** Courts must carefully weigh **aggravating and mitigating factors before sentencing, ensuring that capital punishment is reserved for truly exceptional cases.**

ARTICLE 101(4) OF THE CONSTITUTION

Current Context

- Detained under the **National Security Act (NSA), Amritpal Singh has approached the Punjab and Haryana High Court requesting permission to attend the continuing Parliament session.** With his protracted **absence from Lok Sabha, his plea seeks to avoid disqualification under Article 101(4).**

What Article 101(4) Says

- This computation **excludes the period when Parliament is not in session;** if an **MP misses 60 consecutive days without permission, their seat may be declared vacant.**
- The **Speaker (Lok Sabha) or Chairman (Rajya Sabha) decides ultimately on disqualification.**

Goal & Importance

- Ensures **active participation of MPs in legislative procedures;**
- Prevents **neglect of parliamentary obligations;**
- **Strengthens responsibility and democratic values.**

Exceptionalism and Legal Issues

- **MPs can apply for leave of absence** due to valid reasons like **illness, detention, or unavoidable circumstances.**
- If the House grants permission, **the MP retains their seat.**
- In cases of legal detention, courts may intervene to allow attendance if necessary.

Likely Result

- Should the **court grant permission, Singh might show up for Lok Sabha meetings. If not, his protracted absence could result in Article 101(4) disqualification.**

IMMIGRATION AND FOREIGNERS BILL, 2025

Current Context

- To modernize and unite immigration laws, the Union government has proposed the **Immigration and Foreigners Bill, 2025 in Lok Sabha. It** replaces antiquated legislation including the **Foreigners Act 1936, the Registration of Foreigners Act 1939, and the Passport (Enterment into India) Act, 1920.**

Essential clauses

- Surveillance and national security
  - Foreigners presenting **security concerns cannot enter or live in India.**
  - **Immigration officials approved to seize suspects without a warrant.**
  - Required foreign **mandatory registration upon arrival** with **movement restrictions in sensitive areas.**
- Entry and Stay Policies
  - Entry and exit call for **a valid passport and visa.**
  - **Schools, hospitals, and hotels have to report foreign nationals under their supervision.**
  - **Travellers' correct documentation** must be guaranteed by transportation providers.
  - Ignoring rules could lead to **fines or transport seizure.**
- Stronger Penalties for Infractions
  - Up to five years in jail plus **₹5 lakh** fine for illegal access.
  - **Two to seven years jail plus ₹1 lakh–₹10 lakh** fine for false documents.
  - **Visa overstay:** three years jail plus **₹ 3 lakh** fine.
  - **Driving illegal immigrants: ₹5 lakh** fine plus possible car seizure.

Special Clause Regarding Dual Citizenship

- **Foreigners with dual citizenship** will be considered citizens of the nation whose **passport they used for entrance into India**

D-VOTERS IN ASSAM AND CITIZENSHIP RULES

Current Context

- The issue of **Doubtful Voters (D-voters)** has resurfaced in Assam, with demands to table the **NRC report** and shut down **transit camps** holding detainees.

Who Are D-Voters?

- **Doubtful Voters (D-Voters)** are individuals whose **citizenship status is questioned** in Assam.
- The **Election Commission of India (ECI)** marks them as "D" on electoral rolls, barring them from **voting** until verification.
- This system exists **only in Assam** and emerged during NRC verification.

Verification & Removal Process

- D-Voters must **appear before a Foreigners Tribunal (FT)** to prove citizenship.
- If declared **Indian**, their **D-tag is removed**, and voting rights are restored.
- If declared a **foreigner**, they face **detention** or **deportation.**

Legal Provisions

- **Citizenship Act, 1955** – Governs nationality but does not define D-Voters.
- **Citizenship (Amendment) Act, 2003** – Introduced NPR & NRIC, enabling further scrutiny.
- **Foreigners Tribunals (FTs)** – Decide the citizenship status of D-Voters.
- **Election Commission Guidelines** – D-Voters cannot vote or contest elections.

ZONAL COUNCILS: INTER-STATE COOPERATION MECHANISM

Current Context

- Under Union Home Minister Amit Shah's direction, Pune hosted the Western Zonal Council's **27th meeting**.

Zonal Councils

- **Founded in 1956 in line with the States Reorganisation Act.**
- Designed to promote **interstate cooperation and conflict resolution in particular areas.**
- Serve as advisory bodies **endorsing Centre-State coordination.**

Composition

Every Zonal Council is made up of:

- **Chairperson, Union Home Minister**
- **Rotating Vice-Chairperson, Chief Ministers of member states.**
- **Two Ministers chosen by the Governor from every state.**
- **Two UT representatives and Centre officials.**

Standing committees

- **Made up Chief Secretaries from surrounding states.**
- Meets often to address **problems before full council sessions.**
- When needed, representatives from **pertinent ministries including NITI Aayog join in.**

Important Functions

- Mediates **conflicts between states and centres**.
- Promotes r**egional, social and financial planning.**
- Promotes **cooperative and competitive federalism; addresses issues including border disputes, linguistic concerns, and transportation.**

Through encouraging **consensus-based governance among states and the Centre, zonal councils significantly strengthen federalism.**

LINGUISTIC DIVERSITY IN INDIA

Current Context

- With initiatives to **protect and advance regional languages, India's linguistic diversity has once again taken center stage.** Different studies and projects show the **great variety of languages spoken as well as the difficulties they encounter in a changing sociopolitical scene.**

Languages in India

- **The 2011 Census noted 121 other languages spoken nationwide, 99 non-scheduled languages, and 22 scheduled languages.**
- The **People's Linguistic Survey of India (2010)** noted that almost **50 languages had vanished** over the past five decades out of **780 languages identified overall.**
- From several linguistic families, Indian languages include **Dravidian, Indo-Aryan, Austro-Asiatic, and Tibeto-Burmese.**

Legal and Constitutional References

- **Eighth Schedule:** Lists and officially names **22 languages.**
- **Article 29:** Safeguards citizens linguistic and cultural rights.
- **Article 350-B:** Specifies a special officer for linguistic minorities to guarantee safeguarding of their rights.

Government Programs Promoting Linguistic Variance

- **NEP 2020:** Promotes **mother tongue or local language primary education.**
- **Sahitya Akademi: Uses awards and research to** help to promote and respect several Indian languages.

- Programs like **Bhashini and AI-based translating tools help enable communication in regional languages through technological interventions**.
- **Classical Language Status:** given to languages with **literary and historical value.**
- **Bharatiya Bhasha Samiti (2021):** Founded to **advance the usage of Indian languages and fortify them**

PROXY PARTICIPATION IN PANCHAYATI RAJ INSTITUTIONS (PRIS)

Current Context
- A government panel has **recommended measures to curb proxy participation in PRIs, following a Supreme Court directive in Mundona Rural Development Foundation vs. UoI (2023).** The report, titled **"Transforming Women's Representation and Roles in Panchayati Raj Systems and Institutions,"** aims to strengthen women's real decision-making power in local governance.

Women's Involvement in PRIs: Challenges
- Later **expanded to 50% in many states, the 73rd Constitutional Amendment (1992)** guaranteed **one-third reserve** for women in PRIs.
- Women now hold **46.6%** of elected panchayat positions, yet many remain **figureheads**, with male relatives exerting actual control.
- This practice **weakens the intended empowerment of women and reinforces gender-based political marginalisation.**

Important Advice from the Panel
- **Strict Penalties: Legal action against cases of proxy leadership;** specifics of enforcement are yet unknown.
- **Gender-specific seat allocation, required public oath-taking, and women-led panchayat federations** are among policy reforms.
- T**echnology Integration: Virtual leadership training, Panchayat Nirnay Portal tracking of participation, AI-driven advisory tools**
- **Measures of Accountability:** Helplines, protections for whistleblowers, local monitoring groups reporting violations.

REVISED WAQF (AMENDMENT) BILL, 2024

Current Context
- **Approved by the Union Cabinet, the Revised Waqf (Amendment) Bill, 2024 addresses major issues in Waqf property administration.** The measure **builds on past** changes, including those made in 2013 based on the Sachar Committee Report, and combines recommendations from the Joint Parliamentary Committee (JPC).

Why is a change of direction required?
- Property conflicts arising from the unclear **"Once a Waqf, Always a Waqf" principle** have property disputes.
- Lack of **court review over tribunal rulings.**
- **The Waqf property surveys and record-keeping are in poor condition.**
- **There is an under-representation of underprivileged Muslim groups within the Waqf government.**

Important Characteristics of the Bill
- **Inclusive Governance—**Ensures participation of Muslim women and OBC representatives in Waqf administration.
- **Judicial Oversight—**Allows appeals against Waqf Tribunal decisions in the High Court within 90 days.
- **Strengthening Waqf Councils—**Enhances the role of Central and State Waqf Boards in property management and dispute resolution.
- **Improved Transparency—**Digital record-keeping and stricter property surveys for better accountability.
- **Community-Specific Reforms—**Proposes separate Waqf Boards for Aghakhani and Bohra communities.

Understanding Waqf
- **Waqf is the state of religious endowments whereby assets are permanently set aside for either religious or charitable use.** A **mutawalli (caretaker) manages these assets;** they cannot be sold or used for another purpose. **Comprising 9.4 lakh acres over 8.7 lakh properties, India boasts the highest Waqf landholding worldwide.**

THREE-LANGUAGE FORMULA AND THE ONGOING DEBATE

Current Context
- Once again, **the three-language policy is a divisive topic, especially in Tamil Nadu,** where the **state government rejects its execution under the New Education Policy (NEP) 2020.** The central question is about issues of **federal autonomy in education and language imposition.**

Understanding the Three-Language Formula
- First introduced in the **National Education Policy (NEP) 1968,** and retained with modifications in **NEP 2020**.
- Aims to **promote multilingualism and national integration** among students.

- Requires students to study **three languages** during school education:
  - At least **two must be Indian languages**.
  - The third can be **English or any other language** as per student or regional preference.
- Unlike earlier policies, **NEP 2020 does not mandate any specific language**; instead, it provides **flexibility** in language choice.

- The state has long adopted **a two-language policy (Tamil and English), excluding Hindi.**
- Issues about the policy may indirectly **impose Hindi against Tamil Nadu's long-standing linguistic identity.**
- The **Constitution's treatment of education** as a **Concurrent List item is thought to be an attack on state rights.**

Challenges of Implementation

- **Shortage of trained teachers** for regional languages.
- **Limited resources** in government schools to introduce an additional language.
- **Resistance from non-Hindi-speaking states**, fearing cultural and linguistic dilution.

MISUSE OF PILs: SUPREME COURT RAISES CONCERN

Current Context

- A Supreme Court judge recently pointed out that **Public Interest Litigation (PIL)** is being misused, diluting its intended role as a mechanism for **social justice**. The observation comes amid growing concerns that **PILs are often filed to serve individual, political, or publicity-driven agendas**, rather than addressing genuine public grievances.

Understanding PILs

- PIL allows **any individual or group** to approach the court for matters concerning **public welfare**, even if they are not directly affected. It emerged as a tool to make justice more accessible, especially for **marginalized communities**. The Supreme Court and High Courts handle such cases under **Article 32 and Article 226**, respectively.

Concerns Over Misuse

- Hidden Agendas: Some PILs are driven by personal, corporate, or political motives, diverting attention from real issues.
- Judicial Overreach: Excessive intervention in policy matters can disrupt the balance between the judiciary, executive, and legislature.

- Increasing Caseload: A surge in frivolous petitions is putting additional strain on an already overburdened judicial system.

Why PILs Still Matter

- Despite misuse, PILs have led to **significant legal reforms**, such as **women's entry into religious places, LGBTQ+ rights, and environmental protection**. The challenge lies in ensuring that this tool is used **responsibly** to uphold justice rather than as a means for self-interest.

ASSAM ASSEMBLY PASSES AMENDMENTS TO AUTONOMOUS COUNCIL LAWS

Current Context

- The Assam State Assembly has passed **amendment bills related to seven autonomous councils**, allowing the **Governor to assume control** if elections are deemed **impractical** beyond the extended term of the elected bodies.

Key Amendments

- **Governor's Authority –** If elections cannot be held even after an extension, the Governor can take over the council's powers and functions. He may appoint an interim committee or an authority to run the council.
- **Increased Representation –** The Tiwa Autonomous Council will now have 42 members, with 38 elected and four nominated from communities residing in the council area.

Impacted Autonomous Councils

The amendments apply to the following councils:
- **Missing Autonomous Council**
- **Bodo Kachari Welfare Autonomous Council**
- **Thengal Kachari Autonomous Council**
- **Deori Autonomous Council**
- **Sonowal Kachari Autonomous Council**
- **Rabha Hasong Autonomous Council**
- **Tiwa Autonomous Council**

Other Bills Passed

- **Assam Municipal Employees (Provincialisation) Bill, 2025—Focuses** on incorporating municipal employees into the government payroll.
- **Assam Goods and Services Tax (Amendment) Bill, 2025—** Introduces changes to the state's GST framework.

Implications

- The **Governor's power to take over** may raise concerns over **autonomy and self-governance** in tribal areas.

- Expansion of **council seats** aims to enhance **the political representation** of local communities.
- The amendments reflect an effort to **streamline governance** in Assam's **tribal and municipal regions**.

TRIBUNALS IN INDIA: NEED FOR REFORMS

Current Context

- Tribunals, introduced through the **42nd Constitutional Amendment (1976)**, were established to ease the burden on regular courts and ensure quicker resolution of specialized disputes. However, their effectiveness has been questioned, prompting the **Supreme Court to call for structural reforms** while reviewing the **Tribunal Reforms Act, 2021**.

Define Tribunals

- Created for more e**xpeditious resolution of particular conflicts, tribunals are quasi-judicial bodies.** They were **first included under Articles 323-A (administrative tribunals for public servants) and 323-B (tribunals for taxation, land reforms, etc.) in the 42nd Amendment Act (1976).**

Key Issues in Tribunal Functioning

Issue	Explanation
Judicial Independence	Executive influence over appointments affects neutrality.
Case Backlogs	Tribunals like the Armed Forces Tribunal have pending cases in the thousands
Poor Infrastructure	Inadequate staffing and lack of resources hinder efficiency.
Jurisdictional Confusion	Overlapping authority between tribunals and courts leads to legal ambiguity.

Basis for Constitution

- **Article 323A** let **Parliament create administrative tribunals** for matters involving government service.
- **Article 323B** allows the **establishment of tribunals covering taxation, land reforms, industrial conflicts, etc.**

Way Forward

- **Clear and Independent Appointments** to Minimize Executive Authority.
- **Enhanced Resource Allocation** guarantees better infrastructure.

- **Unambiguous jurisdictional demarcation to avoid regular court conflicts.**

RIGHT TO LIVELIHOOD AS A FUNDAMENTAL RIGHT

Current Context

- Recognizing **Ranveer Allahbadia's only means of income, the Supreme Court let him keep running** his shows.

Constitution Basis

- **Article 21:** As the Supreme Court reads it, the **right to life subtly incorporates the right to livelihood.**
- **Article 39(a):** Orders the State to guarantee that, regardless of gender, every person is entitled to a sufficient means of living.

Notable Supreme Court rulings

- **Olga Tellis v. BMC (1985)**
  - The Supreme Court decided that since **survival depends on capacity to earn, livelihood is a necessary component of life.**
  - Violating their basic rights, evicting pavement dwellers without alternative housing.
- **M.J. Sivani v. State of Karnataka (1995)**
  - **Verified that Article 21 covers livelihood protection,** so deterring arbitrary actions endangering a person's means of living.

Why It Matters

- **Reiterates economic security as a basic right;**
- Stovers **unfair deprivation of livelihoods by the State;**
- Balances **individual rights with reasonable state limitations on professions** and trade.

RAILWAYS (AMENDMENT) BILL, 2024

Current Context

- Designed to modernize Indian railway operations, P**arliament passed the Railways (Amendment) Bill 2024, on March 10, 2024.** Having **passed the Lok Sabha in December 2023, the Bill was approved in the Rajya Sabha by a voice vote.**

Key Provisions of the Bill

- **The Railways Act, 1989** will now control the structure and composition of the Indian **Railway Board, 1905.**
- **Statutory Status for the Railway Board** will have legal support for the first time, guaranteeing clarity in **the appointment, tenure, and qualifications of its members.**

- **Decentralization of Power:** General Managers of Railway Zones can approve projects up to **₹1,000 crore, so enhancing efficiency and decision-making.**
- **Independent regulatory body will supervise fare determination, infrastructure access, and service standards,** so encouraging sector competitiveness.
- **Fast-tracking infrastructure and superfast trains,** Bill supports the increase of **high-speed rail services while removing administrative delays in project approvals.**

Impact on Indian Railways

- **Increased Efficiency**: Strengthens field offices and railway zones by giving them more financial and operational autonomy.
- **Safety Measures**: The government is allocating **₹1 lakh crore annually** for safety improvements, reducing railway accidents (from **171 incidents to 30 per year**).
- **Cooperative Federalism**: The bill clarifies that **state government powers remain intact**, while decentralization empowers railway management.
- **Regional Development**: Facilitates rail network expansion in underserved areas (e.g., **Arunachal Express extension** via Bihar).

OILFIELDS (REGULATION AND DEVELOPMENT) AMENDMENT BILL, 2024

Current Context

- Aiming to boost India's oil and gas exploration, **the Oilfields (Regulation and Development) Amendment Bill, 2024 has been passed by the Lok Sabha.** The Bill addresses issues that have hampered sectoral development by trying to **draw foreign investment, guarantee policy consistency, and permit international arbitration.**

Important Requirement

- **Extended lease periods guarantee investors' long-term security.**
- **Stable Regulatory Framework:** Lowering policy uncertainty increases investor confidence by means of policy certainty
- **International Arbitration:** Provides means of resolving conflicts under worldwide systems.
- **Simplifies operational approvals and licensing,** so improving business ease of use.
- Impact
- **Increasing foreign investment in Indian oilfields** motivates worldwide players.
- **Boost to Domestic Exploration:** Encouragement of higher gas and oil output
- **Improved Energy Security:** Strengthens self-sufficiency by less reliance on imports.

SANSAD BHASHINI: AI FOR PARLIAMENTARY OPERATIONS

Current Context

- The **Lok Sabha Secretariat and MEITY** have signed an MoU to develop **Sansad AI**, an in-house AI solution to enhance multilingual accessibility and streamline parliamentary operations.

Key AI Initiatives

- **AI-Based Translation** – Converts parliamentary documents into regional languages for better accessibility.
- **AI Chatbot for Parliament Website** – Provides instant responses on parliamentary rules and procedures.
- **Speech-to-Text Conversion** – Real-time transcription of debates in Indian languages.
- **Speech-to-Speech Conversion** – Enables live translation and automatic summarization of discussions.

FAST TRACK SPECIAL COURTS (FTSCS)

Current Context

- The **Fast Track Special Courts (FTSCs) Scheme** has been extended until **2026** with a financial outlay of **₹1952.23 crore** under the **Nirbhaya Fund** to expedite justice in **rape and POCSO Act cases**.

Key Features of FTSCs

- **High Disposal Rate**: **96.28%** in 2024, with **88,902 new cases** and **85,595 resolved cases**.
- **Established Under**: **Criminal Law (Amendment) Act, 2018** and **Supreme Court Directive (2019)**. **Implementation**: Centrally Sponsored Scheme (CSS) by **Ministry of Law & Justice**.
- **Total Courts**: **790 FTSCs**, including **exclusive e-POCSO courts**.
- **Target**: Each FTSC must dispose of **165 cases annually**.

Financial Framework

- **Total Budget (2023-2026):** ₹1952.23 crore (₹1207.24 crore from **Nirbhaya Fund**).

Cost Sharing

- **General States/UTs with legislature**: **60:40** (Centre: State). **Northeastern, Hilly States & J&K**: **90:10** (Centre: State).
- **UTs without legislature**: **100%** Central funding.

X CORP'S CHALLENGE TO SAHYOG PORTAL AND IT ACT PROVISIONS

Current Context

- **X Corp (formerly Twitter)** has challenged the **Sahyog portal** and content-blocking orders issued under **Section 79(3)(b) of the IT Act, 2000**, arguing they bypass **Supreme Court-mandated safeguards** under **Section 69A**. The Karnataka High Court is set to hear the case on **March 27, 2025**.

Key Provisions Involved

Legal Provision	Description	X Corp's Argument	Government's Stand
Section 69A (IT Act, 2000)	Empowers the Central Government to block public access to content in the interest of sovereignty, security, public order, etc. with procedural safeguards	Blocking orders should be issued only under Section 69A, which includes judicial and procedural oversight	Blocking orders under Section 69A remain valid, but Section 79(3)(b) also applies
Section 79(3)(b) (IT Act, 2000)	States that intermediaries (like X Corp) lose their legal immunity if they fail to remove illegal content when notified by the government	The government cannot issue blocking orders under this section, as it only defines liability	This provision does not mandate blocking, but informs platforms of illegal content, making them liable for non-compliance
Sahyog Portal	A government platform allowing Central and State authorities, including police, to issue takedown orders for online content	Creates a parallel censorship system, bypassing Supreme Court-mandated safeguards	Ensures efficient coordination for tackling illegal content

PARLIAMENTARY STANDING COMMITTEE ON AGRICULTURE SUBMITS REPORT ON FISHERIES SECTOR

Current Context

- A **Parliamentary Standing Committee** has highlighted **technological obsolescence** and **underutilization** in India's fisheries sector. Despite being the **second-largest producer of fish globally**, India is not realizing its full potential due to outdated practices, lack of deep-sea fishing technology, and limited access to institutional credit for fisherfolk.

Key Findings & Recommendations

- **Need for Modernization**: Adoption of **advanced fishing technologies** and technical know-how for **deep-sea fishing**.
- **Institutional Credit & Support**: Fisheries should be treated **on par with agriculture** to ensure **easier access to credit** for fisherfolk.
- **Sustainable Practices**: Concerns over **unsustainable farming** causing **environmental damage** and **loss of indigenous breeds**.
- **Reservoir Fisheries Development**: Utilizing **reservoirs on rivers** to boost **inland fish production**.
- **Export & Certification Improvements**: Strengthening **certification processes** for **fish exports and imports**.
- **Insurance for Fisherfolk**: **Comprehensive insurance coverage** to protect against **natural calamities**.
- **Democratic Decentralization**: Greater **state-level involvement** to integrate **Central and State schemes** for better implementation.

IN-HOUSE INQUIRY INITIATED AGAINST DELHI HC JUDGE JUSTICE YASHWANT VARMA

Current Context

- Chief Justice of India **Sanjiv Khanna** has initiated an **unprecedented in-house inquiry** against Delhi HC Judge **Justice Yashwant Varma** after **wads of currency notes** were allegedly found at his official residence following a fire incident on **March 14**. A **three-member judicial panel** has been formed to investigate the matter.

In-House Inquiry vs. Impeachment Process

- **Impeachment (Article 124(4))**: A **judge can be removed** by **Parliament** for **"proved misbehaviour"** or **"incapacity"**, requiring a **two-thirds majority** in both Houses.
- **In-House Inquiry (SC Guidelines, 1997 & 2014)**: A **disciplinary mechanism** within the judiciary, distinct from

impeachment, aimed at addressing **judicial misconduct** below the threshold of removal.

Inquiry Process

- **Complaint Received** → Reviewed by the **CJI**.
- **Preliminary Report** → Conducted by the concerned **HC Chief Justice**.
- **Three-Member Inquiry Panel** → If necessary, **two HC Chief Justices & one HC Judge** investigate.
- **Findings Submitted** → If misconduct is **not serious**, the **CJI may advise the judge**; if serious, the **CJI may recommend resignation**.
- **Non-Compliance** → If the judge refuses to step down, **removal proceedings may be initiated** by informing the **President & PM**.

Justice Varma has already been **relieved of judicial duties** by order of the **CJI** pending inquiry. The case marks a **rare invocation of the in-house procedure** in India's judiciary.

DISASTER MANAGEMENT (AMENDMENT) BILL, 2024 PASSED

Current Context

- The **Disaster Management (Amendment) Bill, 2024** was **passed by Parliament on March 25, 2024**, with the **Rajya Sabha approving it on the same day**. The **Lok Sabha had passed it in December 2023**. The bill amended the **Disaster Management Act, 2005**, aiming to enhance the **efficiency of the National and State Disaster Management Authorities (NDMA & SDMA)**.

Key Provisions of the Bill

- **Shifted disaster planning responsibility** from the **National and State Executive Committees** to the **NDMA & SDMA**.
- **Empowered state governments** to set up **Urban Disaster Management Authorities** for **state capitals and municipal cities**.
- **Mandated creation of a disaster database** at the **national and state levels.** **Promoted AI-based real-time disaster monitoring** instead of manual surveillance.
- **Encouraged a multi-dimensional approach**, involving **citizens and society** beyond government response.

Disaster Management Act, 2005

- **Framework** for disaster preparedness, mitigation, and response.
- **Institutions**: National, State, and District Disaster Management Authorities (NDMA, SDMAs, DDMAs).
- **Funds**: National & State Disaster Response Funds (NDRF, SDRF), Mitigation Fund.

INDIAN PORTS BILL, 2025

Current Context

- The **Indian Ports Bill, 2025** was introduced in **Lok Sabha** to modernize **port laws, improve governance, and enhance disaster and pollution management**. It proposes **State Maritime Boards** for **non-major ports** and a **Maritime State Development Council** for sectoral growth. The bill also introduces **dispute resolution mechanisms** but faces opposition for alleged **centralization of port control**.

Key Provisions	Details
Modernization	Consolidates and updates port laws for **better governance**.
Pollution & Disaster Management	Strengthens **environmental safeguards** and **emergency response**.
Dispute Resolution	Introduces **adjudicatory mechanisms** for port-related disputes.
State vs Centre Debate	Empowers **State Maritime Boards** but faces criticism over **centralization**.

INTERNATIONAL RELATIONS

International Relations

QUADRILATERAL SECURITY DIALOGUE (QUAD)

Current Context

- The **Quad Leaders' Summit** was held in **Wilmington, USA**. **Wilmington Declaration** adopted, marking **20 years** of Quad. India to **host the 2025 Quad Summit**.

Key Announcements in Wilmington Declaration

- **Health Security: 'Quad Cancer Moonshot'** to fight cervical cancer in the Indo-Pacific.
- **Infrastructure: 'Quad Ports of the Future Partnership'** for sustainable port development.
- **Technology: Semiconductor Supply Chain Resilience Network** for secure supply chains.
- **Investment: Quad Investors Network (QUIN)** to fund Indo-Pacific projects.
- **Climate Action:** Deployment of **high-efficiency affordable cooling systems**.
- **Maritime Security:**
  - **MAITRI Initiative** for Indo-Pacific **maritime surveillance**.
  - **'Quad-at-Sea Ship Observer Mission' (2025)** for interoperability.

About Quad

- **Members: India, USA, Japan, Australia**.
- **Nature:** A **plurilateral diplomatic partnership** (not a military alliance).
- **Objective:** Promote **Indo-Pacific stability, economic security, and technology cooperation**.

Relevance for India

- **Strategic Counterbalance:** Helps **manage China's influence** in the Indo-Pacific.
- **Defence:** Strengthens **maritime security and naval cooperation**.
- **Technology & Economy:** Reduces dependence on China in **critical sectors like semiconductors**.

Challenges

- **Divergent Priorities:** USA focuses on **global security**, while India prioritizes **regional stability**.
- **China's Opposition:** Viewed as an attempt to create an **Asian NATO**.
- **US Distraction:** Conflicts in **Europe and the Middle East** may shift US focus away from Indo-Pacific.

TAPI GAS PIPELINE: REGIONAL ENERGY COOPERATION & CHALLENGES

Current Context

- **Afghanistan and Turkmenistan** inaugurated a section of the **TAPI pipeline project**.

About TAPI Pipeline

- **Full Form: Turkmenistan-Afghanistan-Pakistan-India (TAPI) Gas Pipeline**.
- **Route: 1,800 km** pipeline carrying **33 billion cubic meters (bcm) of gas annually**.
- **Source: Galkynysh Gas Field, Turkmenistan** (one of the world's largest gas reserves).
- **Financed by: Asian Development Bank (ADB)**.

Significance for India

- **Energy Security:** Ensures **long-term natural gas supply**.
- **Economic Benefits:** Reduces **trade deficit and energy import costs**.
- **Regional Stability: Economic cooperation with Pakistan** can reduce tensions.
- **Strategic Advantage:** Counters **China's influence in Central Asia**.

Challenges

- **Security Concerns:** Instability in **Afghanistan and Pakistan**.
- **Project Delays:** Long-standing **funding and political hurdles**.
- **Alternatives:** India's focus on **LNG imports** may affect TAPI's viability.

INDIA-DENMARK GREEN STRATEGIC PARTNERSHIP: MARITIME & ENERGY TIES

Current Context

- **India and Denmark signed agreements** to enhance **maritime cooperation** under GSP.

Key Facts About GSP

- **Established in: 2020**.
- **Focus Areas:** Climate change, renewable energy, green growth, and job creation.
- **Joint Action Plan (2021-2026):** Implements **Paris Agreement & UN SDGs**.

Key Areas of Cooperation

- **Maritime Sector:** Port management, quality shipping, and training.
- **Renewable Energy:** Collaboration in **wind energy and green hydrogen**.
- **Clean Technology:** Sustainable solutions for **climate resilience**.

Significance for India

- **Energy Transition:** Supports **India's shift to renewables**.
- **Global Diplomacy:** Strengthens **India's ties with the EU** on climate issues.
- **Economic Benefits:** Increases **green investment and technology transfer**.

Challenges

- **Infrastructure Gaps:** Need for advanced **clean energy infrastructure**.
- **High Costs:** Large investments required for green projects.

QUAD'S DIGITAL PUBLIC INFRASTRUCTURE (DPI) FRAMEWORK

Current Context

- **Quad nations released a DPI framework** to support **digital transformation**.

What is DPI?

- A **network of digital services** enabling economic opportunities and social services.
- **Example: India Stack** – India's digital governance and financial inclusion model.

Quad's Principles for DPI

- **Inclusivity:** Eliminates barriers and prevents **algorithmic bias**.
- **Collaboration:** Encourages **cross-border innovation**.
- **Scalability:** Designs adaptable to **growing demand**.
- **Cybersecurity:** Enhances **digital safety and resilience**.

Significance for India

- **Boosts Digital Economy:** Expands **FinTech, e-commerce, and governance models**.
- **Strengthens Cybersecurity:** Helps counter **cyber threats in the Indo-Pacific**.
- **Encourages Innovation:** Advances **AI, blockchain, and big data technologies**.

Challenges

- **Data Protection Concerns:** Need for **robust privacy laws**.

- **Technological Standardization:** Ensuring compatibility across countries.

INDIA-US SECURITY OF SUPPLY ARRANGEMENT (SOSA): STRENGTHENING DEFENCE TIES

Current Context

- India and the US signed the **Security of Supply Arrangement (SOSA)** to ensure **uninterrupted defence supplies** between the two nations. India became the **18th country** to join this agreement, alongside **Australia, Canada, Japan, and the UK**.

Key Features of SOSA

- **Reciprocal Access to Defence Supplies:** Both nations can request priority delivery of critical defence components.
- **Supply Chain Stability:** Helps address delays, such as **jet engine procurement for Tejas fighter jets**.
- **Legal Status:** The agreement is **non-binding** but reinforces **strategic trust**.
- **Future Cooperation:** A legally binding **Reciprocal Defence Procurement (RDP) Agreement** is under discussion.

Significance for India

- **Boost to Defence Manufacturing:** Encourages US firms to source from **Indian defence vendors**.
- **Enhanced Strategic Partnership:** Strengthens **India-US defence cooperation** during crises.
- **Support Under US Defence Priorities System:** Ensures **India gets priority access** to essential military resources.

PACIFIC ISLANDS FORUM (PIF): REGIONAL COOPERATION & INDIA'S ROLE

Current Context

- The **annual Pacific Islands Forum (PIF) meeting** was held in **Tonga**, focusing on regional security, economic development, and climate action.

About PIF

- **Established:** 1971
- **Members:** 18 Pacific nations, including **Australia, New Zealand, Papua New Guinea, Fiji, and Cook Islands**.
- **Headquarters:** Suva, Fiji
- **Objectives:**
  - **Promote economic growth** and regional trade.
  - **Enhance security cooperation** in the Indo-Pacific.
  - **Address climate change and sustainable development**.

India's Engagement with PIF

- India **supports climate resilience projects** in the Pacific region.
- Strengthens **economic and diplomatic ties** under the **Act East Policy**.
- Collaborates with **PIF nations on disaster relief and renewable energy initiatives**.

FORUM ON CHINA-AFRICA COOPERATION (FOCAC): ECONOMIC & STRATEGIC TIES

Current Context

- The **9th FOCAC Summit** was held in **Beijing**, attended by over **50 African leaders** and UN officials.

Key Announcements by China

- **Financial Support:**
  - **$50 billion** for **infrastructure, agriculture, trade, and energy** in Africa.
  - **$11 billion** in direct assistance, with the remainder as **credit and investments**.
  - **$10 billion** from **Chinese firms** investing in Africa.
- **Military Cooperation:**
  - **$141 million in military grants**.
  - Training of **6,000 military personnel and 1,000 police officers**.
- **Strategic Shift:**
  - China remains **Africa's largest trading partner**, despite **domestic economic slowdowns**.
  - **Growing geopolitical competition** with the US influences Beijing's Africa strategy.

Impact on India

- **Economic Competition:** India's **Africa outreach competes with China's investments**.
- **Strategic Considerations:** India supports **capacity-building projects** in Africa to counterbalance Chinese influence.
- **Energy Security:** Africa is a **key partner for India's resource diversification**.

OPERATION SADBHAV: INDIA'S HUMANITARIAN ASSISTANCE IN SOUTHEAST ASIA

Current Context

- India launched **Operation Sadbhav** to provide **disaster relief** to **Laos, Myanmar, and Vietnam**, affected by **Typhoon Yagi-induced floods**.

Part of India's ASEAN Outreach

- Strengthens **India's role in regional disaster response**.
- Aligns with the **Act East Policy**.

Significance

- Positions India as a **first responder in the Indo-Pacific**.
- Enhances **regional goodwill and diplomatic influence**.
- Supports **India's leadership in humanitarian assistance and disaster relief (HADR)**.

INDIA-GCC FOREIGN MINISTERS' DIALOGUE: STRENGTHENING STRATEGIC COOPERATION

Current Context

- India and the **Gulf Cooperation Council (GCC)** held their **first Foreign Ministers' Meeting** in Riyadh. A **Joint Action Plan (2024-2028)** was adopted to expand cooperation in **trade, security, energy, health, and food security**.

About GCC

- **Established:** 1981.
- **Members: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE**.
- **Headquarters: Riyadh, Saudi Arabia**.
- **Objectives:**
  - Promote **economic integration and security cooperation**.
  - Enhance **political dialogue and stability** in the Gulf region.
  - Develop **infrastructure, digital economy, and trade partnerships**.

India-GCC Relations

- **Economic & Trade Partnership:**
  - GCC is a **major trading bloc** for India.
  - Expanding trade beyond **energy to infrastructure, finance, and technology**.
  - **India-GCC Free Trade Agreement (FTA)** under negotiation.
- **Energy Security:**
  - GCC is **India's top supplier** of **oil and gas**.
  - GCC nations interested in **India's Strategic Petroleum Reserve (SPR) project**.
- **Diaspora & Workforce:**
  - GCC hosts **one of the largest Indian expatriate communities**.
  - Indian professionals contribute to **healthcare, finance, and construction sectors** in the Gulf.
- **Defence & Security Cooperation:**

- ■ Increased engagement in **counterterrorism, cybersecurity, and maritime security**.
- ■ Strengthening cooperation in **regional stability and defence partnerships**.
- • **Political Engagement:**
  - ■ Institutionalized annual **India-GCC consultations**.
  - ■ Collaborative approach to **food security and investment opportunities**.

Strategic Importance for India

- • **Boosts energy and economic security**.
- • **Strengthens India's engagement in West Asia**.
- • **Enhances regional influence and investment opportunities**.

NORTHERN UNITED-2024: CHINA-RUSSIA MILITARY DRILLS

Current Context

- • **China and Russia conducted joint military exercises** in the **Sea of Japan and Sea of Okhotsk** to enhance strategic coordination.

Objective

- • Strengthen **naval and air force interoperability** and address **regional security concerns**.

Geopolitical Importance

- • Demonstrates growing **China-Russia military cooperation**.
- • Responds to **shifting security dynamics in the Indo-Pacific**.
- • Signals strategic intent amid **heightened global tensions**.

CÔTE D'IVOIRE JOINS UN WATER CONVENTION

Current Context:

- • Côte d'Ivoire has become the **53rd Party** and **10th African country** to join the **1992 UN Water Convention** for transboundary water cooperation, addressing growing water stress and climate change impacts.

About the UN Water Convention (1992)

- • A legally binding treaty for **transboundary water cooperation**.
- • Ensures **sustainable use, equitable distribution, and conflict resolution**.
- • Opened to **all UN member states in 2016**.

Côte d'Ivoire's Accession

- • **Shares 8 transboundary river basins** with Ghana, Mali, Liberia, etc.

- • **Only 25% of its transboundary water** covered by operational arrangements.
- • Faces **severe water challenges** due to **climate change, pollution, and urbanization**.

Challenges in Côte d'Ivoire's Water Management

- • **Climate Change:** Rising droughts, floods, and uneven water distribution.
- • **Pollution:** Industrial waste, illegal mining, and untreated sewage.
- • **Water Scarcity:** Northern regions face acute shortages.

Significance for Africa

- • **Water Scarcity:** 1 in 3 Africans lack access to safe drinking water.
- • **Economic Impact:** Water issues cost **2-9% of GDP** in African nations.
- • **Future Demand:** Sub-Saharan Africa's population **to double by 2050**.

Role of the UN Water Convention

- • **Encourages Joint Water Bodies:** Strengthens institutions like the **Niger Basin Authority**.
- • **Groundwater Cooperation:** Supports shared aquifers for climate resilience.
- • **SDG 6.5.2 Compliance:** Improves water governance and mobilizes funding.

INDIA-JAPAN JOINT CREDITING MECHANISM (JCM)

Current Context

- • India is set to sign a **Memorandum of Cooperation (MoC)** with Japan to establish a **Joint Crediting Mechanism (JCM)** for **carbon trading and emission reduction credits** under **Article 6.2 of the Paris Agreement**.

Key Features of the JCM

- • **Bilateral Carbon Trading**: Carbon credits will be **allocated and tracked** through a structured registry.
- • **Emission Reduction Sharing**: Credits will contribute to both countries' **Nationally Determined Contributions (NDCs)** while avoiding double counting.
- • **Project Approval Process**: A **Joint Committee** will clear projects and issue credits.

Significance for India

- • **Technology Transfer & Investment**: Japan will provide **finance, capacity-building, and clean tech solutions**.
- • **Job Creation**: Boosts employment in **low-carbon industries**.
- • **Climate Goals**: Helps India achieve its **Net Zero** target by **2070**.

- **Paris Agreement Compliance**: Aligns with **Article 6.2**, promoting international carbon markets.
- **Strengthened Bilateral Ties**: Enhances India-Japan cooperation in **green energy and sustainability**.
- **Global Climate Leadership**: India can leverage JCM for **innovative carbon market strategies**.

INDIA-USA CULTURAL PROPERTY AGREEMENT (CPA)

Current Context

- On **July 26, 2024**, India and the USA signed the **first-ever Cultural Property Agreement (CPA)** at the **46th World Heritage Committee** in **New Delhi**. The agreement aims to **curb illicit trafficking of Indian antiquities** and facilitate their **repatriation**.

Key Features of CPA

- **Aligned with the 1970 UNESCO Convention** on **illicit cultural property trade**.
- **Restricts Import of Indian Antiquities**: Covers **archaeological and ethnological materials** from **1.7 million years ago to 1947 CE**.
- **Designated List**: USA will **seize and return** artifacts prohibited for import.
- **Strengthens Bilateral Cultural Cooperation**: Result of **Article 9 deliberations** since 2022.

Significance for India

- **Accelerates Repatriation**: **358 artifacts** repatriated since **1976**, **345 after 2014**.
- **Supports 'Vikas Bhi, Virasat Bhi' Vision**: Cultural heritage as an economic driver.
- **Enhances Global Cultural Diplomacy**: Follows **G20's Culture Protection Agenda (2023)**.

Global Context

- USA has similar agreements with **Italy, Egypt, Greece, China, Peru, and others**.
- **Exhibition 'Re(ad)dress: Return of Treasures'** showcases repatriated artifacts at **Bharat Mandapam**.

INDIA'S FIRST READY-TO-DRINK FIG JUICE EXPORT TO POLAND

Current Context

- On **August 1, 2024**, India exported its **first ready-to-drink fig juice**, made from **GI-tagged Purandar figs**, to **Poland**.

This initiative, facilitated by **APEDA**, marks a major step in promoting India's unique agro-products globally.

Key Highlights

- **Purandar Figs:**
  - GI-tagged variety known for **high pulp content, rich vitamins, minerals, and excellent sweet taste**.
  - Grown using **salt-free well irrigation** in **red-black soil**, enhancing its unique flavor.
- **Journey to Global Markets:**
  - First **export to Germany in 2022**.
  - Introduced at **SIAL 2023 (Greater Noida, India)** & **Macfrut 2024 (Rimini, Italy)**.
  - Interest from **MG Sales SP (Poland)** led to this milestone shipment.
  - **Produced by Purandar Highlands Farmers Producer Company Ltd.**, which won an award at Macfrut 2024.

Significance

- **Boosts Indian Agro-Exports:** Expands India's footprint in **processed fruit markets**.
- **Supports Small Farmers:** APEDA's role in connecting **smallholder farmers to global trade**.
- **Strengthens GI-Tagged Product Exports:** Enhances the value of **India's Geographical Indications (GIs)** in international markets.

INDIA'S HUMANITARIAN AID TO UKRAINE – BHISHM CUBES

Current Context

- In February **2024**, **Prime Minister Narendra Modi** presented **four BHISHM (Bharat Health Initiative for Sahyog Hita & Maitri) Cubes** to **Ukraine** as humanitarian aid. **President Volodymyr Zelenskyy** thanked India for this assistance, aimed at providing **expeditious medical treatment** in emergency situations.

Key Features of BHISHM Cube

- **Self-sufficient medical unit** for first-line care in **trauma, bleeding, burns, fractures, etc.**
- Includes **surgical equipment** for a **basic Operation Room**.
- Can conduct **10-15 basic surgeries per day**.
- Can handle **200 emergency cases**.
- Generates its **own power and oxygen** in limited amounts.
- An **Indian expert team** has been deployed to train Ukrainian personnel in its operation.

Significance

- **Strengthens India's Humanitarian Diplomacy**: Reinforces India's **neutral stance** while providing humanitarian aid.

- **Supports War-Affected Civilians**: Aids **Ukraine's healthcare system** amid ongoing conflict.
- **Showcases India's Medical & Technological Innovation**: The BHISHM Cube highlights India's **self-reliant (Atmanirbhar) health initiatives**.

INDUS-X SUMMIT 2024 – ADVANCING INDIA-US DEFENCE INNOVATION

Current Context
- The **third edition of the INDUS-X Summit** was held on **9-10 September 2024** in the **United States**, marking a key milestone in the **India-US defence innovation partnership**. Organized by the **U.S.-India Strategic Partnership Forum (USISPF)** and **Stanford University**, the event focused on deepening collaboration in defence technology between the two nations.

Key Highlights of the Summit
- **MoU Signed**: A **Memorandum of Understanding** between **iDEX** (Innovations for Defence Excellence) and the **Defence Innovation Unit (DIU)** was signed, aimed at increasing cooperation in **defence innovation**, facilitating partnerships among industry, research, and investment stakeholders.
- **New Challenges Announced**: The launch of a new challenge under **INDUS-X** to encourage collaboration between startups, MSMEs, and defence innovation.
- **Impact Report Released**: The **INDUS-X Impact Report** was unveiled, detailing the progress and outcomes of the initiative.
- **Official Webpage Launched**: The official **INDUS-X webpage** was launched on the **iDEX** and **DIU websites** to provide a platform for collaboration and information sharing.

Summit Discussions
- The event provided a platform for **startups and MSMEs** to showcase next-generation technologies.
- **Senior Advisory Group** and **Senior Leaders Forum** facilitated discussions on **future tech trends**, **startups' capacity building**, **funding opportunities**, and **strengthening defence supply chains**.
- Key stakeholders, including **defence industry experts**, **investment firms**, **academia**, **think tanks**, and **policymakers**, participated in high-level dialogues.

TRIPARTITE AGREEMENT ON CROSS-BORDER ELECTRICITY TRADE: NEPAL, INDIA, BANGLADESH

Current Context
- **Nepal, India, and Bangladesh** signed a tripartite agreement allowing **Nepal** to export **surplus electricity** to **Bangladesh** through India, from **June 15 to November 15** annually. Initially, **40 MW** of hydroelectric power will be exported via the **Dhalkebar-Muzaffarpur 400 KV transmission line**.

India's Role
- India is central to regional electricity trade, connecting with **Nepal, Bhutan, Bangladesh, and Myanmar** through high-capacity transmission systems. The **Ministry of Power**'s guidelines facilitate cross-border electricity trade, while India's infrastructure supports efficient electricity distribution.

Current Interconnections
- **India-Nepal**: Includes **400kV** transmission lines, enabling **700 MW** power supply to Nepal.
- **India-Bhutan**: Imports **2,000 MW** from Bhutan's hydro plants, with plans to increase to **4,200 MW** by **2024-25**.
- **India-Bangladesh**: Enables **1,160 MW** transfer via **400kV D/C** and **HVDC** links.
- **India-Myanmar**: Provides **3 MW** to Myanmar via **11 kV** lines.

Significance
- This agreement enhances **regional cooperation**, facilitates **green energy trade**, and strengthens South Asia's **energy security** through improved infrastructure and interconnectivity.

PM MODI'S 10-POINT PLAN AT THE 21ST ASEAN-INDIA SUMMIT

Current Context
- At the **21st ASEAN-India Summit**, Prime Minister **Narendra Modi** introduced a **10-point plan** aimed at bolstering the **ASEAN-India Comprehensive Partnership** as part of India's **Act East Policy**. The plan focuses on **connectivity, resilience**, and **people-to-people engagement**

Key highlights
- **Youth Engagement**: Introduction of a **Youth Summit**, **Start-up Festival**, and **Hackathon** to foster ties.
- **Educational & Cultural Initiatives**: Doubling scholarships at **Nalanda University** and inviting ASEAN leaders to join the **'Plant a Tree for Mother'** campaign.

- **Tourism Collaboration**: India will allocate **USD 5 million** for joint tourism activities and designate **2025 as ASEAN-India Year of Tourism**.
- **Women & Science**: Launch of the **ASEAN-India Women Scientists Conclave** and new scholarships for ASEAN students at **Indian agricultural universities**.
- **Disaster & Health Resilience**: **USD 5 million** commitment for disaster resilience and the **Health Ministers' Dialogue** on health resilience.
- **Digital and Cyber Resilience**: Regular **ASEAN-India Cyber Policy Dialogue** and workshops on **green hydrogen**.
- **Trade & Connectivity**: Review of the **ASEAN-India Trade in Goods Agreement (AITIGA)** by **2025**.

PM Modi highlighted **growing trade** (over **USD 130 billion**) and **investment ties**, along with **cultural exchanges** and **direct flight connectivity** expansion to ASEAN nations.

The summit reinforced India's support for **ASEAN Unity**, **ASEAN Centrality**, and the **ASEAN Outlook on Indo-Pacific**. The **10-point plan** was symbolic of a decade of the **Act East Policy**, advancing both economic and strategic ties between India and ASEAN.

PM MODI'S SEVEN KEY PILLARS TO STRENGTHEN INDIA-CARICOM RELATIONS

Current Context

- During the **2nd India-CARICOM Summit**, PM **Narendra Modi** proposed seven "key pillars" to elevate ties between **India** and the **Caribbean Community (CARICOM)**.

C-A-R-I-C-O-M, *include*

- **Capacity Building**
- **Agriculture and Food Security**
- **Renewable Energy and Climate Change**
- **Innovation, Technology, and Trade**
- **Cricket and Culture**
- **Ocean Economy**
- **Medicine and Healthcare**

PM Modi emphasized India's commitment to the partnership, focusing on shared **history, needs, and aspirations**. He proposed initiatives like an online portal to promote **trade, technology, tourism, talent,** and **tradition**, and suggested building a **forensic center** for the CARICOM region.

He also highlighted India's support for **reforms in global institutions** to reflect today's needs, underscoring India's dedication to the **Global South**.

This summit, held in **Guyana**, was the first visit by an Indian head of state in over 50 years. India's strong support for

CARICOM during the **COVID-19 pandemic**, particularly in delivering vaccines, was also recognized.

INDIA-AUSTRALIA ANNUAL SUMMIT

Current Context

- Prime Ministers **Narendra Modi** of India and **Anthony Albanese** of Australia held their **second annual summit** in **November 2024** on the sidelines of the **G20 Summit** in **Rio de Janeiro**. The summit highlighted the **Comprehensive Strategic Partnership** between the two nations, reflecting on the achievements of the past years and setting a forward-looking agenda ahead of the **fifth anniversary** of their partnership in 2025.

Key Areas of Focus

- **Trade & Economy**: Both leaders emphasized the success of the **India-Australia Economic Cooperation and Trade Agreement (ECTA)** and committed to negotiating a more comprehensive **CECA**. They also explored synergies between **'Make in India'** and **'Future Made in Australia'** initiatives.
- **Energy & Climate**: The launch of the **India-Australia Renewable Energy Partnership (REP)** is a significant step, focusing on **solar PV**, **green hydrogen**, and **energy storage**. This collaboration is aimed at accelerating both countries' clean energy transitions.
- **Defence & Security**: There was a continued commitment to a strong defence partnership, with focus areas including **maritime security**, **defence information-sharing**, and the development of a **joint security road map**. Efforts to enhance the **interoperability** of the armed forces through exercises and logistical support were highlighted.
- **People-to-People Ties**: New mobility programs like the **Working Holiday visa** for India and the **MATES scheme** for Indian STEM professionals were discussed to strengthen exchanges in **education**, **sports**, and **cultural sectors**.
- **Regional Cooperation**: Both countries affirmed their commitment to a **free and open Indo-Pacific**, supporting **Quad cooperation**, and promoting **ASEAN-led regional architecture**. They emphasized a shared vision for **peace** and **stability** in the region, alongside collaboration on **climate change**, **cybersecurity**, and **maritime security**.

SCRAPPING OF FREE MOVEMENT REGIME (FMR) BETWEEN INDIA AND MYANMAR

Current Context

- **Home Minister Amit Shah announced the scrapping of the Free Movement Regime (FMR) between India and Myanmar** to bolster internal security and maintain the

demographic balance in northeastern states. This follows the decision to fence the 1,643 km **India-Myanmar border to curb militancy and smuggling.**

What is the Free Movement Regime (FMR)?

- Introduced in 2018 as part of I**ndia's Act East Policy.**
- FMR allows people living within 16 km of the India-Myanmar border to move freely into each other's territories without needing any documentation.
- Covers the states of **Mizoram, Manipur, Nagaland, and Arunachal Pradesh.**

Rationale Behind Scrapping FMR

- **Internal Security:** Prevents the infiltration of militants and illegal activities along the border.
- **Demographic Concerns:** Protects the demographic structure of northeastern states, especially amidst growing concerns from local groups.
- **Security of Border:** Fencing the border, a long-standing demand of Meitei groups in Imphal Valley, aims to curb cross-border militancy and smuggling of narcotics.

Implications

- The suspension of FMR is expected to improve border security and control illegal activities.
- Fencing the entire border will also address concerns about unregulated cross-border movements.

AI ACTION SUMMIT 2024:

Current Context

- **Prime Minister Narendra Modi co-chaired the AI Action Summit with French President Emmanuel Macron in Paris.** The summit, spanning a week (Feb 6-10), focused on **AI's role in reshaping global polity, economy, security, and society.** The event concluded with a high-level segment attended by global leaders, industry experts, and AI companies.

Key Highlights

- **Prime Minister's Address**: PM Modi emphasized the transformative impact of AI, urging for collective global efforts to establish governance frameworks that ensure trust, promote innovation, and address AI risks. He also advocated for AI access for the Global South, linking it to achieving Sustainable Development Goals (SDGs).
- **India's Role in AI**: PM highlighted India's success in building Digital Public Infrastructure for its 1.4 billion citizens. He also discussed India's AI Mission, including the development of a Large Language Model to cater to the country's diverse needs.

- **Thematic Discussions**: The summit featured discussions on key issues such as AI infrastructure accessibility, responsible use of AI, AI for public interest, and ensuring safe and trusted governance of AI.
- **Future Plans**: PM Modi announced that India will host the next AI Summit, continuing its leadership role in global AI governance.

U.S.-INDIA RELATIONS AND STRATEGIC PARTNERSHIP

Current Context

- On **February 13, 2025, President Donald Trump hosted Prime Minister Narendra Modi in Washington, DC, marking a significant step in enhancing U.S.-India relations.** The leaders reaffirmed the strong **India-U.S. Comprehensive Global Strategic Partnership,** launching initiatives focused on defense, trade, energy, technology, and multilateral cooperation.

Key Highlights of the U.S.-India Partnership

- **Defense Cooperation**:
  - Launch of a new initiative, **U.S.-India COMPACT**, to drive military and technological collaboration.
  - The leaders committed to a **ten-year defense framework**, aiming to expand U.S. defense sales and co-production with India.
  - Focus on advanced defense technologies, including autonomous systems, AI-enabled maritime systems, and missile defense.
- **Trade and Investment**:
  - **"Mission 500"** goal set to double bilateral trade to $500 billion by 2030.
  - Negotiations for a **Bilateral Trade Agreement (BTA)** to address tariffs and market access.
  - Significant investments from India in sectors such as aluminum, steel, and pharmaceuticals in the U.S.
- **Energy Security**:
  - Strengthening the **U.S.-India Energy Security Partnership**, focusing on hydrocarbons, civil nuclear energy, and energy trade.
  - India's inclusion in the **International Energy Agency** and collaborative efforts to expand **strategic petroleum reserves**.
- **Technology and Innovation**:
  - Launch of the **U.S.-India TRUST** initiative to promote emerging technologies like AI, semiconductors, and quantum.

- Commitment to build **AI infrastructure** in India, and foster **industry partnerships** to innovate in space, biotechnology, and critical sectors.
- Focus on **critical minerals** cooperation to support technological advancements.
- **Multilateral Cooperation**:
  - Commitment to a free, open Indo-Pacific with stronger ties in the **Quad** and initiatives supporting **Indian Ocean region** security.
  - Joint efforts to combat terrorism, including the **extradition of Tahawwur Rana** and cooperation in counter-terrorism efforts.
- **People-to-People Ties**:
  - Strengthening educational collaboration through joint degree programs, Centers of Excellence, and offshore campuses.
  - Commitment to streamlined **mobility frameworks** for students, professionals, and researchers.
  - Collaborative actions to address illegal immigration and human trafficking, enhancing security between the nations.

INDIA-IRAN LONG-TERM CONTRACT FOR CHABAHAR PORT

Current Context

- India and Iran signed a long-term contract for operating the Shahid Beheshti Port terminal at **Chabahar, Iran** on **May 13, 2024**. The agreement was signed between **India Ports Global Ltd (IPGL)** and **Iran's Ports and Maritime Organisation**. This marks **India's first overseas port management initiative**.

Key Features

- **Strategic Importance of Chabahar Port**
  - Located in **Sistan-Balochistan province**, Chabahar is **Iran's closest port to India** and offers an excellent **nautical advantage**.
  - The port is jointly developed by **India and Iran** to enhance connectivity and trade in the region.
  - It provides **an alternative trade route to Afghanistan**, bypassing Pakistan.
- **Role in INSTC**
  - Chabahar is a crucial link in the **International North-South Transport Corridor (INSTC)**.
  - The **7,200-km INSTC** is a multi-modal network connecting **India, Iran, Afghanistan, Armenia, Azerbaijan, Russia, Central Asia, and Europe**.
- **Financial Commitment & India's Focus**

- India's **Ministry of External Affairs (MEA)** allocated **₹100 crore for Chabahar Port in the 2024-25 budget**, highlighting its strategic priority.
- **Diplomatic & Economic Impact**
  - Strengthens **India-Iran bilateral ties** and regional influence.
  - Enhances **India's connectivity with Central Asia and Europe**, reducing reliance on traditional sea routes via the Suez Canal.
  - Facilitates India's **trade with Afghanistan** despite geopolitical challenges.
- **Challenges & Future Outlook**
  - **US Sanctions on Iran** could pose operational hurdles.
  - Potential **competition from China's Gwadar Port in Pakistan**, part of the **China-Pakistan Economic Corridor (CPEC)**.
  - Success depends on **India's long-term commitment** and **regional stability**.

46TH ANTARCTIC TREATY CONSULTATIVE MEETING (ATCM-46) & 26TH COMMITTEE ON ENVIRONMENTAL PROTECTION (CEP-26)

Current Context:

- India successfully hosted the **ATCM-46 and CEP-26 from May 20-30, 2024, in Kochi, Kerala**, reinforcing its commitment to Antarctic governance, environmental protection, and international scientific collaboration.

Background & Importance

- **Antarctic Treaty (1959):** Establishes Antarctica as a **demilitarized zone** dedicated to peace and scientific research.
- **Madrid Protocol (1991):** The CEP was established under the Protocol on Environmental Protection to the Antarctic Treaty (the Madrid Protocol) in 1991.
- Strengthens environmental protection, banning **mineral resource exploitation** in Antarctica.
- **ATCM & CEP:** These are **annual high-level meetings** where signatories of the Antarctic Treaty decide on scientific cooperation, governance, environmental conservation, and logistical challenges.

India's Key Contributions & Announcements

Strengthening India's Antarctic Presence

- **Maitri-II Research Station:** India plans to establish a **new, advanced Antarctic research station**.
- **Environmental Impact Assessment (EIA):** India to submit a detailed EIA before starting construction.

- **Polar Research Expansion:** India reaffirmed its **scientific, logistical, and environmental commitments** in Antarctica.

Climate & Environmental Protection Measures

- **Sea Ice Change & Climate Resilience:** Prioritizing studies on the **melting of sea ice** and its impact on the ecosystem.
- **Conservation of Emperor Penguins:** Recognized as a species under threat due to **climate change**.
- **Biosecurity Measures:** Steps to **prevent the spread of Highly Pathogenic Avian Influenza (HPAI)**.
- **Sustainable Operations:** Promotion of **renewable energy in Antarctic stations** to reduce carbon footprint.

Tourism & Governance Framework

- **Regulating Antarctic Tourism:** Drafted a **comprehensive framework** to control **growing tourism & non-governmental activities** in Antarctica.
- **Historic & Protected Sites:** **17 new/revised Antarctic Specially Protected Areas (ASPA) management plans** adopted.

India's Diplomatic & Scientific Leadership

- **400+ delegates from 56 countries** participated.
- **Scientific Collaboration:** India hosted **panel discussions on Antarctic governance & climate change** with international experts.
- **Commemorative MyStamp:** Released to mark the event in collaboration with India Post.
- **Public Awareness Initiatives:**
  - **Mural Project:** School students created a mural on Antarctica's biodiversity.
  - **University Seminars:** Engaged students on polar research and global climate diplomacy.

2ND BIMSTEC FOREIGN MINISTERS' RETREAT (2024)

Current Context

- India hosted the **2nd BIMSTEC Foreign Ministers' Retreat** in **New Delhi (July 11-12, 2024)** to strengthen regional cooperation and finalize preparations for the **6th BIMSTEC Summit (September 2024).**

Key Highlights

- **Host:** External Affairs Minister **Dr. S. Jaishankar**.
- **Participants:** Foreign Ministers from **Bangladesh, Bhutan, Myanmar, and Thailand**, Sri Lanka's State Minister, and Nepal's Foreign Secretary.
- **Two-Phase Discussions:**

- **Review of Regional Cooperation:** India presented progress from the **1st Retreat (Bangkok, 2023)** and shared new proposals.
- **Preparations for the 6th BIMSTEC Summit** (Sept 2024).

Prime Minister Narendra Modi's Address

- **BIMSTEC as an Engine for Growth:** Emphasized **economic and social integration**.
- **Focus on Connectivity:** Stressed the need for **enhanced regional linkages**.
- **India's Commitment:** Aimed at a **peaceful, prosperous, resilient, and secure Bay of Bengal region**.

Strategic Significance of BIMSTEC

- **Bridging South & Southeast Asia:** Connects India with ASEAN and enhances regional economic integration.
- **Counterweight to SAARC Challenges:** Bypasses SAARC's stagnation due to Pakistan's inaction.
- **Economic Potential:** Home to **1.7 billion people (~22% of the world's population) & $4.5 trillion GDP**.
- **Geopolitical Importance:**
  - Strengthens **India's Act East Policy & Indo-Pacific strategy**.
  - Reduces dependence on **China-led regional initiatives**.

INDIA-US $4 BILLION PREDATOR DRONE DEAL (2024)

Current Context

- India signed a **$4 billion agreement** with the **US** to procure **31 MQ-9B Predator drones** from **General Atomics**, with **Maintenance, Repair, and Overhaul (MRO) facilities** in India. The deal strengthens **India-US defense ties** and enhances **Indo-Pacific security**.

Key Features of MQ-9B Drones

- **40-hour endurance**, **40,000 ft altitude**
- **SATCOM-enabled** for long-range operations
- **Multi-role:** ISR, strike missions, anti-submarine warfare
- **Lethal Payloads: Hellfire missiles, GBU-39B bombs**

Strategic Importance

- **Border Security:** Persistent surveillance over **LAC & Tibet**.
- **Maritime Defense:** Enhances **Indian Ocean monitoring & ASW**.
- **Tech Transfer:** MRO setup + **Bharat Forge partnership** for UAV components.
- **Indo-Pacific Strategy:** Supports **Quad & Combined Maritime Force (CMF)** missions.

US AI EXPORT RULES: IMPLICATIONS FOR INDIA

Current Context

- The Biden administration introduced the *Framework for Artificial Intelligence Diffusion*, placing countries into three tiers for AI chip exports. India falls under Tier 2, facing moderate restrictions. The policy's enforcement will depend on the incoming Trump administration.

Key Regulations

- **Preferred Nations (Tier 1):** 18 allies (e.g., Japan, UK) with **minimal trade limits**.
- **Restricted Nations (Tier 2 - India):** AI chip imports capped at **50,000 units until 2027**, impacting large-scale AI development.
- **Prohibited Nations (Tier 3 - China, Russia, etc.):** Strict bans on AI chip exports.

India's Unique Status

- **Listed under General Validated End User (GVEU) status.**
- Unlike China, **India can use AI chips for military and civilian purposes** (except nuclear applications).

Impact on India

Short-Term:
- The **IndiaAI Mission's 10,000 GPU procurement is unaffected**.
- **Startups & researchers** to receive subsidized AI chips.

Long-Term Risks:
- **Licensing complexities** could delay large AI projects.
- **Companies like Reliance & Yotta** may struggle to scale AI data centers.
- **Expanding AI infrastructure** may become difficult due to GPU limits.

India's Response & Opportunities

- **Push for relaxed regulations under Trump's administration**.
- **Seek support from Nvidia & AMD** for stable chip supply.
- **Leverage India's AI market, projected to reach $17 billion by 2027**.

Nvidia's Criticism

- Regulations are excessive & bureaucratic.
- Weakens US dominance in AI by restricting innovation.
- Contrasts with Trump's approach, which promoted AI growth with minimal interference.

INDUS WATER TREATY DISPUTE: WORLD BANK NEUTRAL EXPERT'S DECISION

Current Context

- The **World Bank-appointed Neutral Expert (NE), Michel Lino**, has asserted his jurisdiction over **India-Pakistan disputes** on hydroelectric projects under the **Indus Water Treaty (IWT), 1960**. India welcomed this, while Pakistan continues to push for arbitration through the **Permanent Court of Arbitration (CoA)** in the Hague.

Indus Water Treaty Overview

- **Signed in 1960** for **equitable water sharing** between India and Pakistan.
- **India controls** the **eastern rivers** (Sutlej, Beas, Ravi).
- **Pakistan controls** the **western rivers** (Indus, Jhelum, Chenab), though India can utilize them for limited hydropower and irrigation.

Dispute Background

- **Kishenganga Project** (Jhelum tributary) and **Ratle Project** (Chenab) are at the center of the disagreement.
- **Pakistan initially sought a Neutral Expert in 2015** but later switched to arbitration (CoA) in 2016, violating **Article IX** of IWT.
- **India opposed the CoA**, citing it as an **illegally constituted parallel mechanism**.

Legal & Diplomatic Developments

- **World Bank facilitated both Neutral Expert and CoA in 2022** due to disagreements.
- **India has boycotted the CoA proceedings** while engaging with the Neutral Expert.
- **Treaty Review Discussions:**
  - **India invoked Article XII (3)** in 2023 and 2024 for a **treaty review and modification**.
  - **Pakistan has yet to respond formally** to India's multiple notices.

IWT Dispute Resolution Mechanism

- **Permanent Indus Commission (PIC):** First level of dialogue and information exchange.
- **Neutral Expert (NE):** Appointed by the **World Bank** to resolve technical disputes.
- **Court of Arbitration (CoA):** Final step if the **Neutral Expert fails** to resolve the issue.

US ENDS BIRTHRIGHT CITIZENSHIP

Current Context

- The **US has revoked birthright citizenship** through a **presidential executive order**, "Protecting the Meaning and Value of American Citizenship," signed by **President Donald Trump**. This order denies automatic citizenship to children born in the US, regardless of their parents' immigration status, sparking legal battles over its **constitutional validity under the 14th Amendment**.

Background & Legal Precedents

- **Jus Soli Principle:** Birthright citizenship (citizenship by birth) has existed for over a century in the US under the **14th Amendment (1868)**, which was introduced to counter the **Dred Scott ruling (1857)** that denied citizenship to formerly enslaved people.
- **Wong Kim Ark Case (1898):** The **US Supreme Court upheld birthright citizenship**, ruling that a child born in the US to Chinese immigrant parents was a **citizen under the 14th Amendment**. This remains the key legal precedent.
- **Legal Challenges:** Multiple lawsuits argue that the executive order **contradicts the Constitution**, which can **only be changed through a formal amendment process** requiring a **two-thirds majority in Congress**.

Impact on Indian Nationals

- **H-1B Visa Holders & Green Card Applicants:**
  - Indian professionals in the **H-1B backlog** face additional **uncertainty** as their US-born children may not get citizenship.
  - **Green Card delays** may force families to reconsider long-term residency.
- **Remittances:**
  - A shrinking **Indian diaspora in the US** could reduce **remittances to India**, impacting the economy.
- **Brain Drain:**
  - The US hosts **one of the largest Indian student populations**, contributing significantly to its economy.
  - The policy could **discourage skilled professionals and students**, leading to a **shift towards other immigration-friendly nations**.

THE STRATEGIC PARTNERSHIP BETWEEN INDIA AND QATAR

Current Context

- During the state visit of **Qatari Amir Sheikh Tamim Bin Hamad Al Thani to India, India and Qatar raised their bilateral ties to a strategic partnership.** This visit improves cooperation in **trade, energy, investments, technology, food security, and cultural interactions.**

Key Developments

- **Strategic Partnership Agreement**
  - Signed in the presence of **PM Narendra Modi** and **Qatari Amir Sheikh Tamim Bin Hamad Al Thani**.
  - Strengthens cooperation in **economic, technological, and cultural fields**.
- Revised Double Taxation Avoidance Agreement
  - Aimed at **preventing fiscal evasion** and **enhancing economic cooperation**.
- High-Level Diplomatic Engagements
  - **Ceremonial welcome and guard of honour** at Rashtrapati Bhavan.
  - There were discussions between President Droupadi Murmu and the Qatari delegation.
  - **A bilateral meeting at Hyderabad House to discuss regional and global issues.**
- Economic & Business Engagement
  - A **high-level Qatari delegation** of ministers, officials, and business leaders accompanied the Amir.
  - Focus on **bilateral investments and commercial ties**.

Significance of India-Qatar Relations

Area	Importance
Energy Security	Qatar is India's **largest supplier of LNG (Liquefied natural gas).**
Trade & Investment	Bilateral trade exceeds **$20 billion**; Qatar invests in India's **infrastructure & energy sectors**.
Diaspora & Culture	Over **830,000 Indians** live in Qatar, strengthening **people-to-people ties**.
Regional Influence	Qatar is a key player in **West Asian geopolitics**, making this partnership strategically important.

UN-HABITAT & C40 CITIES PARTNERSHIP: URBAN PLANNING ACCELERATOR

Current Context

- A historic alliance between **C40 Cities and the United Nations Human Settlements Program (UN-Habitat)** will change urban design. This project will start an Urban Planning Accelerator targeted at a **25% reduction in city emissions by 2025 and** Advocating inclusive, fairer, and safer urban environments

About UN-Habitat

- **Started in 1978**
- **Goal:** To guarantee enough cover for everyone and hence encourage environmentally friendly towns and cities.
- **Key Role:**
  - Implements policies like the **New Urban Agenda** to create **inclusive, safe, resilient, and sustainable cities**.
  - Work with governments and stakeholders to address urbanisation challenges.
- **What is C40?**
  - This is a global network of nearly 100 mayors of the world's leading cities.
  - The focus is on **climate action and urban sustainability.**
- **Objective**:
  - The program supports cities in **reducing greenhouse gas emissions.**
  - Implements policies aligned with the **Paris Agreement.**

WORLD DAY OF SOCIAL JUSTICE: PROMOTING EQUITY & INCLUSION

Current Context

- Globally observed on **February 20, 2024, the World Day of Social Justice** underlined the need for **fair development, inclusion, and economic justice. Reinforcing the value of fair labour practices, social security, and access to economic opportunities** for underprivileged co-India's efforts in social justice were the **United Nations (UN) and International Labour Organisation (ILO).**

Background and International Context

- **Established by UNGA:**
  - The proclamation was made during the 62nd session on November 26, 2007.
  - It was first observed on February 20, 2009 (63rd session).
- **Objective:**
  - The organisation recognises **social justice as essential for peace, security, and development.**
  - The program addresses inequality, unemployment, and exclusion in order to create fair societies.
- **Global Challenges Addressed:**
  - Emphasise economic **opportunities, fair wages, and access to technology**.
  - Advocates for **trade, investment, and global partnerships** to support marginalised organisation groups
- **International Labour Organization (ILO) Role:**
  - **The Declaration on Social Justice for Fair Globalisation (2008) promotes fair labour** conditions.
  - **The Decent Work Agenda** ensures social security, employment rights, and economic stability.
- **United Nations Initiatives:**
  - **Social Protection Floor (2009):** Aims to provide **basic income security and universal access to essential services**.

India's Efforts in Social Justice

Area	Key Initiatives
Legislative Reforms	Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989, Rights of Persons with Disabilities Act, 2016.
Economic Empowerment	Pradhan Mantri Vishwakarma Yojana, Stand-Up India Scheme, Micro Units Development and Refinance Agency (MUDRA) loans for entrepreneurship.
Social Welfare Programs	National Social Assistance Programme, Ayushman Bharat - Pradhan Mantri Jan Arogya Yojana, Pradhan Mantri Awas Yojana for vulnerable groups.
Education and Skill Development	Samagra Shiksha Abhiyan, Skill India Mission, Eklavya Model Residential Schools for tribal students.

INDIA'S ELECTION AS VICE PRESIDENT OF THE INTERNATIONAL ORGANIZATION OF AIDS TO MARINE NAVIGATION

Current Context

- India has been **elected as the Vice President** of the **International Organization of Aids to Marine Navigation**

(IALA) during its **inaugural General Assembly in Singapore**. This milestone strengthens **India's global maritime leadership**, coinciding with IALA's **transition.**

Background & Global Context

About IALA:
- **Established in 1957**, IALA works on **coordinating marine aids to navigation** worldwide.
- It develops **global standards for maritime safety**.
- In **August 2024**, IALA transitioned from an NGO to an **IGO** after **34 member states ratified** the transformation.

India's Role in IALA's Transition:
- India played an **active role** in facilitating IALA's shift to an intergovernmental body.
- This transition grants IALA **greater authority** to regulate and harmonize **maritime navigation systems** globally.

Key Indian Representatives at IALA General Assembly:
- **T.K.Ramachandran**, Secretary, Ministry of Ports, Shipping, and Waterways.
- **Mukesh Mangal**, Joint Secretary.
- **N. Muruganandam**, Director General of Lighthouses and Lightships.
- **S. Saravanan**, Deputy Director.

Strategic Importance of India's Election:
- Enables India to **influence international maritime navigation policies**.
- Enhances India's participation in **global decision-making on marine safety and technology**.
- Positions India as a **key player in maritime governance and innovation**.

India's Maritime Leadership and Future Plans

Area	Key Developments
Maritime Policy Influence	Greater participation in global navigation standardization and marine safety regulations.
Upcoming IALA Events Hosted by India	IALA Council Meeting in December 2025, IALA Conference & General Assembly in September 2027 (Mumbai).
Maritime Technology Advancements	Showcasing navigation systems, lighthouse modernization, and digital maritime solutions.
Environmental & Safety Focus	Strengthened policies on eco-friendly shipping, port security, and navigation efficiency.

INDIA'S LNG IMPORTS FROM THE UNITED STATES REACH RECORD HIGH

Current Context
- India's **Liquefied Natural Gas (LNG) imports from the United States** surged by **over 71% year-on-year** during the first **eleven months of 2024** (US Energy Information Administration). India is the **fourth-largest LNG importer globally** and aims to **increase the share of natural gas to 15% in its energy mix by 2030**. Rising LNG imports align with India's **strategy to transition towards cleaner energy sources** while **reducing dependency on crude oil and coal**.

What is LNG?
- **Formation:** LNG is created by **cooling natural gas to -162°C (-260°F)**, making it **easier to store and transport**.
- **Composition:** Primarily consists of **methane (~90%)**, making it **odourless, colourless, non-toxic, and non-corrosive**.
- **Environmental Benefits:**
  - Produces **40% less CO_2 than coal** and **30% less than oil**.
  - Considered the **cleanest fossil fuel**, aiding in **climate change mitigation**.

Why is India Increasing LNG Imports?
- **Energy Diversification:**
  - Reducing **coal dependency** in power generation.
  - Expanding the **energy mix with cleaner alternatives**.
- **Gas-Based Economy:**
  - LNG helps transition towards a **natural gas-driven economy**.
  - Reduces **reliance on crude oil imports**.
- **Climate Change Goals:**
  - Supports **India's Net Zero targets**.
  - Aligns with **global decarbonization strategies**.
- **Industrial Demand Growth:**
  - Increasing need in **power generation, transport, and heavy industries**.
- **Strategic Partnerships:**
  - Strengthening **bilateral energy trade** with the **United States** and other key suppliers.

Challenges in India's LNG Sector
- **Price Volatility:** Global factors (e.g., **Russia-Ukraine war, OPEC policies**) impact **LNG pricing and availability**.
- **Infrastructure Deficit:** Inadequate LNG regasification and distribution infrastructure and **Limited pipeline network** hinders last-mile delivery.

- **Storage Constraints: Low storage capacity** increases vulnerability to **global price shocks**.
- **High Import Dependence:** India **imports over 50% of its LNG needs**, making it reliant on external suppliers.
- **Limited Domestic Production: Lack of sufficient natural gas reserves** to meet rising demand.

Key Applications of LNG in India

- **Power Generation:** Used in **gas-based power plants** as a **lower-carbon alternative to coal**.
- **Transport:** Fuel for **LNG-powered trucks, buses, and ships**, reducing emissions.
- **Residential & Commercial Use:** Used in **cooking, heating, and water heating**.
- **Industrial Sector:** Key raw material for **fertilizers, plastics, textiles, and chemicals**.

Government Initiatives to Boost LNG Adoption

- **Draft LNG Policy:** Encourages LNG use in **transportation, mining, and industrial sectors**.
- **Amendment to Central Motor Vehicles Rules (2017):** Recognized **LNG as an official transport fuel**.
- **Expansion of City Gas Distribution (CGD):** Increasing **LNG availability for domestic and industrial use**.
- **Strategic LNG Terminals Development:** Setting up new **LNG import terminals and pipeline projects**.
- **India's Energy Roadmap:**
  - Target to **achieve 1,000 LNG stations across highways**.
  - Investment in **LNG regasification plants and storage facilities**.

INDIA UAE COMPREHENSIVE ECONOMIC PARTNERSHIP AGREEMENT (CEPA) – THREE YEARS OF PROGRESS

Current Context

- **India-UAE CEPA completes three years** on **18th February 2025**. Signed on **18th February 2022** during a **virtual summit** between **Prime Minister Narendra Modi** and **UAE President Sheikh Mohamed bin Zayed Al Nahyan**. Came into effect on **1st May 2022**, marking a **deep and full trade agreement** between both nations.

Trade Growth Under CEPA

- **Bilateral merchandise trade nearly doubled** from **USD 43.3 billion (FY 2020-21) to USD 83.7 billion (FY 2023-24)**.
- **Non-oil trade reached USD 57.8 billion in FY 2023-24**, contributing **more than half** of total trade.
- **Target: Bilateral non-oil trade of USD 100 billion by 2030**.
- **Utilization of Preferential Duties:**

- **2,40,000 Certificates of Origin issued** since CEPA's implementation.
- **Total exports under CEPA: USD 19.87 billion**.

India's Export Performance Under CEPA

- **Non-oil exports touched USD 27.4 billion in FY 2023-24**, growing at **25.6% annually** since CEPA began.
- **Key export sectors benefiting from CEPA:**
  - **Refined petroleum products**
  - **Gems & jewellery**
  - **Electrical machinery & equipment**
  - **Light & medium-high technology goods** (boilers, generators, reactors)
  - **Organic & inorganic chemicals**
  - **Smartphones** emerged as a major export, reaching **USD 2.57 billion in FY 2023-24**.

Institutional Mechanisms to Address Trade Challenges

- **Joint Committee established** to review CEPA implementation. **Met twice at Joint/Additional Secretary level**, last meeting held in **October 2024**.
- **Trade in Goods Committee:** Regular meetings to resolve **bilateral trade issues**.
- **Other active sub-committees focus on:**
  - Trade in services
  - Rules of origin
  - Customs procedures & trade facilitation

Key Initiatives & Future Prospects

- **Bharat Mart Initiative:**
  - Launched by **Prime Minister Modi in Dubai**.
  - A **One-Stop-Shop for Indian manufacturers** to showcase products to **global markets**.
  - Aims to **boost Indian exports** and enhance global trade connectivity.
- **Economic Impact of CEPA:**
  - **Empowering MSMEs** by increasing their access to UAE markets.
  - **Generating employment** through increased trade opportunities.
  - **Strengthening business partnerships** between Indian and UAE firms.

INDIA-EU STRATEGIC PARTNERSHIP

Current Context

- **European Commission (EC) President Ursula von der Leyen** led the **EU College of Commissioners** to India on **27-28 February 2025**. Marks **30 years of India-EC Cooperation**

Agreement (1994-2024) and **20 years of India-EU Strategic Partnership (2004-2024)**. First visit of the **EU College of Commissioners outside Europe**, underscoring India's strategic importance.

Key Areas of Cooperation

1. Trade & Investment

- Leaders committed to **fast-tracking the India-EU Free Trade Agreement (FTA)** by 2025.
- Negotiations on:
  - **Investment Protection & Geographical Indications (GI) Agreements**.
  - **Removing trade barriers & improving market access**.

2. Technology & Digital Innovation

- **Strengthening India-EU Trade and Technology Council (TTC)**:
  - **Semiconductor supply chains & AI governance** (MoUs signed).
  - **6G collaboration (Bharat 6G Alliance & EU 6G SNS MoU)**.
  - **Digital Public Infrastructure & green technology partnerships**.

3. Clean Energy & Climate Cooperation

- Focus on **Green Hydrogen, Offshore Wind, Solar Energy & Sustainable Mobility**.
- **India-EU Green Hydrogen Forum & Offshore Wind Business Summit planned**.

4. Connectivity & Security

- **India-Middle East-Europe Economic Corridor (IMEC)**: Review & accelerate implementation.
- **Defense & Maritime Security**:
  - India exploring participation in **EU's Permanent Structured Cooperation (PESCO)**.
  - Negotiations for **Security of Information Agreement (SoIA)**.
  - **Strengthening counterterrorism & Indo-Pacific cooperation**.

5. People-to-People Ties

- **Boosting skilled workforce migration, education & research collaboration**.
- Key as **EU faces labour shortages & India has a growing skilled workforce**.

Global Commitments

- **Ukraine War**: Support for **just peace based on UN Charter**.
- **Middle East Conflict**: Commitment to **two-state solution for Israel-Palestine**.

Future Agreements

- Expedite FTA negotiations by 2025.
- Strengthen Indo-Pacific & trilateral cooperation.
- Advance IMEC connectivity projects.
- Deepen maritime security coordination.
- Enhance collaboration in green energy & hydrogen.

BELGIUM-INDIA ECONOMIC DELEGATION VISIT

Current Context

- **Her Royal Highness Princess Astrid of Belgium** led a **high-powered economic delegation to India,** marking the **second such mission**. With over **325 delegates, including key CEOs, academics, and officials, the visit focused on enhancing trade, investment, and cooperation in sectors like innovation, semiconductors, defence, clean energy, and digital technologies**.

Key Engagements

1. High-Level Political Meetings

- **Princess Astrid met PM Narendra Modi**: Discussed **economic resilience, innovation-led growth, and bilateral cooperation**.
- **EAM Dr. S. Jaishankar** met Princess Astrid & **Belgium's Deputy PM & Foreign Minister**, discussing:
  - Trade & investment
  - Defence & semiconductors
  - Digital & emerging technologies
  - Infrastructure & food processing
- **Meetings with Defence, Commerce, and IT Ministers** to explore deeper collaboration.

2. Key Business & Investment Developments

- **Agristo-Masa's Expansion**: Belgian **potato processing firm Agristo** to invest **₹750 crore** to expand its **Bijnor (UP) facility**.
- **35+ Business & Academic MoUs Signed** in: **Green Technology, Healthcare, Defence, Food Processing, Ports & Education**.
- **B2B Meetings & Seminars** on: **Water management, defence ties, sustainable infrastructure, astronomy, women entrepreneurship, healthcare, logistics, green hydrogen**.

3. Trade & Investment Relations

- **Bilateral Trade**: **$15 billion (2023-24)** → **Belgium is India's 5th largest EU trading partner**.
- **175+ Belgian companies in India**, with **$4 billion in cumulative investments**.

- Mission expected to **boost investment, diversify trade, and enhance bilateral cooperation**.

INDIA-MAURITIUS BILATERAL RELATIONS – PM MODI'S STATE VISIT

Current Context

- **Prime Minister Narendra Modi visited Mauritius from March 11-12, 2025, and held discussions with Mauritian Prime Minister Navinchandra Ramgoolam**. The visit aimed to strengthen the **Comprehensive Strategic Partnership between** the two nations and reaffirm India's role as a key development partner in Mauritius.

Key Highlights

- **Comprehensive Strategic Partnership**: Both leaders emphasized the deep historical, cultural, and economic ties between the two countries and agreed to enhance their strategic partnership.
- **Development Cooperation**: India has been a significant contributor to Mauritius' infrastructure and socio-economic growth since its independence.
- **New Agreements**: The two leaders agreed on:
    - **Delivery of 100 electric buses** to Mauritius.
    - **Implementation of Phase II of High Impact Community Development Projects**.
    - **Replacement of a 100 km water pipeline** under the INR-denominated Line of Credit agreement.
    - **Exploring new development cooperation areas** based on Mauritius' needs.
- **Parliamentary Cooperation**: Both sides agreed to strengthen parliamentary ties and share best practices in legislative proceedings.
- **Maritime Security and Vision SAGAR**: PM Modi reiterated Mauritius' crucial role in India's **Vision SAGAR (Security and Growth for All in the Region)**, aimed at ensuring maritime security and economic cooperation in the Indian Ocean Region.

INDIA-US TRADE RELATIONS: RECIPROCAL TARIFFS AND FTA NEGOTIATIONS

Current Context

- Former US President Donald Trump **has announced** that the US **will impose** reciprocal tariffs on India starting **April 2, 2025**, complicating the ongoing **India-US Free Trade Agreement (FTA) negotiations**. Despite this, India **remains** optimistic that the mutual understanding **reached** between Prime Minister Narendra Modi and President Trump on **February 13 will help** resolve trade issues.

Key Highlights

- **Reciprocal Tariffs (Effective April 2, 2025):**
    - The US **will match** India's tariff rates on American exports starting **April 2, 2025**.
    - Trump **has previously criticized** India's tariffs, calling it a **"tariff king,"** specifically citing **100% tariffs on US motorcycles**.
    - The US **average MFN tariff on agricultural goods is** 5%, while India's **is** 39%.
- **Impact on Free Trade Agreement (FTA):**
    - Negotiations for an **India-US FTA are underway**, with a **September 2025 deadline** for the first phase.
    - India **has taken** steps to **increase market access for US agricultural products** like alfalfa hay, duck meat, and medical devices.
    - India **has also lowered** tariffs on US products such as bourbon whiskey, motorcycles, ICT products, and metals.
- **Challenges to Global Trade Rules:**
    - The **WTO's Most Favored Nation (MFN) principle could be violated** by unilateral tariff measures.
    - India **argues** that **preferential trade arrangements** under the WTO **should be respected**.
    - **Significance of the Development**
- **Could lead** to trade tensions between India and the US.
- **Might delay or derail** FTA negotiations.
- **Could impact** India's **export-driven industries** like ICT, pharmaceuticals, and textiles.
- **Raises concerns** about US protectionism and global trade stability

INDIAN OCEAN CONFERENCE

Current Context

- The 8th Indian Ocean Conference was held in **Oman** on **February 16, 2024**, where **External Affairs Minister S. Jaishankar** emphasised **India's commitment to regional cooperation** and **maritime security** under the vision of **SAGAR (Security and Growth for All in the Region).**

Indian Ocean Conference

- Initiated by **the India Foundation in 2016** (Singapore) with participation from 30 countries.
- Aims to bring together **critical states and maritime partners** to discuss regional cooperation.

- **Theme for 2024**: *"Voyages to New Horizons of Maritime Partnership"*.

Significance of the Indian Ocean

- **Third-largest ocean** with major **trade routes** controlling:
  - 50% of global container ships
  - 33% of bulk cargo traffic
  - 66% of global oil shipments
- **Strategic connectivity** between Africa, Asia, and Australia.
- **Population:** 2.7 billion across diverse nations in **South Asia, Southeast Asia, West Asia, Africa, and Australasia**.
- India's **strategic location**, extensive **coastline**, and historical **maritime trade ties** make it a pivotal player.

Security and Growth for All in the Region (SAGAR)

- Proposed by **PM Narendra Modi in 2015**, outlining a holistic vision for maritime security & economic growth.
- Key components:
  - **Enhancing regional connectivity** (Act East & Think West).
  - **Strengthening maritime security** (anti-piracy, disaster response).
  - **Developing hinterland linkages** to boost trade and cooperation.

India's Role in Strengthening the Indian Ocean Region

Jaishankar highlighted **India's contributions** in various domains:

- Economic & Humanitarian Assistance
  - **COVID-19 support:** Vaccines, medicines, food, fuel, and fertilizers to regional partners.
  - **$4 billion financial aid to Sri Lanka** during its economic crisis.
- Connectivity & Trade Corridors
  - India-Middle East-Europe Economic Corridor (IMEC)
  - India-Myanmar-Thailand Trilateral Highway (IMTT)
  - International North-South Transport Corridor (INSTC)
- First Responder in Crises
  - **Disaster relief:** Yemen conflict, Sri Lanka & Myanmar floods, Nepal earthquake.
  - **Environmental response:** Oil spill containment near **Mauritius & Sri Lanka**.
- Strengthening Maritime Security
  - **Quad cooperation** for disaster response.
  - **ReCAAP** (Singapore) to combat piracy.
  - **Coastal surveillance radars & White Shipping agreements** for maritime safety.

- **Naval deployments** in **Northern Arabian Sea & Gulf of Aden** to counter threats.
- Capacity Building & Defense Partnerships
  - **Training & equipping** navies of **Vietnam, Mauritius, Mozambique, Sri Lanka**.
- Digital Security & Cyber Infrastructure
  - **Trusted communication networks** via government & private sector collaborations.
- Indo-Pacific Engagement
  - India acts as a **bridge** between the **Global South** and **major global powers**.
  - Ensures adherence to **UNCLOS (United Nations Convention on the Law of the Sea)**.
- Regional Institution Building
  - **IORA** (Indian Ocean Rim Association)
  - **BIMSTEC** (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation)
  - **IONS** (Indian Ocean Naval Symposium)
  - **Colombo Security Conclave**
  - **Indo-Pacific Oceans Initiative**

INDIA-NEW ZEALAND RELATIONS: PM LUXON'S VISIT

Current Context

- **New Zealand PM Christopher Luxon's first India visit (March 16-20, 2025)** focused on **trade, defence, and multilateral ties**. Key takeaways: **FTA talks, defence cooperation, maritime security, education, mobility, and UNSC reforms**. Both leaders reaffirmed commitment to **Indo-Pacific stability, UNCLOS, and counterterrorism**.

India-New Zealand Bilateral Engagement

Strategic & Trade Ties

- PM Luxon's first visit to India focused on **trade, defence, education, and maritime security**.
- **FTA negotiations launched**, AEO-MRA signed for smoother trade.
- Agreements on **horticulture, forestry, and digital payments cooperation**.
- Encouraged **direct flights** to boost connectivity.

Defence & Security

- Signed **India-NZ Defence MoU**; expanded **joint military exercises & naval cooperation**.
- New Zealand welcomed **India into the Combined Maritime Forces (CMF)**.

- Strengthened **maritime security & freedom of navigation**.

Science, Technology & Disaster Management
- New Zealand joined **CDRI**, reaffirmed support for **ISA**.
- Strengthened ties in **earthquake mitigation & climate resilience**.

Education, Mobility & Cultural Links
- Signed **Education Cooperation Agreement**, discussed **skilled worker mobility**.
- Boosted **sports collaboration**, incl. 2026 **"Sporting Unity"** events.
- Promoted **traditional medicine, yoga, and cultural exchanges**.

Global & Multilateral Cooperation
- **New Zealand backed India's UNSC bid**.
- Jointly condemned **terrorism & terror financing**. Advocated a **two-state solution for Palestine** and **peace in Ukraine**.

SBI REPORT ON FTAS & INDIA'S TRADE RESILIENCE

Current Context
- The **SBI report** highlights how India's **aggressive FTA strategy** is helping it navigate global tariff challenges and boost exports. With **13 FTAs signed in the last five years**, India is strengthening trade ties with partners like **Mauritius, UAE, and Australia**, while negotiating with **UK, Canada, and the EU**.

Significance of FTAs
- FTAs eliminate **tariff and non-tariff barriers**, enhancing trade in goods, services, and digital commerce. They benefit **SMEs, attract investments,** and promote regional economic integration. India's approach focuses on **export-led manufacturing** and diversifying supply chains.

India's Economic Outlook
- India saw **$41 billion in FII inflows** in FY24, the highest since FY16, reflecting global confidence in its economy. The **export basket is expanding**, with a shift toward value-added products and new supply chain models.

This report underscores India's **strategic push for economic resilience, trade diversification, and clean energy adoption** amid evolving global challenges.

INTERNATIONALIZATION OF THE RUPEE

Current Context
- **India (RBI) and Mauritius have signed an MoU to promote the use of their local currencies in trade,** marking another step toward reducing dependence on the US dollar in cross-border transactions.

What is rupee internationalization?
- It refers to expanding the use of the Indian Rupee (INR) in **global trade, investment, and foreign exchange reserves**, making it a recognized currency beyond India's borders.

Why is it important?
- **Reduces Forex Risk**: Lowers dependence on volatile foreign currencies.
- **Boosts Trade & Investment**: Simplifies transactions with partner nations.
- **Enhances Economic Influence**: Strengthens India's role in the global financial system.

Steps Taken by India
- **Bilateral Currency Agreements** with Japan, Sri Lanka, and UAE.
- **Masala Bonds** to attract foreign investment in INR.
- **INR Trade Settlements** with countries like Russia.

RAISINA DIALOGUE 2025

Current Context
- The **10th edition of the Raisina Dialogue** was held in **New Delhi from March 17-19, 2025**, inaugurated by **Prime Minister Narendra Modi**. **New Zealand's Prime Minister Christopher Luxon** was the **Chief Guest** and delivered the **keynote address**.

About the Raisina Dialogue
- **India's flagship** annual conference on **geopolitics and geo-economics**.
- Hosted by the **Observer Research Foundation (ORF)** in collaboration with the **Ministry of External Affairs (MEA), India**.
- Brings together **global leaders, policymakers, military experts, think tanks, academics, and industry leaders** to discuss key international challenges.

Raisina Dialogue 2025 – Key Highlights
- **Theme**: *"Kālachakra - People, Peace and Planet"*.
- **Participants**: Delegates from **125+ countries**, including **former Heads of State, Ministers, military commanders, technology leaders, and scholars**.

- **Total Participants**: **3500+ in-person attendees**, with a global digital audience in millions.

Six Thematic Pillars of Raisina Dialogue 2025

- **Politics Interrupted** – Shifting Sands and Rising Tides. **Resolving the Green Trilemma** – Who, Where, & How.
- **Digital Planet** – Agents, Agencies, and Absences.
- **Militant Mercantilism** – Trade, Supply Chains, & the Exchange Rate Addiction.
- **The Tiger's Tale** – Rewriting Development with a New Plan.
- **Investing in Peace** – Drivers, Institutions, & Leadership.

INDIA-US NUCLEAR COOPERATION: HOLTEC GETS APPROVAL FOR SMR TECHNOLOGY TRANSFER

Current Context

- The **US Department of Energy (DoE)** has approved **Holtec International** to transfer **small modular reactor (SMR) technology** to India, removing a key hurdle in the **2007 India-US Civil Nuclear Agreement**.

Key Aspects	Details
Approval Details	Holtec can share unclassified SMR technology with Holtec Asia, Tata Consulting Engineers, and L&T. purifiers, and generator sets.
Conditions	Valid for 10 years, subject to 5-year review; technology for peaceful use under IAEA safeguards.
Restrictions	No third-party sharing, no military use, and quarterly reporting to DoE.

Strategic & Economic Impact

- **Boost to India's Nuclear Energy Mission**: The Union Budget 2025 allocated ₹200 billion to develop **five SMRs by 2033**.
- **Reduction in Dependence on PHWRs**: India currently relies on **Pressurised Heavy Water Reactors (PHWRs)**, while global trends favor **Pressurised Water Reactors (PWRs)** like Holtec's **SMR-300** model.
- **Counter to China**: India and the US can jointly develop **SMRs** to counter China's growing nuclear outreach in developing nations.

Challenges Ahead

- **Liability Concerns**: India's **Civil Liability for Nuclear Damage Act (2010)** deters foreign vendors. Amendments to the **Atomic Energy Act, 1962**, are being considered.

- **Regulatory Approvals**: Holtec's **SMR-300** design is still under review in the **UK and Canada**.
- Holtec plans to **expand its facility in Dahej, Gujarat**, potentially doubling its workforce. The deal marks a new phase in **India-US nuclear cooperation**, but further regulatory and legal adjustments are needed.

OPERATION BRAHMA: INDIA'S EARTHQUAKE RELIEF MISSION TO MYANMAR

Current Context

- India launched **Operation Brahma** as the **first responder** to assist Myanmar after a **7.7-magnitude earthquake** caused massive destruction.

Key Actions	Details
Relief Aid	**55+ tonnes** of materials including tents, food, medicines, water purifiers, and generator sets.
NDRF Deployment	**80-member team** with rescue dogs, concrete cutters, and medical support.
Medical Assistance	**118-member Indian Army Field Hospital** team sent to Mandalay.
Naval & Air Support	**INS Satpura, INS Savitri**, and multiple **IAF aircraft** carrying relief supplies.

PM Narendra Modi spoke to **Myanmar's leader Min Aung Hlaing**, reaffirming India's **solidarity**. Another **NDRF team remains on standby** in Kolkata for further deployment

INDIAN ECONOMY

UNION BUDGET 2025:
KEY HIGHLIGHTS & ECONOMIC ROADMAP

The **Union Budget 2025-26**, presented by **Finance Minister Nirmala Sitharaman**, is centered around the theme of **"Sabka Vikas"** (Inclusive Growth) and the long-term vision of **Viksit Bharat** (Developed India) by 2047. With a focus on **economic expansion, employment generation, and fiscal consolidation**, this budget is being termed a **"dream budget"** for the middle class.

BYOL

03 Revenue Deficit
Shortfall when revenue receipts are less than revenue expenditure, leading to borrowing for daily expenses.
Not explicitly detailed in the budget.

02 Fiscal Deficit
Total expenditure minus total revenue (excluding borrowings); a key financial health indicator.
Projected at 4.4% of GDP.

04 Capital Expenditure
Spending on infrastructure, asset creation, and long-term growth (e.g., roads, railways).
₹1.5 lakh crore allocated for 50-year interest-free loans to states.

01 Budget Deficit
When government spending exceeds revenue, requiring borrowing.
Fiscal deficit target for 2025-26 set at 4.4% of GDP (down from 4.8%).

05 Taxes –
Direct Taxes:
Paid by individuals/corporations (e.g., Income Tax). Nil tax slab raised to ₹12 LAKH to boost middle-class spending.
Indirect Taxes:
Levied on goods/services (e.g., GST). Customs duties reduced on marine products, minerals, and life-saving drugs exempted.

UNION BUDGET 2025:
5 Basic Terms You Must Know for UPSC

Key Themes & Objectives

- **Sabka Vikas**—Balanced growth across all regions.
- **Viksit Bharat Goals –** Zero poverty, quality education, affordable healthcare, skilled workforce, and women's economic participation.
- **Key Focus Areas**—Poor (Garib), Youth, Farmers (Annadata), and Women (Nari).
- **Four Growth Engines**—Agriculture, MSMEs, Investment, and Exports.

Key Focus Areas & Growth Engines

The Budget revolves around **four major economic engines:**
1. **Agriculture**
2. **MSMEs**
3. **Investment**
4. **Exports**

Additionally, **Reforms** act as the **fuel** to drive these engines forward.

1st Engine: Agriculture

- Launch of 'Prime Minister Dhan-Dhaanya Krishi Yojana' covering 100 districts.
- 'Mission for Aatmanirbharta in Pulses' (6 years) with procurement of Tur, Urad, and Masoor.
- Kisan Credit Card (KCC) Loan Limit Increased from ₹3 lakh to ₹5 lakh.
- Cotton Productivity Mission (5 years) and Comprehensive Programme for Fruits & Vegetables.

Impact on Agriculture Sector

- Improved farm productivity and income.
- Better storage, irrigation, and crop diversification.
- Encouragement for small and marginal farmers.

2nd Engine: MSMEs

- Investment & Turnover Limits for MSMEs Increased by 2.5 times & 2 times respectively.
- Credit Enhancement: Increased guarantee cover for MSMEs.

- New Scheme for 5 lakh Women, SC/ST Entrepreneurs (₹2 crore term loans in 5 years).
- National Manufacturing Mission for "Make in India".
- Toy Industry Boost: Government to develop India as a **global hub for toys.**

- Enhanced credit access and ease of doing business.
- More women and marginalized communities in entrepreneurship.
- Strengthened domestic manufacturing & exports.

3rd Engine: Investment

Investment in People
- **50,000** Atal Tinkering Labs in Government Schools.
- Broadband in All Govt. Schools & Primary Health Centres (BharatNet).
- National AI Centre of Excellence for Education **(₹500 Cr)**.

Investment in Economy
- **₹1.5 Lakh Cr** Interest-Free Loan to states for capital expenditure.
- Asset Monetization Plan 2025-30 **(₹10 Lakh Cr)**.
- Jal Jeevan Mission Extended Till 2028.
- ₹1 Lakh Cr Urban Challenge Fund for "Cities as Growt Hubs".

Investment in Innovation
- **₹20,000 Cr** Fund for Private Sector R&D & Innovation.
- Gyan Bharatam Mission: Survey & Digital Repository of **1 Crore** Manuscripts.
- National Geospatial Mission to improve urban planning.

Impact on Investment & Infrastructure

- Boost to Digital & AI Education.
- Higher capital investment for **urban & rural infrastructure.**
- Strengthened research & innovation ecosystem.

4th Engine: Exports

- Export Promotion Mission (focus on MSMEs & Global Supply Chains).
- 'BharatTradeNet' (BTN): Unified Digital Trade Documentation & Finance Platform.
- Support for Domestic Manufacturing (Industry 4.0, Electronics, Warehousing).
- Air Cargo & Horticulture Infrastructure Upgrades.

Impact on Exports

- Strengthened India's role in **global trade & supply chains.**
- Easier export financing & **digital trade solutions.**
- Growth in **manufacturing, logistics & agri-exports.**

Taxation & Financial Reforms

- Zero Income Tax for Individuals Earning up to **₹12 Lakh**
- under the new tax regime.
- **Section 87A** rebate limit increased from **₹7 lakh to ₹12**
- **lakh (Maximum rebate: ₹60,000)**.
- **Revenue Loss: ₹1 Lakh Crore** due to tax reductions.
- **100% FDI Limit for Insurance** (from 74%) (Only if entire
- premium is invested in India).
- Investment Friendliness Index for States (2025).
- **Jan Vishwas Bill 2.0** (Decriminalization of 100+ Laws).

New Income Tax Slabs:

Budget 2025
No Income Tax on Earnings Up to ₹12 Lakh!

Nil (₹0–4 lakh) • 5% (₹4–8 lakh) • 10% (₹8–12 lakh) • 15% (₹12–16 lakh) • 20% (₹16–20 lakh) • 25% (₹20–24 lakh) • Above ₹24 lakh: 30%

New Tax Slabs

Rebate Advantage: No income tax for those earning up to ₹12 lakh annually under the new regime.
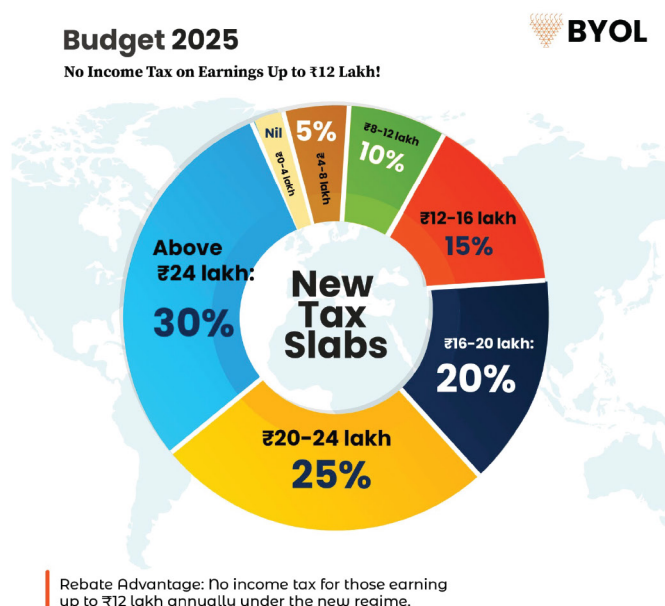
Other Tax Reforms

- Senior Citizen TDS Limit on Interest Doubled **(₹50,000 → ₹1 Lakh)**.
- TDS on Rent Increased to **₹6 Lakh (from ₹2.4 Lakh)**.
- 4-Year Time Limit for Filing Updated Returns (Earlier: 2 Years).

Impact on Economy & Business

- Easier business regulations & FDI growth
- Greater state competition for investments.
- More efficient financial regulation for sustained economic growth..

- More disposable income → **Increased Consumption & Savings.**
- Lower compliance burden for businesses & individuals.
- Boost to real estate & investment in financial products.

Capital Expenditure & Fiscal Deficit

- Capital Expenditure (Capex) increased to **₹11.21 lakh crore** (up from **₹11.11 lakh crore** in FY2024-25).
- Fiscal deficit pegged at **4.4%** of GDP, down from 4.8% last year.
- Market Borrowings estimated at **₹11.53 lakh crore**, reduced from **₹14.01 lakh crore** in FY2024-25.

Infrastructure & Economic Growth

- Modified UDAN scheme to connect **120** new destinations, targeting 4 crore passengers in **10 years**.
- Real Estate Boost—Swamih Fund 2 launched with **₹15,000 crore** for housing sector revival.
- Manufacturing Push—Incentives for clean tech industries, EV batteries, solar PV cells, and wind turbines.
- Tourism Promotion—Development of 50 top tourist sites, MUDRA loans for homestays, and e-visa expansion.

Import Duty Exemptions & Reductions

- 36 Life-Saving Cancer & Rare Disease Drugs → No Basic Customs Duty (BCD).
- Critical Minerals (Cobalt, Lithium, Zinc) for Battery Manufacturing → BCD Exempted.
- Textile Machinery & Shuttle-less Looms → BCD Exempted.

Incentives for "Make in India"

- EV & Mobile Phone Battery Manufacturing: **35** Capital Goods Exempted.
- Shipbuilding Components → BCD Exemption Extended for **10 Years**.
- Knitted Fabrics Tariff Increased (**10% to 20% or ₹115/kg**, whichever is higher).

Impact on Economy & Business

Boost to healthcare affordability & pharma industry.
Strengthened EV & electronics manufacturing
Increased domestic textile & handicraft production.

HEALTH BUDGET 2025-26

2014-15 — 34,286 Cr
2025-26 — 99,858.56 Cr

CHEAPER MEDICINES
- 36 lifesaving drugs fully exempted from Basic Customs Duty
- 6 lifesaving drugs get 5% concessional duty
- 37 more medicines & 13 patient assistance programmes fully exempted

DAY CARE CANCER CENTRES
- 200 centres in district hospitals by 2025-26

GIG WORKERS' HEALTHCARE
- Govt to register gig workers on e-Shram portal
- 1 crore gig workers to get PM Jan Arogya Yojana coverage

HEAL IN INDIA: MEDICAL TOURISM
- Govt-private medical tourism push
- Simplified visa norms for patients
- Strengthening India as a global healthcare hub

Bihar-Focused Development

- The Makhana Board announced it would improve production & marketing.
- Greenfield airports are planned in Bihar to boost connectivity.

Employment & Industry Initiatives

- **22 lakh** new jobs are to be generated, with a focus on the footwear & leather sector.
- MSMEs, Startups, and Gig workers get special policy support.
- The FDI limit in insurance increased from **74% to 100%**.

Nuclear & Energy Investments

- **₹20,000 crore** allocated for the Nuclear Energy Mission to develop 5 Small Modular Reactors (SMRs) by 2033.
- Energy sector allocation increased by **18% YoY to ₹81,174 crore.**

Defence & IT Sector Allocations

- Defence Budget set at **₹4.91 lakh crore** (up from **₹4.56 lakh crore**).
- IT & Telecom Allocation reduced to **₹95,298 crore** from **₹1.16 lakh crore.**

Relief for Consumers – Cheaper Goods

| BUDGET 2025-26 |

CHEAPER
Pulses & edible oils
Fruits & vegetables
Makhana (fox nuts)
Marine products
Lifesaving drugs
Handicrafts
Mobile phones
Electronic goods
36 lifesaving drugs &
medicines
EV batteries
Leather goods
12 critical minerals
Medical equipment

COSTLIER
Flat panel display
Knitted Fabrics

- Reduced prices on:
  ○ Cancer & lifesaving drugs.
  ○ Solar PV cells & lithium-ion batteries.
  ○ Telecom & semiconductor equipment.

MSMEs & Startup Support

- Credit Guarantee Cover increased from **₹5 crore to ₹10** crore.
- New Entrepreneurs' Scheme – **₹2 crore term loans for 5 lakh women and SC, ST entrepreneurs.**
- BharatTradeNet (BTN) – Digital trade documentation & financing for exporters.

Social Welfare & Policy Reforms

- Tax Exemptions on 36 lifesaving drugs.
- New Urea Plant in **Assam—12.7 lakh metric tonne** capacity.
- **22 Lakh Jobs** Creation – Focus on the footwear & leather industry.
- 'Mission for Aatmanirbharta in Pulses' – Six-year plan for domestic production.

Additional Reforms & Governance

- Self-Occupied Property Rule Removed—Taxpayers can claim two properties as self-occupied.
- New Income Tax Bill to simplify tax laws by reducing tax by **50%.**

A budget that supports middle-class savings, employment, and economic growth.

OUTLAY ON MAJOR SCHEMES

Scheme	Outlay
PMGKAY	2,03,000 ₹ crore
MGNREGP	86,000 ₹ cr
JJM/NRDWM	67,000 ₹ cr
PM-Kisan	63,500 ₹ cr
PMAY-G	54,832 ₹ cr
Samagra Shiksha	41,250 ₹ cr
NHP	30,010 ₹ cr
PMAY-Urban	19,794 ₹ cr
DAY-NRLM	19,005 ₹ cr
PMGSY	19,000 ₹ cr
PM Poshan	12,500 ₹ cr
NSAP	9,652 ₹ cr
PMJAY	9,406 ₹ cr
RKVY	8,500 ₹ cr
PM-SHRI	7,500 ₹ cr
SWM-Gramin	7,192 ₹ cr
SWM-Urban	5,000 ₹ cr
PMMSY	2,465 ₹ cr
PM-USHA	1,815 ₹ cr
NYM	1,275 ₹ cr
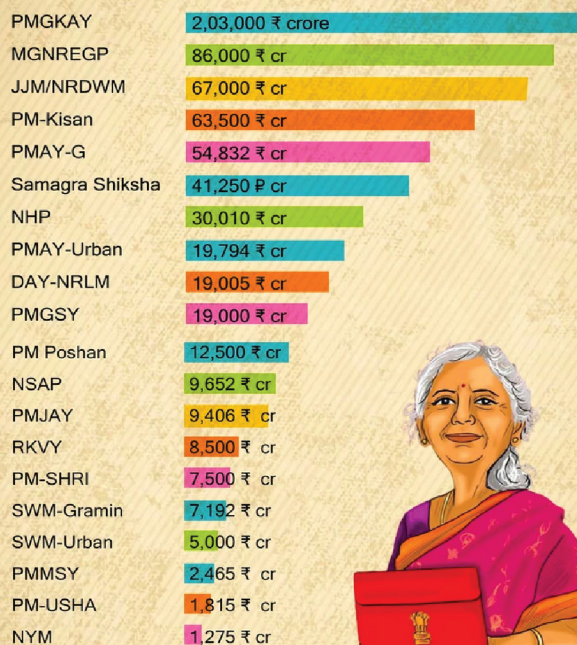
UNION BUDGET 2025-26

Overall Impact of Budget 2025-26

- **Middle Class:** Higher savings, consumption boost.
- **Farmers:** Higher credit, better procurement, rural employment.
- **MSMEs:** Enhanced credit access, better global trade opportunities.
- **Startups & Entrepreneurs:** Investment-friendly reforms, regulatory ease.
- **Investors & Businesses:** Lower taxation, infrastructure push.
- **Infrastructure and Exports:** Increased manufacturing & global trade integration.

A Transformative Budget for Growth & Stability

The **Union Budget 2025-26** lays the foundation for a **self-reliant and developed India by:**

- Providing tax relief to the middle class.
- Boosting infrastructure & manufacturing.
- Encouraging entrepreneurship & employment.
- Strengthening agriculture & rural economies.
- Maintaining fiscal discipline.

With a balanced approach of **tax relief, economic expansion, and social welfare**, this budget reflects the **government's vision for a prosperous, self-reliant India** while ensuring **sustainable growth and fiscal responsibility.**

BYOL

BUDGET 2025-26
KEY HIGHLIGHTS

Income Tax Changes

No tax on income up to ₹12 lakh (rebate under New Tax Regime).

New Tax Slabs:

₹0-4 lakh – 0%
₹4-8 lakh – 5%
₹8-12 lakh – 10%
₹12-16 lakh – 15%
₹16-20 lakh – 20%
₹20-24 lakh – 25%
Above ₹24 lakh – 30%

Time to file tax returns extended from 2 years to 4 years.
Rationalization of TDS & TCS to reduce compliance burden.

Economic Growth & Infrastructure

GDP growth projected at 6.3-6.8%.
Fiscal deficit pegged at 4.8% of GDP.

₹20,000 crore for private sector-driven tech research (IITs, IISc).

UDAN Scheme Expansion: 120 new destinations, 4 crore more passengers in 10 years.

SWAMIH Fund 2: ₹15,000 crore to complete 1 lakh housing units.

Energy & Industry

Nuclear Energy Mission: Target 100 GW nuclear capacity by 2047.

₹20,000 crore for Small Modular Reactors R&D, 5 reactors by 2033.

FDI in Insurance raised from 74% to 100%.

Education & Healthcare

Broadband for all govt secondary schools & PHCs under BharatNet.

₹1,000 crore VC fund for space startups.

10,000 fellowships under PM Research Fellowship.

Daycare cancer centers in all district hospitals (200 centers by FY 2025-26).

50,000 Atal Tinkering Labs in Govt Schools for STEM & AI.

10,000 Medical Seats (UG + PG) to be added in 2025.

New Centre of Excellence in AI & another for education (₹500 Cr outlay).

Ease of Doing Business & Investments

Trust-based regulatory framework for ease of compliance.

Investment Friendliness Index of states to be launched.

High-level committee to review non-financial regulations.

Economic & Regulatory Reforms

Trust-Based Regulatory Frameworks to reduce trust deficit and encourage deregulation.

Second Asset Monetisation Plan (2025-2030) to generate ₹10 lakh crore for new projects.

100% FDI in Insurance (up from 74%) to boost investment.

Entrepreneurship & MSMEs

₹2 Cr Term Loans for 5 lakh SC/ST Women Entrepreneurs.

Customised Credit Cards for micro industries with a ₹5 lakh limit (10 lakh cards in Year 1).

Export Support Mission to ease credit access and help MSMEs tackle non-tariff barriers.

Agriculture & Rural Development

PM Dhan Dhanya Krishi Yojana in 100 agri districts (similar to Aspirational Districts Programme).

National Mission on High Yielding Seeds to boost climate-resilient crop production.

Loan Limit under MISS increased from ₹3 lakh to ₹5 lakh for farmers.
India Post to be repositioned as a rural economic catalyst & logistics hub.

Infrastructure & Investment

₹20,000 Cr for Tourism Development, focusing on Ramayana & Buddhist Circuits.

Patna Airport Expansion & new Brownfield Airport in Bihar.

₹25,000 Cr Maritime Development Fund (Govt: 49%, Pvt: 51%).

Electricity Distribution Reforms with 0.5% additional GSDP borrowing incentive for states.

Social Welfare & Employment

Gig Workers to get ID cards, e-shram registration & healthcare under PM Jan Arogya Yojana.

PM-SVANidhi Scheme Revamp: Higher loan amounts, UPI-linked credit cards, capacity building

Manufacturing & Clean Tech

National Manufacturing Mission for clean tech industries (solar PV, EV batteries, wind turbines).

New Urea Plant in Assam (12.7 lakh tonnes capacity).

ECONOMIC SURVEY

Chapter 1: State of the Economy

State of the Economy

GDP Growth (FY24): 7.3% (fastest-growing G20 economy).

Inflation (CPI): 5.4% (FY24), controlled despite global disruptions.

GST Revenue: ₹1.6 lakh crore/month (FY24).

Forex Reserves: $620 billion (macroeconomic stability).
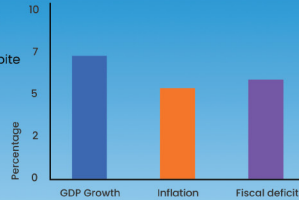
Key Sectors:

Services: 55% of GDP.
Manufacturing: Boosted by PLI schemes.
Agriculture: 3.4% growth, focus on Agri-tech.
Fiscal Deficit: 5.9% of GDP (FY24), target 4.5% by FY26.
FDI Inflows: $82 billion (FY24), led by IT, renewables, infrastructure.

Current Context

- India's GDP growth for FY24 is projected at **7.3%,** making it one of the fastest-growing major economies.
- Inflation under control at **5.4%** (CPI-based) despite global supply chain disruptions.
- Robust tax collections with GST revenue averaging **₹1.6 lakh crore/month in FY24.**
- Forex reserves at **$620 billion**, ensuring macroeconomic stability.

India's Economic Performance

- **IGDP Growth:** Strong domestic consumption and investment are key drivers.
- **Manufacturing and Services:** Service sector contributed **55%** to GDP, while PLI (Production-Linked Incentive) schemes boosted manufacturing.
- **Agriculture:** Growth rate moderated to **3.4%**, with focus on digitalization and Agri-tech adoption.

Key Fiscal & Monetary Indicators

- **Fiscal Deficit Target: 5.9% of GDP for FY24,** aiming to reduce it to **4.5%** by FY26.
- Current Account Deficit (CAD): Improved to **1.3%** of GDP due to strong service exports.
- FDI Inflows: Total FDI in FY24 at **$82 billion**, led by IT, renewable energy, and infrastructure.

Employment & Social Sector Trends

- **Unemployment Rate: Reduced to 6.2%,** with highest job creation in MSMEs & startups.
- **Digital Economy Growth:** UPI transactions crossed **₹17 lakh crore** per month, aiding financial inclusion.

Global Economic Comparisons

- India remains the fastest-growing G20 economy, ahead of China **(4.8%)** and the US **(2.5%).**
- World Bank projects India's economy to reach **$5 trillion** by FY27

Key Takeaways for UPSC Prelims

- **India's GDP Growth (FY24): 7.3%**
- **Forex Reserves: $620 billion**
- **Fiscal Deficit Target: 5.9% of GDP**
- **Current Account Deficit: 1.3% of GDP**
- **FDI Inflows: $82 billion**
- **UPI Transactions: ₹17 lakh crore/month**
- **Fastest Growing G20 Economy**

Chapter 2: Monetary and Financial Sector Developments

Monetary and Financial Sector

Repo Rate (2024): 6.5% (neutral stance).

CRR Cut (Dec 2024): 4%, injecting ₹1.16 lakh crore liquidity.

GNPA Ratio: 2.6% (12-year low).

Money Supply Growth (M3): 9.3% YoY (Dec 2024).

Financial Inclusion Index: 64.2 (March 2024).

Stock Market: Record highs despite global risks.
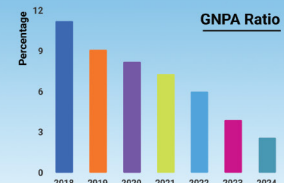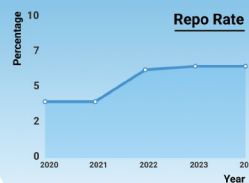
Current Context

- RBI maintained the repo rate at **6.5%** throughout 2024, shifting from "withdrawal of accommodation" to a "neutral" stance in October.
- Inflation under control with the **CRR** cut to **4%** in December 2024, injecting **₹1.16 lakh crore** into the banking system.

- Banking sector strengthened, with the GNPA ratio declining to **2.6%** (12-year low) and a rise in the Capital-to-Risk Weighted Asset Ratio (CRAR).
- **Stock markets reached record highs,** outperforming emerging market peers despite geopolitical risks.

Monetary Policy & Liquidity Trends

- IRBI aims to balance inflation control and economic growth through instruments like repo rate, CRR, and SLR adjustments.
- **Money supply (M3) grew by 9.3%** YoY as of December 2024, with deposits as the largest contributor.
- **Money Multiplier (MM) increased to 5.7,** indicating higher liquidity circulation.

India's Economic Performance

- **IGDP Growth: Strong domestic consumption** and investment are key drivers.
- **Manufacturing and Services:** Service sector contributed **55%** to GDP, while PLI (Production-Linked Incentive) schemes boosted manufacturing.
- **Agriculture:** Growth rate moderated to **3.4%,** with focus on digitalization and Agri-tech adoption.

Banking & Credit Sector Performance

- Bank credit growth converging with deposit growth, ensuring financial stability.
- **Decline in NPAs:** GNPA of Scheduled Commercial Banks (SCBs) fell to **2.6%**, while net NPAs stood at **0.6%.**
- Rural Financial Institutions (RFIs) & Development Financial Institutions (DFIs) played a key role in economic inclusion and infrastructure funding.

Capital Markets & Financial Inclusion

- Indian stock market hit new highs in December 2024, driven by domestic investment and foreign inflows.
- Financial Inclusion Index (RBI) improved to **64.2** (March 2024) from **53.9** in 2021, showing stronger banking penetration.

Emerging Trends & Risks

- **Rise in consumer credit:** Share in total bank credit increased from **18.3%** in FY14 to **32.4%** in FY24.
- **Growth in non-bank financing:** Banks' share in total credit fell from **77%** (FY11) to **58%** (FY22), with NBFCs and bond markets expanding.
- **Increase in equity financing:** IPO listings grew six times between FY13 and FY24, making India the top IPO market globally.

Key Takeaways for UPSC Prelims

- **Repo Rate (2024): 6.5%**
- **Cash Reserve Ratio (CRR): Cut to 4% (Dec 2024)**
- **GNPA Ratio (Sept 2024): 2.6% (12-year low)**
- **Money Supply (M3) Growth: 9.3% YoY (Dec 2024)**
- **Financial Inclusion Index: 64.2 (March 2024)**
- **Stock Market: Record highs despite global uncertainties**

Chapter 3: External Sector

External Sector

Total Exports (FY25): $602.6 billion (first 9 months)

Total Imports (FY25): $682.2 billion (first 9 months)

Trade Deficit: $79.5 billion

Forex Reserves (Dec 2024): $640.3 billion

FDI Growth: 17.9% YoY (April-Nov 2024)

Global Services Exports Rank: 7th

Import v/s Export
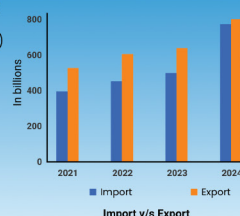
Current Context

- India's total exports (merchandise + services) reached **$602.6** billion in the first nine months of FY25, growing at **6%** YoY.
- Imports increased by **6.9%** to **$682.2 billion**, driven by strong domestic demand.
- FDI inflows revived, but net FDI declined due to increased repatriation.
- Foreign exchange reserves at **$640.3 billion** (Dec 2024), covering **90%** of external debt (**$711.8 billion**, Sept 2024).

India's Trade Performance

- Service sector exports grew by **10.4%**, while non-petroleum, non-gems exports expanded by **9.1%.**
- The trade deficit widened to **$79.5** billion, driven by **higher import** demand.
- **India ranked 7th in global services exports,** highlighting competitiveness in IT, finance, and consulting.

Foreign Direct Investment (FDI) Trends

- **Gross FDI inflows increased by 17.9% YoY** (April-Nov 2024).
- **Net FDI fell due to high repatriation**, which rose **33.2%** YoY, reflecting strong investor profit-booking.
- **Sectors attracting FDI**: Services **(19.1%),** Software & Hardware **(14.1%)**, Renewable Energy **(7%)**, Trading **(9.1%).**

Foreign Portfolio Investment (FPI) & Forex Reserves

- FPI inflows are volatile due to global uncertainties, but positive overall.
- Forex reserves peaked at **$704.9 billion (Sept 2024)**, later moderating to **$634.6 billion (Jan 2025).**
- India's sovereign bonds included in JP Morgan EM Bond Index, attracting foreign debt investors.

Global Trade Challenges & India's Strategy

- Geopolitical risks, protectionism, and trade policy changes impacting exports.
- India diversifying export markets, increasing focus on biotechnology, semiconductors, and high-value manufacturing.

Key Takeaways for UPSC Prelims

- **Total Exports (FY25 first 9 months): $602.6 billion**
- **Total Imports (FY25 first 9 months): $682.2 billion**
- **Trade Deficit: $79.5 billion**
- **Forex Reserves (Dec 2024): $640.3 billion**
- **Gross FDI Growth: 17.9% YoY**
- **India's Global Ranking in Services Exports: 7th**

India's external sector remains resilient, with export growth, strong forex reserves, and stable capital inflows, despite global economic challenges.

Chapter 4: Prices and Inflation

Prices and Inflation

CPI Inflation (FY25): 4.9% (April-Dec)

Core Inflation: Below 4% (decade-low)

Food Inflation Drivers: Onion, Tomato, Pulses, Cereals

Global Inflation (2024): 5.7% (down from 8.7% in 2022)

Government Measures: Stock limits, buffer stocks, duty-free imports
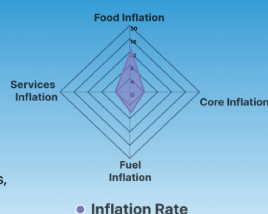
● Inflation Rate

Current Context

- **Retail inflation in India moderated from 5.4% in FY24 to 4.9% in FY25** (April-December) due to government interventions and monetary policy adjustments.
- Core inflation (excluding food and fuel) reached a decade-low, while food inflation remained volatile due to supply chain disruptions and extreme weather.
- **Global inflation declined from 8.7% (2022) to 5.7% (2024),** helped by tight monetary policies.

Global Inflation Trends

- Monetary tightening by central banks worldwide led to a gradual decline in global inflation.
- Despite high interest rates, global economic resilience helped stabilize inflation rates.
- Commodity prices softened due to improved global supply chains, though geopolitical risks remain.

Domestic Inflation Trends

- **Consumer Price Index (CPI) inflation decreased to 4.9% (FY25 April-December).**
- Food inflation remained high, driven by vegetables (especially onion & tomato), pulses, and cereals.
- **Core inflation fell below 4%**, mainly due to stable fuel and service prices.

Government Measures to Control Inflation

- Stock limits imposed on wheat and pulses to prevent hoarding.
- Buffer stock operations for onions and tomatoes under the Price Stabilization Fund.
- Subsidized sale of essential food items (e.g., onions at ₹35/kg, tomatoes at ₹65/kg).
- **Duty-free imports of pulses** (tur, urad, masur) till March 2025.

Key Risks & Challenges

- Extreme weather events (heatwaves, cyclones, unseasonal rains) are impacting food prices.
- Geopolitical uncertainties affecting global oil and food prices.
- Supply chain disruptions leading to price volatility in essential commodities.

Key Takeaways for UPSC Prelims

- **India's CPI Inflation (FY25 April-Dec): 4.9%**
- **Core Inflation: Below 4% (lowest in a decade)**
- **Global Inflation (2024): 5.7% (down from 8.7% in 2022)**
- **Major drivers of food inflation: Onion, Tomato, Pulses, Cereals**
- **Government measures:** Stock limits, buffer stock, duty-free imports

India's inflation outlook remains stable, with effective policy interventions helping to control price rise, though climate-related risks and global factors continue to pose challenges.

Chapter 5: Medium-Term Outlook

Medium-Term Outlook

$5 trillion economy by FY28

$6.3 trillion by FY30

Investment Rate Target: 35% of GDP (currently 31%)

Jan Vishwas Act 2023: Decriminalized 183 provisions in 42 laws

Global Trend: Shift from globalization to protectionism
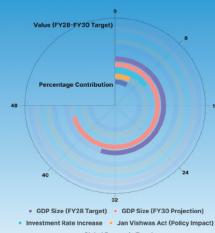
Current Context

- IMF projects India to become a **$5 trillion** economy by FY28 and **$6.3 trillion** by FY30.
- India needs **8% real GDP growth for the next two decades to achieve its Viksit Bharat@2047 goal.**
- Global geo-economic fragmentation is reshaping trade and investment flows, requiring India to focus on domestic growth levers.

Global Economic Challenges & India's Growth Path

- **Geo-economic fragmentation:** Shift from globalization to protectionism is affecting trade.
- **China's dominance:** Challenges in supply chains, mineral resources, and energy transition impact India's manufacturing sector.
- **Climate transition costs:** India must balance green growth with economic expansion.

India's Growth Strategy

- **Investment rate needs to increase to 35% of GDP** from the current **31%** to sustain high growth.
- **Efficiency in investment is key:** Faster implementation and higher output per investment are necessary.
- Boosting domestic demand & productivity to reduce dependence on exports.

Deregulation as a Catalyst for Growth

- Reducing compliance burden for businesses, especially MSMEs, to enhance entrepreneurship.
- Jan Vishwas Act 2023 decriminalized **183** provisions across **42 central laws**, easing business operations.
- **State-led reforms:** Punjab, Tamil Nadu, and Andhra Pradesh simplified labor and industrial regulations.
- **Sectoral deregulation:** Land, labor, logistics, and environmental laws being reformed.

Key Policy Recommendations

- **Ease of Doing Business (EoDB) 2.0:** State-led initiative to simplify business regulations.
- **Tax and tariff rationalization:** Reducing industrial electricity costs to boost competitiveness.
- **Adopting global best practices:** Learning from US, UK, and Germany in deregulation policies.

Key Takeaways for UPSC Prelims

- **IMF GDP Projections:** $5 trillion by FY28, $6.3 trillion by FY30.
- **Investment Rate Target:** 35% of GDP (currently 31%).
- **Jan Vishwas Act 2023:** Decriminalized 183 provisions in 42 laws.
- **States Leading in Deregulation:** Punjab, Tamil Nadu, Andhra Pradesh.
- **Global Economic Trend:** Shift from globalization to protectionism.

India's focus on deregulation, domestic growth levers, and investment efficiency will be crucial to sustain its economic momentum amid global uncertainties

Chapter 6: Investment and Infrastructure

Investment and Infrastructure

Infrastructure Investment Target (FY20-FY25): ₹111 lakh crore (NIP)

National Monetisation Pipeline (NMP): ₹3.86 lakh crore achieved (till FY24)

Railway Expansion (FY25): 2,282 km

Installed Power Capacity (Nov 2024): 456.7 GW

5G Deployment: Completed in 700+ cities

Water & Irrigation 8.00%
Digital & Telecom 12.00%
Urban Infrastructure 20.00%
Transport 35.00%
Energy 25.00%
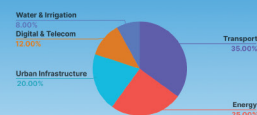
Current Context

- **Capital expenditure on infrastructure increased post-election, with ₹1.91 lakh crore targeted for FY25.**
- Private participation in infrastructure projects remains a challenge, despite the government's push for Public-Private Partnerships (PPP).
- Sustainable construction practices and digital infrastructure development are gaining prominence.

India's Infrastructure Investment Trends

- **Government capital expenditure (Capex) on infrastructure grew at 38.8% CAGR from FY20 to FY24.**
- National Infrastructure Pipeline (NIP) aims for **₹111 lakh crore** investment from FY20 to FY25, covering **9,766** projects across **37** sub-sectors.
- **National Monetisation Pipeline (NMP): Target of ₹6 lakh crore (FY22-FY25), with ₹3.86 lakh crore achieved by FY24.**
- **Major sectors:** Roads, power, civil aviation, telecom, railways, ports.

Physical & Digital Connectivity Developments

- **Railways: 17 new Vande Bharat trains launched; 2,282 km of railway network commissioned.**
- **Roads & Highways:** Expansion of Bharatmala Pariyojana and expressways.
- **Digital Infrastructure: 5G rollout** completed in **700+** cities, rural broadband expansion via BharatNet.

Private Sector Participation & Financing Models

- **PPP models in infrastructure:** Build-Operate-Transfer (BOT), Hybrid Annuity Model (HAM), and Toll-Operate-Transfer (TOT).
- **Challenges:** High capital costs, long gestation periods, contract management issues.
- **Solutions:** Improved risk-sharing mechanisms, regulatory reforms, faster clearances.

Sector-Specific Infrastructure Growth

- **Power Sector:** Installed capacity at **456.7 GW (Nov 2024)** expansion in renewable energy, smart grids.
- **Urban Infrastructure:** Swachh Bharat **2.0**, Smart Cities Mission, AMRUT 2.0 driving urban transformation.
- **Tourism Infrastructure:** PRASHAD, Swadesh Darshan **2.0**, focus on heritage and spiritual tourism.
- **Space Infrastructure:** ISRO's Gaganyaan, Venus Orbiter, Bhartiya Antariksh Station projects approved.

Key Takeaways for UPSC Prelims

- **Total Infrastructure Investment Target (FY20-FY25): ₹111 lakh crore (NIP).**
- **National Monetisation Pipeline (NMP) Achievement: ₹3.86 lakh crore (till FY24).**
- **Railway Network Expansion (FY25): 2,282 km.**
- **Installed Power Capacity (Nov 2024): 456.7 GW.**
- **5G Deployment: Completed in 700+ cities.**

India's investment-driven growth strategy, focus on PPP in infrastructure, and sustainable construction practices are key to achieving Viksit Bharat@2047

Chapter 7: Industry
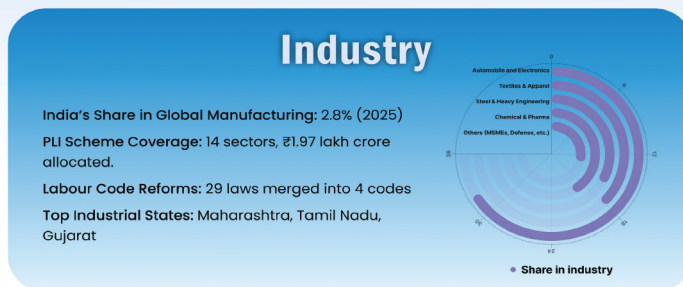
Current Context

- **India's share in global manufacturing increased to 2.8%, but it remains far behind China's 28.8%.**
- Industrial growth slowed in H1 FY25, impacted by global trade disruptions and aggressive trade policies by major economies.
- PLI (Production Linked Incentive) scheme expanded to new sectors like semiconductors, textiles, and green hydrogen to boost domestic manufacturing.

India's Manufacturing Performance

- Core industries (steel, cement, chemicals, petrochemicals) stabilized growth, while consumer sectors like automobiles, electronics, and pharmaceuticals drove expansion.
- The manufacturing sector's share in India's GDP is **17.4%**, with efforts to reach **25%** under Make in India.

Key Industrial Policies & Reforms

- **Production Linked Incentive (PLI) Scheme:** ₹1.97 lakh crore allocated across 14 key sectors.
- **Ease of Doing Business (EoDB) 2.0:** Focus on reducing compliance burden and digitization of business processes.
- **Labour Code Reforms:** Integration of 29 labour laws into 4 simplified codes to improve workforce flexibility.
- **National Single Window System (NSWS):** Streamlining business approvals with over 27,000 approvals granted.

State-Level Industrial Performance

- **Maharashtra, Tamil Nadu, and Gujarat lead in industrial output and investment.**
- **States with reform potential: Bihar, Jharkhand, Madhya Pradesh, Uttar Pradesh** need better industrial policies.
- **Deregulation initiatives in states: Punjab and Tamil Nadu** amended industrial policies to boost investments.

Global Challenges & Opportunities

- Geopolitical tensions and supply chain disruptions impacting export-driven manufacturing.
- India's participation in global value chains (GVCs) improving, especially in electronics and electric vehicles.

Key Takeaways for UPSC Prelims

- **India's share in global manufacturing (2025): 2.8%.**
- **PLI Scheme coverage: 14 sectors.**
- **Labour Code Reforms: Merged 29 laws into 4 codes.**
- **Top industrial states: Maharashtra, Tamil Nadu, Gujarat.**
- **Ease of Doing Business 2.0 launched for compliance reduction.**

India's manufacturing sector is expanding but faces global trade uncertainties, making industrial reforms and deregulation critical for long-term growth

Chapter 8: Services – New Challenges for the Old War Horse

Services

Service Sector Contribution to GDP: 57% (FY25)
Global Services Exports Rank: 7th (4.3% share)
Bank Credit to Services: ₹48.5 lakh crore (Nov 2024), 13% YoY growth
ONDC: Expanding digital commerce inclusivity
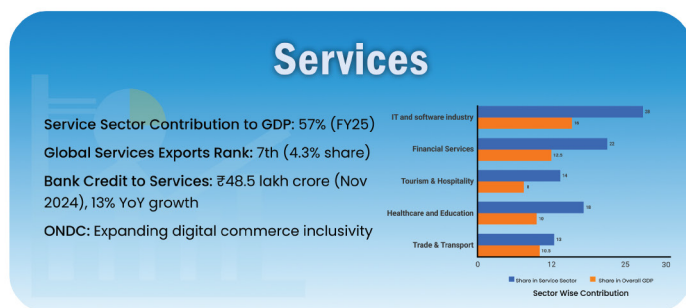
Current Context

- **The service sector remains the largest contributor to India's GDP (57% in FY25), supporting GDP growth despite a global trade slowdown.**
- India's share in global services exports **increased to 4.3%** in 2024, ranking **7th** globally, driven by IT, finance, and professional services.
- Logistics and digital services gained momentum, with **Open Network for Digital Commerce (ONDC)** expanding e-commerce inclusivity.

Services Sector Performance

- **Services PMI at 53.8 (Dec 2024):** Indicates steady expansion for **23** consecutive months.
- Bank credit to services sector stood at **₹48.5 lakh crore** (Nov 2024), growing **13% YoY**.
- FDI in services reached **$5.7 billion** in Apr-Sep FY25, with insurance and financial services leading inflows.

Key Growth Drivers

- **"Servicification" of industries:** Manufacturing increasingly integrates logistics, AI-driven business processes, and digital finance.
- India's digital economy is expanding, with strong growth in cloud computing, AI, and fintech services.
- Government support for business process outsourcing (BPO) and IT-enabled services.

Government Initiatives

- **ONDC (Open Network for Digital Commerce):** Expanding access to digital marketplaces.
- **PLI Scheme for Services:** Encouraging domestic value addition in sectors like telecom, fintech, and AI-driven automation.
- **Skilling and Digital India Programs:** Focus on AI, cloud computing, and cybersecurity workforce training.

Key Takeaways for UPSC Prelims

- **Service sector contributes 57% to India's GDP (FY25).**
- **India's share in global services exports: 4.3% (7th rank).**
- **Bank credit to services: ₹48.5 lakh crore (Nov 2024), 13% YoY growth.**
- **ONDC boosting digital commerce & financial inclusion.**
- **Global protectionism & AI adoption reshaping service sector jobs.**

India's service sector remains resilient, driving economic growth, exports, and employment, but skilling, AI adoption, and global trade policies pose challenges

Chapter 9: Agriculture and Food Management – Sector of the Future

Agriculture

Agriculture GDP Share: 16% (FY24)
Workforce in Agriculture: 46.1%
Cereal Production: 11.6% of global output
PM-KISAN Beneficiaries: Over 11 crore farmers
Fisheries Growth: 13.67% CAGR (FY15–FY23)
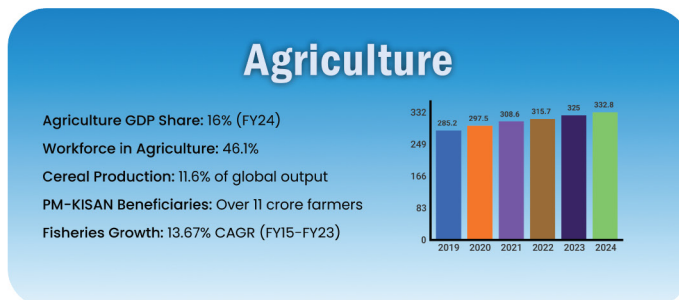
Current Context

- Agriculture sector growth rebounded to **3.5% in Q2 FY25,** after fluctuating between **0.4% and 2.0%** in the previous four quarters.
- India remains the world's largest producer of cereals (**11.6% of global output**), but crop yields remain below the global average.
- Government expanding digital agriculture, irrigation infrastructure, and food processing industries to boost farm incomes.

Agriculture's Contribution to the Economy

- Accounts for **16% of GDP** (FY24, PE) and employs **46.1%** of the workforce.
- **Average sector growth: 5%** annually (FY17-FY23), showcasing resilience despite climate challenges.
- Horticulture, livestock, and fisheries driving sectoral diversification, with fisheries growing at a CAGR of **13.67%** (FY15-FY23).

Key Government Initiatives

- **PM-KISAN:** Direct income support to over **11 crore** farmers.
- **National Innovations in Climate Resilient Agriculture (NICRA):** Promotes heat-resistant and high-yield crop varieties.
- **e-NAM:** Expanding agricultural marketing for better price discovery.
- **Per Drop More Crop (PDMC):** Expanding micro-irrigation coverage.

Sectoral Challenges & Opportunities

- **Climate change impacts:** Increasing frequency of dry spells and extreme rainfall.
- **Low productivity:** India's crop yields remain **20-30%** lower than the global average.
- **Agricultural diversification:** Shifting towards high-value crops, floriculture, and food processing industries.
- **Storage & food security:** Expansion of modern grain storage under the Public Distribution System (PDS), including smart warehouses and mobile storage units.

Key Takeaways for UPSC Prelims

- **Agriculture GDP Share: 16% (FY24, PE).**
- **Workforce in Agriculture: 46.1%.**
- **Sector Growth (FY17-FY23): 5% annually.**
- **Largest producer of cereals: 11.6% of global output.**
- **Fastest growing allied sector: Fisheries (CAGR 13.67%).**

India's agriculture sector remains resilient, with policy support for diversification, climate adaptation, and market reforms, but productivity improvements and climate risk management remain key priorities

Chapter 10: Climate and Environment – Adaptation Matters

Climate and Environment

Adaptation Expenditure (FY22): 5.6% of GDP
India's Climate Vulnerability Rank: 7th
MISHTI Initiative: Mangrove protection & carbon sequestration
LiFE Initiative: Endorsed by UNEA (2024)

- Renewable Energy
- Disaster Resilience & Adaptation
- Electric Mobility & Green Transport
- Forest & Biodiversity Conservation
- Sustainable Agriculture & Water
- Carbon Capture & Research
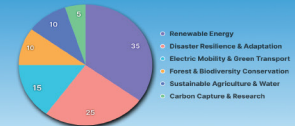
Current Context

- **India ranks 7th among the most climate-vulnerable countries, facing extreme weather events, sea-level rise, and biodiversity loss.**
- Adaptation expenditure **increased from 3.7% to 5.6%** of GDP (FY16-FY22), indicating growing climate resilience efforts.
- **COP29 (Baku, 2024) failed to secure substantial climate finance commitments, with developed nations falling short of their NDC pledges by 38%.**

India's Adaptation Strategies

- National Adaptation Plan (NAP) under development, aligning with Sustainable Development Goals (SDGs).
- **Agricultural adaptation:** Climate-resilient seeds, groundwater conservation, improved soil health.
- **Urban climate resilience:** National Mission on Sustainable Habitat (NMSH) focuses on waste management, urban flooding, and green building initiatives.
- **Coastal adaptation:** Mangrove Initiative for Shoreline Habitats & Tangible Incomes (MISHTI) launched to protect coastlines and enhance carbon sequestration.

Energy Transition & Climate Challenges

- Renewable energy expansion faces storage and mineral access challenges.
- Global shift to net-zero emissions requires significant financial and technological support, which remains inadequate.
- LiFE (Lifestyle for Environment) initiative endorsed by UNEA (2024), promoting sustainable consumption and circular economy practices.

- India's Adaptation Expenditure (FY22): 5.6% of GDP.
- India's Global Climate Vulnerability Rank: 7th.
- MISHTI Initiative: Mangrove protection & carbon sequestration.
- Life Initiative: Endorsed by UNEA (2024).
- COP29 Outcome: Developed nations missed NDC pledges by 38%.

India's climate adaptation and mitigation strategy focuses on resilience-building, energy transition, and international cooperation, but funding gaps and technological barriers remain key challenges

Chapter 11: Social Sector – Extending Reach and Driving Empowerment

Social Sector

Social Sector Expenditure: 26.2% of total government spending (FY25)

Ayushman Bharat Coverage: 60 crore beneficiaries

Jal Jeevan Mission: 75% rural households with tap water

Self Help Groups (SHGs): 87 lakh women-led SHGs supported
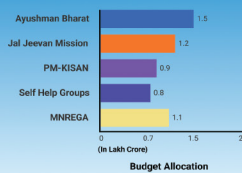
Current Context

- India's social sector expenditure increased to **26.2% of total government spending in FY25.**
- NEP 2020 implementation expanded, focusing on foundational literacy, skill development, and digital education.
- Ayushman Bharat coverage expanded to **60 crore** beneficiaries, strengthening India's healthcare accessibility.

Education & Skill Development

- **Gross Enrolment Ratio (GER): Near universal enrolment at the primary level (93%), with efforts underway to improve secondary (77.4%) and higher secondary (56.2%) levels.**
- **National Education Policy (NEP) 2020:** Focuses on digital learning, vocational training, and reducing dropout rates.
- **Digital education initiatives:** Expansion of DIKSHA platform and PM e-Vidya for blended learning.

Healthcare & Social Welfare

- **Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (PMJAY):** Expanded coverage to **60 crore** beneficiaries, reducing out-of-pocket expenditure.
- **National Digital Health Mission (NDHM):** Integrated with e-Sanjeevani telemedicine platform, providing **2.8 crore** teleconsultations in FY24.
- **Jan Aushadhi Kendras (JAKs):** Over **14,000** outlets, ensuring affordable generic medicines availability.

Rural Development & Social Inclusion

- **PM Awas Yojana (PMAY): Over 3.5 crore rural houses constructed, enhancing housing security.**
- **Jal Jeevan Mission:** Achieved **75%** rural household tap water coverage.
- **Self Help Groups (SHGs):** Over **87 lakh** women-led SHGs supported under DAY-NRLM, strengthening livelihood generation.

Key Takeaways for UPSC Prelims

- **Social sector expenditure: 26.2% of total government spending.**
- **GER (Primary): 93%; GER (Secondary): 77.4%.**
- **Ayushman Bharat covers 60 crore beneficiaries.**
- **Jal Jeevan Mission: 75% rural households have tap water.**
- **Self Help Groups (SHGs): 87 lakh women-led SHGs supported.**

India's social sector progress is driven by inclusive policies in education, healthcare, and rural development, but further improvements in governance and last-mile service delivery are essential

Chapter 12: Employment and Skill Development – Existential Priorities

Employment and Skill Development

Unemployment Rate (FY25): 3.2%

Labour Force Participation Rate: 50.4%

Prime Minister's Internship Scheme: 1 crore youth

Green Jobs: 10 million by 2030
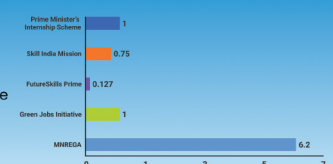
Current Context

- **India's unemployment rate dropped to 3.2% in FY25, down from 6% in FY18,** indicating a strong post-pandemic recovery.
- **Labour Force Participation Rate (LFPR) increased to 50.4%,** with urban unemployment declining to 6.4%.
- Formal job creation strengthened, with EPFO net payroll additions increasing significantly in FY24.

State of Employment in India

- Agriculture employs **44.8%** of the workforce, though a gradual shift towards non-farm jobs is observed.
- Manufacturing sector employment rose, reflecting post-pandemic resilience.
- Service sector leads in formal job creation, contributing to **50%** of new payroll additions.

Key Government Initiatives for Employment & Skilling

- **Prime Minister's Internship Scheme (PMIS):** Internship in **500** top companies for **1 crore** youth over five years.
- **PMKVY 4.0:** Skilling **20 lakh** youth over five years, focusing on Industry **4.0**, AI, and fintech.
- **EPFO Employment Incentive Scheme:** ₹3,000/month reimbursement for employers hiring additional workers.
- **Skill India Digital Hub (SIDH):** Expanding online skilling courses for AI, cybersecurity, and robotics.

Emerging Trends & Future Job Markets

- **Rise of digital and AI-based jobs: 1.27 lakh** professionals trained under FutureSkills Prime.
- **Women's workforce participation improving:** Growth in work-from-home and fintech-driven employment.
- **Green jobs expansion:** Renewable energy sector projected to create **10 million** jobs by **2030.**

Key Takeaways for UPSC Prelims

- **Unemployment Rate (FY25): 3.2%.**
- **Labour Force Participation Rate: 50.4%.**
- **Prime Minister's Internship Scheme: 1 crore youth.**
- **Women in the Workforce: Increasing via fintech and WFH jobs.**
- **Green Jobs: 10 million by 2030.**

India's employment scenario is improving, supported by skilling programs, digital job creation, and formalization of the workforce, but sectoral shifts and automation-driven changes need continuous adaptation

Chapter 13: Labour in the AI Era – Crisis or Catalyst?

Current Context

- **AI-driven automation is reshaping global labour markets, with India expected to witness 30-40% job transitions by 2035.**
- Generative AI investments surged from **$3 billion in 2022 to $25.2 billion in 2023**, indicating rapid adoption.
- India's AI market projected to grow at **25-35% CAGR by 2027**, with a shift towards AI-augmented job roles.

Impact of AI on the Labour Market

- Entry-level jobs most at risk, especially in customer service, data entry, and routine-based white-collar jobs.
- High-skill jobs in AI development, data science, and robotics are expected to grow.
- Generative AI could replace **up to 57%** of occupations in emerging economies, but also create new high-value job categories.

Opportunities & Challenges in AI Adoption

- AI's impact on India's workforce depends on skilling and adaptation.
- Automation will augment, not eliminate, many job roles, enhancing worker productivity.
- Digital infrastructure, regulatory frameworks, and ethical AI use are crucial for inclusive AI growth.

Key Government Initiatives

- **Skill India Digital Hub (SIDH):** AI, blockchain, and cybersecurity-focused training programs.
- **FutureSkills Prime Initiative: 1.27 lakh** professionals trained in AI-driven job roles.
- **PLI Scheme for AI & Robotics:** Encouraging indigenous AI startups and innovation.

Key Takeaways for UPSC Prelims

- **The AI market in India is projected to grow at 25-35% CAGR by 2027.**
- **57% of occupations in emerging economies could be affected by AI.**
- **Generative AI investment rose from $3B (2022) to $25.2B (2023).**
- **FutureSkills Prime trained 1.27 lakh professionals in AI.**
- **Skill India Digital Hub launched for AI skilling.**

India's AI-driven labour market transition presents both challenges and opportunities, requiring strong skilling initiatives, regulatory oversight, and industry-academia collaboration for sustainable workforce transformation

Indian Economy

MONETARY POLICY OF RBI

Current Context

- RBI kept the repo rate unchanged at **6.5%** in 2024-25 to balance inflation control and economic growth.
- Inflation moderated to **4.9%** in FY25, staying within the RBI's target range of **2-6%.**
- Liquidity tightening measures were implemented, including Variable Rate Reverse Repo (VRRR) auctions and Open Market Operations (OMOs).
- GDP growth projected at **6.5%** for FY25, driven by strong domestic demand and investment.

About

- Monetary policy refers to the RBI's actions to regulate money supply, inflation, and interest rates in the economy.
- Governed under the **RBI Act, 1934**, and operates under a **Flexible Inflation Targeting (FIT)** framework.
- **Monetary Policy Committee (MPC)** is a **six-member body (three from RBI, three external experts)** that decides policy rates.

Instruments used by RBI

- **Repo Rate:** The rate at which RBI lends to commercial banks.
- **Reverse Repo Rate:** The rate at which RBI borrows from banks.
- **CRR (Cash Reserve Ratio):** Banks' mandatory cash reserves with RBI.
- **SLR (Statutory Liquidity Ratio):** Minimum reserves banks must maintain in the form of **gold, cash, or securities.**

India's Context

- Key Policy Rates (2025):
  - **Repo Rate – 6.5%**
  - **Reverse Repo Rate – 3.35%**
  - **CRR – 4%**
  - **SLR – 18%**
- RBI uses Open Market Operations (OMOs) to control liquidity and inflation.

Global Context

- The US Federal Reserve and European Central Bank (ECB) are tightening monetary policy to control inflation.

Key Reports & Takeaways

- IMF's World Economic Outlook (2024) projected India's GDP growth at **6.5%**, emphasizing the role of monetary policy in economic stability.

Related News

- **RBI launched CBDC (Central Bank Digital Currency)** trials, integrating digital transactions with monetary policy tools.

UNIVERSAL BANKS

Current Context

- RBI is encouraging digital transformation and fintech adoption among universal banks.

About

- Universal banks provide a full range of financial services, including commercial banking, investment banking, and insurance.
- Regulated under the Banking **Regulation Act, 1949** and governed by Basel III norms.
  Examples: **SBI, ICICI Bank, HDFC Bank, Axis Bank.**

India's Context

- Universal banks dominate India's banking sector, holding over **60%** of total financial assets.
- RBI has tightened capital adequacy requirements to ensure banking stability.

URBAN COOPERATIVE BANKS (UCBS)

Current Context

- RBI increased regulatory oversight on UCBs following multiple governance failures.

About

- Urban Cooperative Banks provide credit to urban and semi-urban areas.
- Dual regulation by RBI and State Governments, leading to governance challenges.

India's Context

- Over **1,500** UCBs exist in India, facing NPA and governance issues.
- RBI classified UCBs into a 4-tier system, imposing stricter capital and risk norms.

INDIAN MICROFINANCE SECTOR

Current Context

- Microfinance loan portfolio grew by **16%** YoY, with total loans reaching **₹3.7 lakh crore**.

About

- Microfinance provides small loans (up to **₹1.25 lakh**) to low-income groups without collateral.
- Regulated by RBI under NBFC-MFI framework.

India's Context

- Leading MFIs: Bandhan Bank, SKS Microfinance, Janalakshmi Finance.
- Government Initiatives: PM SVANidhi, SHG-bank linkage programs.

NON-BANKING FINANCIAL COMPANIES (NBFCS)

Current Context

- NBFCs' lending grew at **12.5%** YoY, led by consumer and SME financing.

About

- NBFCs provide financial services without holding a banking license.
- Regulated by RBI under the NBFC Act.

India's Context

- NBFCs hold nearly **25%** of India's financial sector assets.
- Large NBFCs subject to stricter capital and governance norms.
- NBFCs mandated to integrate AI-based risk assessment tools for better loan management.

NON-PERFORMING ASSETS (NPAS)

Current Context

- Gross NPA ratio declined to **2.6%**, the lowest in **12 years**.

About

- Loans unpaid for **90+ days**.
- Classified into Substandard, Doubtful, and Loss Assets.

India's Context

- IBC 2016 and Asset Reconstruction Companies (ARCs) helping in NPA resolution.
- Bad Bank (NARCL) resolved **₹80,000 crore** in stressed assets.

INSOLVENCY AND BANKRUPTCY CODE (IBC) 2016

Current Context

- Over **7,000** companies were resolved under IBC, recovering **₹3.2 lakh crore**.

About

- Time-bound framework for resolving insolvency cases.
- Managed by Insolvency and Bankruptcy Board of India (IBBI).
- Improved recovery rate (**38%**) compared to pre-IBC levels (26%).

ASSET RECONSTRUCTION COMPANIES (ARCS)

Current Context

- NARCL (Bad Bank) operational with **₹80,000 crore** asset pipeline.

About

- ARCs buy bad loans and restructure them for recovery.
- ARCs hold **₹2.3 lakh crore** stressed assets.

FINANCIAL INCLUSION INDEX

Current Context

- India's Financial Inclusion Index improved to **64.2** (FY25).

About

- Developed by RBI to measure financial access, usage, and quality.
- PM Jan Dhan Yojana added **48 crore** bank accounts.
- UPI transactions hit **₹17 lakh crore/month**.

WAYS AND MEANS ADVANCES (WMA) SCHEME

Current Context

- RBI increased WMA limits to help states manage fiscal gaps.

About

- Short-term credit by RBI to central & state governments.
- Used for temporary fiscal mismatches.
- RBI revising borrowing limits for fiscally weaker states.

RBI RELEASED STATE FINANCES REPORT

Current Context

- The Reserve Bank of India (RBI) recently released the **"State Finances: A Study of Budgets"** report, highlighting

the fiscal health of Indian states. The report projects an increase in state fiscal deficits and concerns over rising debt burdens.

About

- This annual report provides an assessment of state government revenues, expenditures, debt sustainability, and capital outlays. It is a crucial document for policymakers and analysts.

Key Findings (2023-24)

- States' fiscal deficit projected at **3.1% of GDP**, revenue expenditure on the rise, and capital outlay expected to **decline to 2.7% of GDP**.
- The report urges states to improve fiscal discipline by enhancing revenue sources and rationalizing subsidies. States are advised to focus on infrastructure spending for long-term growth.

Challenges

- Declining own tax revenue, high dependency on central transfers, and increasing committed expenditures (salaries, pensions, interest payments).

FISCAL DEFICIT

Current Context

- The **Union Budget 2024-25** has set the **fiscal deficit target at 5.1% of GDP**, aiming for consolidation to **below 4.5% by 2025-26**.

About

- Fiscal deficit is the difference between total government expenditure and total revenue (excluding borrowings). It indicates the government's borrowing requirements.
- **Revenue Deficit** – When revenue expenditure exceeds revenue receipts.
- **Primary Deficit** – Fiscal deficit minus interest payments.

Significance

- A high fiscal deficit can lead to inflation, currency depreciation, and a credit rating downgrade. However, controlled borrowing can finance growth-oriented investments.
- The **FRBM Act, 2003** sets fiscal discipline targets. The government is focusing on tax reforms (GST efficiency, direct tax compliance) and rationalized subsidies to manage the deficit.

GDP AND ITS BASE YEAR REVISION

Current Context

- The **National Statistical Office (NSO)** is planning to revise the **base year of GDP calculations to 2022-23**, expected by **2025**.

About

- GDP (Gross Domestic Product) measures the total value of goods and services produced in a country. The base year revision helps reflect structural economic changes.
- The current GDP base year is **2011-12**. The new base year will incorporate new data sources, digital economy contributions, and revised sectoral weights for accuracy.
- Nominal GDP (current prices), Real GDP (adjusted for inflation), and GDP at Purchasing Power Parity (PPP).

FOREIGN DIRECT INVESTMENT (FDI)

Current Context

- India witnessed **$71 billion in FDI inflows in 2023-24**, with major contributions from the US, Singapore, and the UAE. The government is revising policies to attract investment in **semiconductors, renewable energy, and manufacturing**.

About

- FDI is an investment by a foreign entity in a country's business operations.
- The **FDI policy under the automatic and approval route** regulates investments. Key reforms include 100% FDI in sectors like telecom, e-commerce, and renewable energy. The **Production-Linked Incentive (PLI) scheme** has boosted manufacturing FDI.
- **Greenfield FDI** – Investment in new facilities.
- **Brownfield FDI** – Investment in existing enterprises.

BANKING LAWS (AMENDMENT) BILL 2024

Current Context

- The government is **introducing the Banking Laws (Amendment) Bill, 2024**, proposing structural changes in banking regulation, including the privatization of public sector banks (PSBs).

About

- The bill seeks to amend the **Banking Regulation Act, 1949, and the Banking Companies Act, 1970 & 1980**.
- The privatization of PSBs aligns with **government divestment plans** and aims to improve banking efficiency while maintaining financial stability.

Key Provisions
- Allowing gradual privatization of PSBs.
- Increasing RBI's supervisory powers.
- Strengthening bank governance and capital adequacy.

PPP FRAMEWORK IN INDIA

Current Context:
- The **government has revamped the Public-Private Partnership (PPP) framework** to boost infrastructure investments, especially in **roads, railways, and urban mobility**.

About
- PPP is a collaboration between government and private entities for public infrastructure development.
- **BOT (Build-Operate-Transfer)**
- **BOOT (Build-Own-Operate-Transfer)**
- **HAM (Hybrid Annuity Model)**

Indian Context
- The **Viability Gap Funding (VGF) scheme** supports PPP projects. The **National Monetization Pipeline (NMP)** aims to attract private investments in infrastructure.

MOST FAVORED NATION (MFN) CLAUSE

Current Context
- India's **WTO commitments under the MFN principle** are under discussion amid global trade tensions and Free Trade Agreement (FTA) negotiations.

About
- MFN is a principle under the **WTO** ensuring non-discriminatory trade treatment among member countries.
- India grants MFN status to **all WTO members except Pakistan**. It balances MFN provisions with regional FTAs to enhance trade competitiveness.

MBRIDGE PROJECT

Current Context
- The **MBRIDGE (Multiple CBDC Bridge) project** is gaining momentum as a cross-border digital currency initiative involving **China, UAE, Thailand, and Hong Kong**.

About
- MBRIDGE is a **central bank digital currency (CBDC) project** aimed at improving international payments efficiency.

- India is evaluating **cross-border CBDC use** and piloting the **Digital Rupee** to enhance remittance efficiency and financial inclusion.

TOURISM SECTOR IN INDIA

Current Context
- The **Union Budget 2024** has allocated funds for tourism infrastructure under the **Dekho Apna Desh initiative** and **Swadesh Darshan Scheme 2.0**.

About
- Tourism contributes **~6.8% to India's GDP** and employs **~39 million people**.
- **Types:** Heritage, eco-tourism, medical tourism, and spiritual tourism.
- **Incredible India, PRASAD, and G20 tourism roadmaps** are key government initiatives to boost domestic and international tourism.

INSURANCE SECTOR IN INDIA

Current Context
- The government is **revising FDI limits in the insurance sector** and strengthening **IRDAI regulations**.

About
- The insurance sector includes **life, health, and general insurance**.
- The **Ayushman Bharat scheme** and increased FDI (74%) have boosted sectoral growth.

OILFIELDS

Current Context
- India is focusing on **strategic oil reserves** amid global crude oil volatility.

About
- Oilfields are reservoirs of crude oil. Major types include **onshore and offshore oilfields**.
- India's key oilfields are **Mumbai High, Rajasthan Barmer, Assam Digboi, and KG Basin**. The **Hydrocarbon Exploration and Licensing Policy (HELP)** promotes domestic oil production.

GOODS AND SERVICES TAX (GST)

Current Context

- The **55th GST Council Meeting** convened on **December 21, 2024**, in **Jaisalmer, Rajasthan**, under the chairpersonship of Union Finance Minister Smt. Nirmala Sitharaman. Key decisions included GST rate adjustments, exemptions, and measures to streamline compliance.

About GST

- Implemented on **July 1, 2017**, GST is a comprehensive, destination-based indirect tax that subsumes multiple indirect taxes such as excise duty, VAT, and service tax. It aims to create a unified national market by eliminating the cascading effect of taxes.

Structure of GST

- **CGST (Central GST):** Levied by the Central Government on intra-state supplies.
- **SGST (State GST):** Levied by State Governments on intra-state supplies.
- **IGST (Integrated GST):** Levied by the Central Government on inter-state supplies.
- **UTGST (Union Territory GST):** Levied in Union Territories without legislatures.

Recent Key Decisions from the 55th GST Council Meeting

- Reduction of GST rate on **Fortified Rice Kernel (FRK)** from **18% to 5%**.
- Exemption of GST on **gene therapy** treatments.
- Increase in GST rate on the sale of all old and used vehicles, including EVs, from **12% to 18%**, applicable on the margin of the supplier.
- Exemption of GST on contributions made by general insurance companies from third-party motor vehicle premiums to the **Motor Vehicle Accident Fund**.
- Clarification that no GST is payable on **penal charges** levied by banks and NBFCs for non-compliance with loan terms.
- Transactions involving **vouchers** are treated neither as supply of goods nor services; thus, no GST is applicable.
- Introduction of a **Track and Trace Mechanism** for specified evasion-prone commodities, based on unique identification markings.
- Amendment to the CGST Act to reduce the pre-deposit for filing appeals involving only penalties from **25% to 10%**.

Indian Context and Government Initiatives

- The GST regime has significantly enhanced India's tax compliance and revenue collection. Monthly GST collections have consistently surpassed **₹1.6 lakh crore**, indicating robust economic activity.

- The government continues to refine GST policies through regular GST Council meetings, addressing industry concerns, simplifying procedures, and rationalizing tax rates to promote ease of doing business.

Conclusion

- GST has been pivotal in transforming India's indirect tax landscape, fostering a unified market, and enhancing compliance. Ongoing reforms and decisions by the GST Council aim to address emerging challenges, ensure clarity, and streamline processes, thereby contributing to economic growth and stability.

INDIA'S TRADE DEFICIT

Current Context

- India's **trade deficit widened to $19.8 billion in January 2024**, as imports surged and exports showed moderate growth. The **cumulative trade deficit for FY 2023-24** is expected to remain around **$240 billion**.

About

- Trade deficit occurs when the value of imports exceeds exports. Persistent trade deficits can affect foreign exchange reserves and currency stability.
- Key reasons for India's trade deficit include **high energy imports (crude oil, LNG), electronic goods, and gold imports**. The government is promoting **export incentives, FTAs, and domestic manufacturing (PLI Scheme)** to reduce the deficit.

INTERNATIONALISATION OF INDIAN RUPEE

Current Context

- The **Reserve Bank of India (RBI) has taken steps to promote rupee trade settlement with countries like Russia, UAE, and Sri Lanka** to reduce dependence on the US dollar.

About

- Internationalisation refers to increasing the use of the Indian Rupee in global trade and finance. This reduces forex risks and enhances India's financial sovereignty.
- India has launched **Special Rupee Vostro Accounts (SRVA)** and enabled **bilateral trade in INR with key partners**. RBI is also exploring digital rupee adoption for cross-border transactions.

BRETTON WOODS CONFERENCE

Current Context

- The relevance of the **Bretton Woods system is being debated** amid de-dollarization trends and the rise of alternative financial systems like **BRICS New Development Bank and AIIB**.

About

- The **Bretton Woods Conference (1944)** led to the establishment of the **IMF and World Bank**, shaping the post-World War II global financial order.
- It created the **gold-exchange standard**, pegging major currencies to the US dollar. The system collapsed in **1971** when the US ended the gold standard.

WORLD TRADE ORGANIZATION (WTO)

Current Context

- The **13th WTO Ministerial Conference (MC13)** is scheduled in **Abu Dhabi (February 2024)**, focusing on **dispute resolution reform, agriculture subsidies, and e-commerce taxation**.

About

- WTO is a global organization that regulates international trade rules among member nations. It replaced **GATT in 1995**.
- India actively participates in WTO negotiations, advocating for **special and differential treatment (S&DT) for developing nations**, food security, and **protection of domestic industries (MSME sector)**.

HUMAN DEVELOPMENT REPORT (HDR)

Current Context

- The **2023 Human Development Report (HDR)** by **UNDP** highlights global inequalities and India's improving human development indicators.

About

- HDR measures human well-being using the **Human Development Index (HDI)**, which considers **life expectancy, education, and per capita income**.
- India's HDI **(0.645 in 2022)** has improved, but challenges remain in **healthcare, education, and gender parity**. Government schemes like **Ayushman Bharat, PM Poshan Abhiyan, and Skill India** aim to enhance human development.

MIDDLE INCOME TRAP

Current Context

- Many emerging economies, including **India, Brazil, and South Africa, face risks of falling into the Middle-Income Trap**, where growth stagnates before reaching high-income status.

About

- The Middle-Income Trap occurs when countries **fail to transition from middle-income to high-income status** due to slowing productivity and lack of innovation.
- India is focusing on **industrialization, technology-driven growth, infrastructure development, and human capital enhancement** to avoid stagnation and sustain high growth rates.

GROSS FIXED CAPITAL FORMATION (GFCF)

Current Context

- India's **GFCF as a share of GDP** reached **34.1% in FY 2023-24**, reflecting robust investment activity in infrastructure and manufacturing.

About

- GFCF measures **investment in fixed assets like machinery, buildings, and infrastructure**, which is crucial for economic growth.
- Government initiatives like **PM Gati Shakti, National Infrastructure Pipeline (NIP), and PLI Scheme** are boosting capital formation to drive long-term economic expansion.

GLOBAL MULTIDIMENSIONAL POVERTY INDEX (MPI)

Current Context

- The 2023 Global MPI report, released by UNDP and Oxford Poverty & Human Development Initiative (OPHI), shows a decline in global multidimensional poverty, with **415 million** Indians lifted out of poverty between 2005 and 2021.

About

- MPI considers health (nutrition, child mortality), education (years of schooling), and living standards (electricity, sanitation, drinking water) to assess poverty beyond income measures.
- Government schemes like PM Awas Yojana, Swachh Bharat Mission, and Ujjwala Yojana have significantly contributed to poverty reduction. However, challenges remain in addressing rural poverty, malnutrition, and access to quality education.

HORTICULTURE SECTOR OF INDIA

Current Context

- India's horticulture production is estimated to reach **350 million tonnes** in 2023-24, driven by increased production in fruits, vegetables, and plantation crops. The government is focusing on export promotion and value addition to enhance farmers' incomes.

About

- Horticulture includes fruits, vegetables, flowers, medicinal & aromatic plants, spices, and plantation crops. It contributes to **33%** of the total agricultural GDP from only **17%** of the cropped area.
- India is the **2nd largest** producer of fruits and vegetables globally, leading in mango, banana, papaya, and spices.

Government Initiatives

- **MIDH (Mission for Integrated Development of Horticulture) –** Supports high-value crops and technology-driven farming.
- **Operation Greens –** Aims to stabilize prices for tomatoes, onions, and potatoes (TOP Scheme).
- **Agri-Export Policy –** Encourages exports of processed and fresh horticultural produce.

Challenges

- Climate change, post-harvest losses (**30-40%**), lack of cold storage facilities, and market volatility.

Conclusion

- Expanding cold storage, logistics, and processing infrastructure can significantly boost India's horticulture exports and farmer incomes.

LIVESTOCK SECTOR OF INDIA

Current Context

- **India's livestock sector grew at 7.8% annually** (2021-22), outpacing agriculture's growth. The government is strengthening disease control, breed improvement, and fodder security.

About

- The livestock sector includes cattle, buffaloes, sheep, goats, pigs, poultry, and fisheries. It contributes **4.5%** to India's GDP and **25.6%** to agricultural GDP.
- India is the world's largest producer of milk (**222 million tonnes** in 2022-23) and ranks second in egg production.

Government Initiatives

- Rashtriya Gokul Mission – Enhancing indigenous cattle breeds.
- National Animal Disease Control Programme (NADCP) – Vaccination against foot-and-mouth disease (FMD) and brucellosis.
- Dairy Processing & Infrastructure Development Fund (DIDF) – Strengthening dairy infrastructure.

Challenges

- Low per-animal productivity, fodder shortages, high disease prevalence, and lack of cold chain infrastructure.

Conclusion

- Scientific breeding, disease control, and efficient supply chains will make the livestock sector a key driver of India's rural economy.

WHITE REVOLUTION 2.0

Current Context

- India is focusing on White Revolution 2.0 to increase milk productivity, improve breed genetics, and strengthen dairy infrastructure. Rising dairy exports and demand for value-added dairy products are key drivers.

About

- White Revolution 2.0 refers to India's second phase of dairy sector growth, building upon the first White Revolution (1970s), led by Dr. Verghese Kurien and Operation Flood.
- India produces **22%** of global milk output and ranks **1st in dairy production.** The dairy industry supports **8 crore** rural households.

Government Initiatives

- Rashtriya Gokul Mission – Genetic improvement of indigenous breeds.
- DIDF (Dairy Infrastructure Development Fund) – **₹10,000 crore** fund for processing and marketing.
- Animal Husbandry Infrastructure Development Fund (AHIDF) – **₹15,000 crore** investment in dairy processing.

Challenges

- Adulteration, fodder scarcity, low yield per animal, and informal sector dominance.

Conclusion

- Strengthening dairy farming practices, innovation, and **supply chain management** will ensure India remains a global dairy leader.

AGRICULTURE INFRASTRUCTURE FUND (AIF)

Current Context

- Launched in 2020, the **₹1 lakh crore** Agriculture Infrastructure Fund (AIF) is providing financial support for post-harvest infrastructure, cold chains, and primary processing units.

About

- AIF is a long-term financing facility with **3%** interest subvention for building warehouses, cold storage, grading & sorting facilities, and food processing units.
- Over **31,850 projects worth ₹24,000 crore** have been sanctioned under AIF as of 2024.

Government Initiatives

- NABARD and banks provide subsidized loans to farmers, FPOs, and startups.
- Convergence with schemes like PM-Kisan Sampada Yojana, Operation Greens, and MIDH.

Challenges

- Lack of awareness, high capital costs, and limited participation from small farmers.

Conclusion

- Strengthening rural infrastructure and value chains through AIF can reduce post-harvest losses, boost exports, and enhance farmer income.

NATIONAL MISSION ON EDIBLE OILSEEDS – OIL PALM (NMEO-OP)

Current Context

- India launched the **₹11,040 crore** National Mission on Edible Oils – Oil Palm (NMEO-OP) in 2021 to boost domestic edible oil production and reduce import dependence.

About

- India imports **55-60%** of its edible oil requirements, spending **$15 billion annually**. NMEO-OP promotes oil palm cultivation and indigenous oilseed production.
- India ranks **1st** in groundnut, **2nd** in mustard, and **5th** in soybean production but remains dependent on palm oil imports (**50%** of total consumption).

Government Initiatives

- Viability Price Assurance for Farmers – Ensuring minimum returns.
- Area Expansion Targets – **10 lakh hectares** by 2025-26, focusing on Northeast and Andaman & Nicobar Islands.

- Research & Development Support – High-yield seed varieties, processing units, and sustainable palm cultivation.

Challenges

- Environmental concerns, long gestation period (5 years for oil palm), and volatile global prices.

Conclusion

- NMEO-OP is crucial to achieve self-reliance (Atmanirbhar Bharat) in edible oils, but sustainable farming practices are necessary.

MINIMUM SUPPORT PRICE (MSP)

Current Context

- The MSP for Rabi crops for 2024-25 was announced in October 2023, with the highest increase for lentils (**₹425 per quintal**) and wheat (**₹150 per quintal**) to ensure farmer profitability.

About

- MSP is a government-fixed price for **23** crops (including cereals, pulses, oilseeds, and commercial crops) to protect farmers from market price fluctuations. The CACP (Commission for Agricultural Costs and Prices) recommends MSP based on factors like input costs, demand-supply, and market trends.
- While MSP benefits only **6%** of farmers directly, crops like wheat and rice have high procurement under the Public Distribution System (PDS).

Government Initiatives

- **PM-AASHA Scheme –** Strengthens procurement beyond rice and wheat.
- **e-NAM (Electronic National Agriculture Market) –** Provides fair price discovery.

Challenges

- Limited procurement beyond wheat and rice, farmer protests for legal MSP guarantee, and market price fluctuations.

Conclusion

- A wider reach of MSP and crop diversification are needed to enhance farmer income.

INDIA'S AGRICULTURE EXPORT POLICY

Current Context

- India's agriculture exports reached a record **$53 billion** in FY 2022-23, with rice, wheat, spices, and sugar as major export items.

About

- The Agriculture Export Policy (AEP) 2018 aims to double farm exports and integrate farmers with global markets while maintaining food security.
- India is the world's largest exporter of rice, spices, and marine products but faces sanitary and phytosanitary barriers in global trade.

Government Initiatives

- **APEDA (Agricultural and Processed Food Products Export Development Authority) –** Supports value-added agri exports.
- **Product -** specific clusters (Banana, Mango, Basmati rice) for global markets.
- **Districts as Export Hubs –** Identifying export potential at the district level.

Challenges

- High logistics costs, tariff barriers, and fluctuating global prices.

Conclusion

- Strengthening infrastructure, quality control, and trade agreements will help sustain export growth.

MILLETS IN INDIA

Current Context

- The UN declared 2023 as the International Year of Millets, boosting India's role as a global millet hub. The government promotes nutri-cereals for food security and export growth.

About

- Millets (e.g., Jowar, Bajra, Ragi) are climate-resilient, rich in fiber, and require less water, making them ideal for sustainable agriculture.
- **India is the largest producer and second-largest exporter of millets globally.**

Government Initiatives

- **PM Poshan Scheme –** Integrates millets into midday meals.
- **Millet Mission (INSIMP) –** Increases millet productivity and market linkages.
- **Export Promotion by APEDA –** Branding India as a millet-exporting nation.

Challenges

- Low consumer awareness, poor processing infrastructure, and market access issues.

Conclusion

- Strengthening value chains, branding, and international markets will enhance millet adoption.

SPICED SCHEME (STRENGTHENING PHARMACEUTICALS INDUSTRY THROUGH CLUSTER EXPANSION AND DISTRIBUTION)

Current Context

- Launched in 2022, the SPICED scheme aims to enhance pharmaceutical infrastructure, research, and exports.

About

- SPICED focuses on capacity building of pharma clusters, reducing import dependency on raw materials, and boosting domestic production.
- **India is the 3rd largest producer of pharmaceuticals by volume and known as the 'Pharmacy of the World'.**

Government Initiatives

- **PLI Scheme for Pharmaceuticals – ₹15,000 crore** for API production.
- Bulk Drug Parks in **Himachal Pradesh, Gujarat, and Andhra Pradesh.**
- **Research & Development Support –** Enhancing biotech innovation.

Challenges

- China dependence for Active Pharmaceutical Ingredients (APIs), quality certification hurdles, and competition from generic drug manufacturers.

Conclusion

- SPICED will help India reduce API imports, strengthen pharma supply chains, and boost global competitiveness.

PULSES IN INDIA

Current Context

- The government has increased pulses MSP and imports to ensure sufficient availability due to domestic production shortfalls in 2023-24.

About:

- Pulses (Chana, Arhar, Moong, Masoor, Urad) are protein-rich, improve soil fertility (nitrogen fixation), and require less water, making them key for sustainable agriculture.
- **India is the largest producer, consumer, and importer of pulses.** Production stands at **27.7 million** tonnes in 2023-24 but falls short of domestic demand (32 million tonnes).

Government Initiatives

- **National Food Security Mission (NFSM-Pulses)** – Boosts productivity.
- **Targeted MSP Hikes** – Encourages pulse cultivation.
- **Pulse Import Agreements (Mozambique, Myanmar)** – Ensures steady supply.

Challenges

- Low yield, high import dependency, and price volatility.

Conclusion

- Expanding domestic production, research on high-yield varieties, and buffer stocking will enhance India's self-sufficiency in pulses.

JUTE IN INDIA

Current Context

- The government is promoting jute packaging for sustainable alternatives under the Jute Packaging Materials Act.

About:

- Jute is a natural fiber crop used in packaging, textiles, and handicrafts. It is biodegradable and eco-friendly, making it crucial for plastic alternatives.
- **India is the largest producer of jute (mainly in West Bengal, Bihar, and Assam), contributing 80% of global jute production.**

Government Initiatives

- **Jute ICARE Scheme** – Increases productivity through better seeds and farming techniques.
- **Mandatory Jute Packaging (Jute Packaging Materials Act, 1987)** – Promotes jute use in government procurement.
- **Export Promotion by National Jute Board (NJB)** – Strengthens global market access.

Challenges

- Competition from synthetic fibers, outdated processing methods, and labor-intensive production.

Conclusion

- Modernizing jute processing, promoting jute-based biodegradable products, and expanding exports are key to strengthening the sector.

NABARD (NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT)

Current Context

- NABARD has allocated **₹1.5 lakh crore** in 2023-24 for rural infrastructure projects, microfinance, and agri startups.

About

- NABARD was established in 1982 to finance rural development, agriculture, and small-scale industries. It supports cooperative banks, RRBs, and farmer cooperatives.
- NABARD plays a key role in rural credit, irrigation, food security, and digital payments in agriculture.

Government Initiatives

- **Rural Infrastructure Development Fund (RIDF) – ₹40,000 crore** for roads, irrigation, and storage.
- **E-Shakti Project –** Digitizing Self-Help Groups (SHGs) for financial inclusion.
- **Financial Assistance to Farmer Producer Organizations (FPOs) –** Strengthening rural enterprises.

Challenges

- Credit accessibility for small farmers, slow implementation of infrastructure projects, and dependence on government funds.

Conclusion

- NABARD is critical for agricultural growth and rural transformation, and strengthening its financial mechanisms will further boost inclusive development.

FISHERIES SECTOR IN INDIA

Current Context

- India's fisheries sector is growing at **7%** annually, contributing to food security, employment, and exports. The government has set a target of **22 million tonnes** of fish production by 2024-25 under the Blue Revolution initiatives.

About

- Fisheries include marine, inland, and aquaculture production. It is a key source of protein, employment, and foreign exchange earnings.
- **India is the 2nd largest fish-producing country globally and the largest producer of inland fish. The sector contributes 1.1% to GDP and 7% to agricultural GDP.**

Government Initiatives

- **PM Matsya Sampada Yojana (PMMSY) (2020-25) – ₹20,050 crore** for infrastructure and value-chain development.
- **Fisheries and Aquaculture Infrastructure Development Fund (FIDF) – ₹7,522 crore** for modernizing fishing harbors and cold chains.
- **Marine Products Export Development Authority (MPEDA) –** Promotes fish exports.

Challenges

- Overfishing, climate change impact, illegal fishing practices, and lack of cold storage facilities.

Conclusion

- Strengthening sustainable aquaculture, improving value addition, and enhancing marine conservation will boost India's fisheries sector.

SEAWEED FARMING IN INDIA

Current Context

- India is promoting seaweed farming as a high-value marine resource with applications in food, pharmaceuticals, biofuels, and cosmetics. The government has allocated **₹640 crore** under PMMSY for seaweed cultivation.

About

- Seaweed is marine algae that grow in oceans and are rich in nutrients, antioxidants, and bioactive compounds.
- India has potential to cultivate **1 million tonnes** of seaweed annually, especially along the **Tamil Nadu, Gujarat, and Andaman & Nicobar coasts.**

Government Initiatives

- **Multipurpose Seaweed Park in Tamil Nadu –** Boosting large-scale cultivation.
- **Support under PM Matsya Sampada Yojana –** Encouraging farmers to switch to seaweed farming.
- **Research Support by ICAR-CMFRI –** Developing improved strains for higher productivity.

Challenges

- Lack of processing units, low awareness among coastal communities, and limited investments.

Conclusion

- Expanding seaweed farming with better infrastructure and research support can make India a global leader in marine bioeconomy.

CENTRAL SILK BOARD (CSB)

Current Context

- The Central Silk Board (CSB) is modernizing India's silk industry through sericulture development, research, and farmer support. The government has allocated **₹875 crore** for silk production enhancement in 2023-24.

About

- CSB, under the Ministry of Textiles, regulates silk production, quality control, and research in India. Sericulture includes mulberry, tasar, eri, and muga silk farming.
- **India is the 2nd largest silk producer globally** and the only country producing all four major silk varieties. **Karnataka, Tamil Nadu, and Assam** are key silk-producing states.

Government Initiatives

- **Silk Samagra 2 (2021-26) –** A **₹1,000 crore** scheme for R&D, seed production, and market development.
- **Integrated Sericulture Development Project (ISDP) –** Supports silk farmers with infrastructure and training.
- **Export Promotion by CSB –** Boosting silk textile exports to international markets.

Challenges

- High production costs, competition from cheap Chinese silk, and low mechanization in silk farming.

Conclusion

- Technology adoption, farmer incentives, and branding of Indian silk will strengthen the sector's global competitiveness.

EXPLORATION LICENCE

Current Context

- Under EL regime, India has launched first exploration license (EL) auction for critical minerals.

About

- Exploration Licenses were introduced after enactment of MMDR Amendment Act, 2023 to allow private participation in reconnaissance and prospecting for 29 critical and deep-seated minerals.
- Those minerals which are essential for economic development and national security, may remove supply chain vulnerability and disruption.

Challenges

- Pollute and deplete water resources.
- High exploration costs.

HOUSING SECTOR

Current Context

- Banks account for **81%** whereas Housing Finance Companies (HFCs) account for **19%** of housing loans.
- **Housing loans (as % of GDP):** It has increased from **6.60%** (2011-12) to **11.29%** (2023-24).

About National Housing Bank (NHB)

- It is a statutory body established under National Housing Bank Act, 1987.
- It supervises Housing Finance Companies, however regulatory powers (including registration of HFCs) have been transferred to the Reserve Bank of India (RBI).

VENTURE CAPITAL

Current Context

- India's Venture Capital (VC) funding surges by **43%** to **$13.7 billion** in 2024.

About

- It is a type of private equity used to support startups and early-stage companies with the potential for substantial and rapid growth.
- Venture capitalists provide backing through financing, technological expertise, or managerial experience.

ANTI-DUMPING DUTY

Current Context

- India has recently imposed an anti-dumping duty on water treatment chemicals from China and Japan.

About

- Anti-dumping duties are taxes imposed on imported goods in order to compensate for the difference between their export price and their normal value, if dumping causes injury to producers of competing products in the importing country.

E-SHRAM PORTAL

Current Context

- Union Budget 2025-26 announced for registration on e-Shram portal, ID cards, and healthcare coverage under AB-PMJAY (Ayushman Bharat Pradhan Mantri Jan Arogya Yojana).

Significance

- Registration on portal will help workers access benefits of the schemes of the government.

Challenges faced by Gig and Platform workers

- Lack of Social Security
- Low Income

INSIDER TRADING

Current Context

- EBI has issued warning to Nestle India for violating insider trading regulations.

About

- Insider refers to any person (usually senior management and officials) in a company who has access to unpublished price-sensitive information (UPSI).

RESERVE BANK OF INDIA ANNOUNCES OVER $21 BILLION INFUSION

Current Context

- It will infuse **$21 billion** in rupee liquidity into the banking system in a bid to ease lending conditions and boost economic growth.

About

- It will conduct two open market operations, It will also conduct a dollar-rupee buy-sell swap worth **$10 billion**.
- **Open market operations(OMOs)** - Under this, RBI buys or sells G-Secs in the open market to influence the money supply and interest rates within an economy.
- **Dollar-rupee buy-sell swap -** It is worth **$10 billion** , a bank shall sell US dollars to the RBI and simultaneously agree to buy the same amount of US dollars at the end of the swap period.

PRADHAN MANTRI SHRAM YOGI MAANDHAN YOJNA (PM-SYM)

Current Context

- The scheme has completed 6 years**.**

About PM-SYM

- Central Sector Scheme launched in 2019 by the Ministry of Labour and Employment.
- Voluntary and contributory pension scheme ensuring a minimum monthly pension of **Rs. 3,000** after age of 60.
- **Top three states** - Haryana , Uttar pradesh , Maharashtra.

- **Total Enrollments** - **46 lakh** as on Mar 2025.

CIRCULAR ECONOMY

Current Context

- 3R(Reduce, Reuse, Recycle) and Circular Economy forum happens to be in Jaipur.

About

- It is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible.
- **Launched in 2009**, Forum aims to promote sustainable waste management, resource efficiency, and circular economy principles across the region.

India Initiatives

- Swachh Bharat Mission
- GOBAR-Dhan Scheme
- E-Waste Management Rules 2022
- Mission LiFE

NATIONAL GREEN HYDROGEN MISSION(NHM)

Current Context

- Pilot Projects on Hydrogen Fuelled Buses and Trucks have been launched under NHM by the ministry of new and renewable energy.

Significance

- To make India a global hub for production, usage and export of Green Hydrogen and its derivatives.
- Production of 5 MMT per annum of Green Hydrogen by 2030.

SCHEME FOR FORMATION AND PROMOTION OF 10,000 FPOS

Current Context

- Govt achieves goal of setting up of **10,000** farmer producer organisations.

About

- This scheme started in 2020 by the Ministry of Agriculture & Farmers Welfare.
  - For a period of five years to each new FPO formed, and financial assistance to the tune of **Rs.18 lakhs** to each FPO towards management cost for 3 years.

Key benefits

- Help achieve Better price realization and reduced distress sales.
- Minimized post-harvest losses through joint storage and value addition facilities.

TRADE AND TECHNOLOGY COUNCIL (TTC)

Current Context

- Second meeting of India-EU (European Union) Trade and Technology Council (TTC) took place in India.

Key highlights of the meeting

- Agreed to conclude the Free Trade Agreement (FTA) by 2025.
- Discussed trade and decarbonization, including EU's **Carbon Border Adjustment Mechanism (CBAM)**.

About TTC

- The EU-India TTC establishment was announced in 2022 as a key bilateral platform to address challenges at the confluence of trade, trusted technology and security.

TARIFFS AND INDIA REPORT

Current Context

- It is released by GTRI (Global Trade Research Initiative).

About

- It provides in-depth analysis of India's tariff structure, its alignment with World Trade Organization (WTO) regulations, and the potential implications of trade negotiations with the United States.

Impact of Reciprocal Tariffs

- Indian exports could face an additional tariff of **4.9%** compared to the current **2.8%**.
- Petroleum, minerals, and garments may be unaffected.
- Farm exports would be hit hardest, with shrimp, dairy, and processed foods facing tariffs of up to **38.2%**

Way forward

- India should refuse unfair concessions and consider countermeasures, similar to China's response.

INDIA - UAE COMPREHENSIVE ECONOMIC PARTNERSHIP AGREEMENT (CEPA)

Current Context

- It has been three years since the agreement has been signed.

About India-UAE CEPA

- It is the first deep and full-fledged Free Trade Agreement, signed by India with any country in the past decade.
- It covers Trade in Goods and Services, Pharmaceutical products, IPR, Investment, etc.

Success achieved

- Bilateral Merchandise trade nearly doubled from USD **43.3billion** (FY 2020-21) to USD **83.7billion** (FY 2023-24).
- Increased market access & employment, with Bharat Mart in Dubai enhancing global trade.

SOIL HEALTH CARD SCHEME

Current Context

- Celebrating a Decade of Soil Health Card scheme.

About

- Soil health card provides information to farmers on nutrient status of their soil along with recommendation on appropriate dosage of nutrients to be applied for improving soil health and its fertility.
- The scheme was launched to assist State Governments to issue soil health cards to all farmers in the country.
- Based on this, the card will also indicate fertilizer recommendations and soil amendment required for the farm.

Key facts

- India has the world's second-largest road network of around **63.45 lakh kilometres**.
- Union Minister of Ports, Shipping & Waterways inaugurated the Inland Waterways Terminal at Jogighopa, Assam
- Recently, Brazil approved entry into OPEC+. India is not a member of it.
- **24.74 crore** Soil Health Cards (SHC) generated.

SMART CITIES MISSION(SCM)

Current Context

- Smart Cities Mission deadline ended on March 31, 2025

About

- Aims to enhance the quality of life in India's cities through smart, sustainable solutions. Its goal is to create cities that are economically vibrant, inclusive and environment friendly.
- The mission's area-based development approach aimed to create replicable models for other parts of the cities and neighboring regions.

Key achievements

- By July 2024, **90%** of the total projects (7,188 projects worth ₹1,44,237 crore) were completed. The remaining **10%** (830 projects worth ₹19,926 crore) were in advanced stages of completion.

Challenges

- Delays due to legal issues, obstacles in obtaining clearances, land acquisition problems, and construction difficulties, especially in hilly areas and smaller cities.

SAGARMALA PROGRAMME

Current Context

- In March 2025, India commemorated the 10th anniversary of the Sagarmala Programme.

About

- Aims to harness India's **7,500 km** coastline and **14,500 km** of navigable waterways to promote port-led economic growth, enhance logistics efficiency, and reduce transportation costs.

Key Achievements

- **Infrastructure Development:** Significant investments have been made in port modernization to improved cargo handling capacity and efficiency.
- **Coastal Community Development:** Initiatives under Sagarmala have focused on skill development, fisheries, and tourism to uplift coastal communities.

Challenges

- Environmental concerns, land acquisition issues, and coordination among multiple stakeholders.

NATIONAL HIGHWAY AUTHORITY OF INDIA

Current Context

- The National Highways Authority of India (NHAI) raised **₹18,380 crore** through its Infrastructure Investment Trust (InvIT), marking the largest monetization transaction in the Indian roads sector.

About
- NHAI's InvIT, established to monetize operational road assets, allows institutional investors to invest in income-generating highway projects, facilitating resource mobilization for new infrastructure developments.

Challenges
- Ensuring consistent returns for investors and maintaining asset quality are critical for the sustained success of the InvIT model.

EQUALIZATION LEVY

Current Context
- The Indian government has proposed removing the **6%** equalization levy on digital advertising services, effective April 1, 2025, aiming to address international trade concerns and foster a more favorable business environment.

About
- Introduced in 2016, the equalization levy imposed a **6%** tax on payments made to non-resident companies for online advertisements, targeting major tech firms operating in India.
- Removing the levy is expected to improve trade relations, particularly with the United States, and encourage foreign investment in India's digital economy.

Policy Amendment
- The Finance Bill 2025 includes provisions to eliminate this levy, reflecting India's commitment to aligning with global tax norms and addressing critiques from international partners.

Challenges
- The government must identify alternative revenue sources to compensate for the loss from the levy and ensure a fair taxation framework for digital services.

GOLD MONETISATION SCHEME

Current Context
- The Indian government has decided to discontinue the Gold Monetisation Scheme due to low public participation and challenges in its implementation.

About
- Launched in 2015, the scheme aimed to mobilize idle gold held by households and institutions, offering interest on deposited gold and reducing reliance on gold imports.

Key Features
- **Eligibility:** Open to resident individuals, Hindu Undivided Families (HUFs), trusts, and charitable institutions.
- **Deposit Forms:** Accepted gold in jewelry, coins, bars, subject to purity verification.Forbes

Challenges
- **Low Participation:** Complex procedures, including purity testing and melting of jewelry, deterred many potential depositors.
- **Cultural Factors:** Emotional attachment to jewelry and concerns over loss of original items contributed to limited engagement.

FINANCE BILL

Current Context
- The Finance Bill 2025 has been passed by the Lok Sabha, introducing amendments aimed at streamlining tax administration, enhancing compliance clarity, and promoting economic growth.

About
- The Finance Bill outlines the government's fiscal policies, including taxation and expenditure for the upcoming financial year.

Key Amendments
- **Tax Reforms:** Adjustments in tax slabs and exemptions to benefit the salaried middle class and stimulate consumption.
- **Regulatory Changes:** Measures to simplify tax compliance and reduce litigation.

Challenges
- Ensuring effective implementation and addressing potential revenue shortfalls due to tax concessions.

PRIORITY SECTOR LENDING

Current Context
- The Reserve Bank of India (RBI) has issued revised Priority Sector Lending (PSL) guidelines, which came into effect on April 1, 2025. These updates aim to enhance credit flow to critical sectors of the economy.

About
- Priority Sector Lending mandates banks to allocate a specific portion of their lending to sectors vital for inclusive economic development, including agriculture, micro, small and medium enterprises (MSMEs), education, housing, social infrastructure, and renewable energy.

Key Changes

- **Enhanced Loan Limits:** The RBI has increased loan limits for various categories to broaden PSL coverage. Notably, housing loan limits have been raised to promote affordable housing initiatives.
- **Renewable Energy:** The scope of loans classified under the renewable energy sector has been expanded, encouraging investment in sustainable energy projects.
- **Urban Cooperative Banks (UCBs):** The overall PSL target for UCBs has been revised to **60%** of Adjusted Net Bank Credit (ANBC).
- **Weaker Sections:** The list of eligible borrowers under the 'Weaker Sections' category has been expanded, and the cap on loans by UCBs to individual women beneficiaries has been removed, promoting greater financial inclusion.

Challenges

- Effective implementation of these guidelines will require banks to adjust their lending strategies and ensure compliance while balancing profitability and risk. Continuous monitoring and evaluation will be essential to assess the impact on the intended sectors.

PROOF OF ORIGIN

Current Context

- India's Ministry of Finance amended the Customs (Administration of Rules of Origin under Trade Agreements) Rules, 2020, replacing the term **"Certificate of Origin"** with **"Proof of Origin"** across key sections.

About

- The amendment aims to enhance trade compliance by broadening the verification process for goods imported under Free Trade Agreements (FTAs).
- This change is expected to tighten scrutiny over the misuse of FTAs, ensuring that importers cannot exploit trade agreements to bypass trade barriers meant to protect domestic industries.

Challenges

- Importers must adapt to the new requirements by enhancing compliance measures and strengthening coordination with suppliers to avoid disruptions.

INCENTIVE SCHEME FOR PROMOTION OF LOW-VALUE BHIM-UPI TRANSACTIONS

Current Context

- The Union Cabinet approved an incentive scheme to promote low-value BHIM-UPI transactions (Person to Merchant - P2M) for the financial year 2024-25, with an estimated outlay of **₹1,500 crore.**

About

- The scheme aims to boost digital payments by incentivizing UPI transactions up to **₹2,000**, particularly benefiting small merchants.
- **Incentive Rate:** An incentive at the rate of **0.15%** per transaction value will be provided for transactions up to **₹2,000** to small merchants.
- This initiative supports the government's goal of promoting digital payments, encouraging small merchants to adopt UPI, and advancing financial inclusion.

Challenges

- Effective implementation will require robust infrastructure and awareness among small merchants to maximize the benefits of the scheme.

MGNREGA

Current Context

- Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) has experienced an high increase in employment generation compared to the previous year.

About

- MGNREGA is a social security measure aimed at providing at least 100 days of wage employment in a financial year to rural households whose adult members volunteer to do unskilled manual work.
- An **82%** rise in person-days of work generated under MGNREGA, reflecting heightened demand for rural employment.
- The surge underscores the program's critical role in providing livelihood security and supporting rural economies, especially during times of economic distress.

Challenges

- Ensuring timely wage payments and addressing issues of fund allocation remain essential for the program's continued effectiveness.

INDIA'S FIRST PPP GREEN WASTE PROCESSING PLANT

Current Context

- Indore is set to inaugurate India's first Public-Private Partnership (PPP) based green waste processing plant,

marking a significant advancement in sustainable waste management.

About

- The plant will process organic waste to produce bio-CNG, compost, and other eco-friendly products, contributing to environmental sustainability and urban cleanliness.
- **PPP Model:** Collaboration between the municipal corporation and a private entity for efficient waste management.
- **Output:** Production of bio-CNG and organic fertilizers from green waste.
- This initiative exemplifies innovative approaches to waste management, promoting renewable energy and reducing landfill dependency.

Challenges

- Ensuring consistent waste segregation at the source and maintaining operational efficiency are critical for the plant's success.
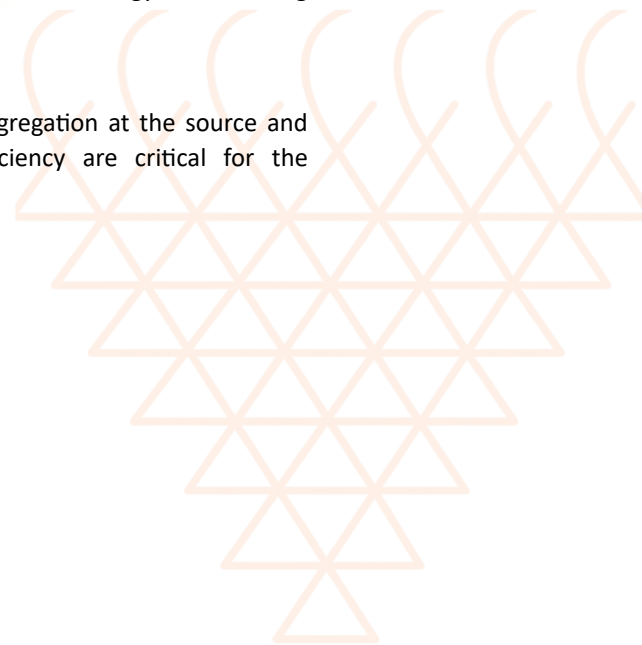
GEOGRAPHY

REGENERATIVE AGRICULTURE

Introduction

- India, with **145** crore people, has attained food and nutrition self-sufficiency during the last **70 years**, owing mostly to agricultural development and improved practices during the Green Revolution. Food demand is expected to rise by **2-3% every year,** requiring the country to produce **50% more food by 2050.**

What is Regenerative Agriculture?

- Regenerative agriculture is a **comprehensive farming approach aimed at improving soil health, food quality, biodiversity, water, and air by minimizing the use of chemical fertilizers and pesticides, reducing tillage, incorporating livestock, and utilizing cover crops. The Rodale Institute first used the term "regenerative agriculture" in the 1980s.**
- While still in the early stages, regenerative farming is gaining momentum in India. Farmers in states like **Madhya Pradesh, Rajasthan, and Maharashtra** are experimenting with techniques such as cover cropping, reduced tillage, and agroforestry.

Principles on which Regenerative Farming Depends

- **Reduce Soil Disturbance:** To lessen soil disturbance, employ conservation tillage.
- **Crop diversification:** To restore nutrients and disrupt the cycles of pests and diseases, grow a range of crops.
- **Preserve Soil Cover:** To preserve and improve soil health, plant cover crops.
- **Integrated Farming:** Include animals to improve soil, produce manure, and aid in the sequestration of carbon.

Distinct Features of Regenerative Agriculture

- **Advancing Beyond Sustainability:** Regenerative agriculture improves soil health, biodiversity, and ecosystem resilience. Regenerative agriculture actively reverses degradation, promoting ecological restoration.
- **Soil-Focused Regeneration:** Emphasizes microbial-plant symbiosis to enhance nutrient cycling and carbon sequestration.
- **Integrated Agricultural Practices:** Combines agroecology and conservation agriculture, tailored to local conditions.

- **Adaptive and Inclusive Approaches:** Incorporates flexible methods like zero tillage, crop diversification, and livestock integration.
- **Environmental and Agricultural Synergy:** Strengthens soil health, increases crop nutrition, and reduces greenhouse gas emissions.
- **Environmental and Ecological Advantages:** Enhances soil structure, water retention, nutrient cycling, and provides habitats while reducing erosion.

Need for Integrated Agriculture in India

- **Declining soil fertility:** With soil organic carbon falling from **2.4% in 1947 to 0.4% now,** below the crucial 1.5% threshold, overuse of synthetic fertilizers and unsustainable practices have decreased soil fertility. Over the previous **70 years, this has cost India about $564 billion.**
- **Changes in climate:** In addition to decreasing soil health and ineffective methods, rising droughts, floods, and extreme temperature events have a detrimental effect on agricultural productivity.
- **Pressures from the economy:** Farmers must contend with exorbitant input costs, volatile market prices, and a yearly fertilizer subsidy of Rs **2 lakh crore ($25 billion),** which encourages inefficient practices and raises greenhouse gas emissions by **25 million tons (CO2e)** annually.
- **Potential hazards:** Experts caution that within the next 50 years, feeding the world's population may be impossible due to soil degradation, dwindling biodiversity, and declining soil fertility.
- **Deficits in knowledge:** Rural farmers' adoption of regenerative and climate-resilient methods is hampered by a lack of knowledge and resources.

Advantages of Regenerative Agriculture

- **Decreased emissions:** By sequestering carbon and improving crop resistance to climate shocks, regenerative agriculture helps reduce emissions. For example, it could cut emissions b**y 600 million tons, or around 2%** of global emissions, which is equal to Germany's carbon footprint, if it were implemented on **40%** of the world's crops.

- **Health of the soil: B**y recycling agricultural waste and adding composted ingredients, it improves the health of the soil. Studies by the Indian **Council of Agricultural Research (ICAR)** show that composting and regenerative farming practices can increase soil organic matter by **22-25% over 5 years.**
- **Biodiversity:** By using techniques like crop rotation, agroforestry, and silvopasture, it increases **b**iodiversity. Research from the P**unjab Agricultural University** indicates a **20%** reduction in pest incidence and a **15-20%** increase in yields through crop rotation.
- **Conserving water:** It encourages effective groundwater use, which helps save water. Regenerative practices in Maharashtra reduced irrigation needs by **25-30%**, as reported by **ICRISAT (International Crops Research Institute for the Semi-Arid Tropics).**
- **Financial well-being of farmers:** Regenerative agriculture boosts farmers' economic well-being by reducing input costs and increasing productivity and profits. Regenerative farming in Tamil Nadu cut input costs by **30%** (MS Swaminathan Research Foundation). Farmers in Andhra Pradesh saw a **50% profit** increase due to higher yields and lower costs.

Regenerative Farming Across Globe

Regenerative farming techniques are being used in a number of nations to combat climate change, enhance biodiversity, and improve soil health. Important instances consist of:
- **United States:** Under the direction of the Rodale Institute, regenerative techniques like rotational grazing and cover crops have gained widespread traction in areas like **Iowa and California.**
- **Australia:** Well-known for its use of agroforestry, rotational grazing, and holistic management, especially in areas that are prone to drought.
- **Brazil: In the Mato Grosso region,** regenerative farming restores degraded land by combining cattle ranching with agroforestry.
- **Canada:** The Regenerative Agriculture Alliance encourages farmers in the prairie areas to use no-till farming, crop rotation, and livestock integration.
- **United Kingdom:** With the help of groups like the Soil Association, the use of cover crops, agroforestry, and no-till farming is expanding.
- **New Zealand:** Encourages soil regeneration and rotational grazing in sheep and dairy farming to improve soil health.

- **Argentina:** To combat soil degradation and cut down on chemical inputs, no-till farming, crop rotation, and pasture management are being adopted.

Way forward

- **Reduce Soil Disturbance:** To maintain soil health and minimize soil disturbance, use conservation tillage.
- **Crop Diversification:** Encourage a variety of cropping methods to replenish nutrients and break the cycles of pests and diseases.
- **Integrative farming:** Incorporating livestock into farming systems can improve soil quality, produce carbon sinks, and contribute manure.
- **Policy Support:** Create regulations that lower fertilizer subsidies and encourage environmentally friendly agricultural methods.
- **Research and Development:** To evaluate the advantages of regenerative agriculture, conduct comprehensive studies across agro-climatic zones.
- **Campaigns to Raise Awareness:** Inform farmers and other interested parties on the advantages of regenerative approaches for the economy, ecology, and human health.
- **Collaboration:** To scale up sustainable agricultural practices, encourage cooperation between NGOs, the commercial sector, and local communities.

Conclusion

India's agriculture requires a complete rethink, with a focus on radical transformation through regenerative farming rather than simply optimizing the current intense system. This strategy is not only a choice but a requirement for meeting the expanding food demand on a sustainable basis.

UPSC Mains Model Question

Q. Regenerative agriculture is emerging as a promising solution to the challenges of soil degradation, water scarcity, and declining biodiversity. Discuss the key principles, distinct features, and advantages of regenerative agriculture, highlighting its relevance to India's agricultural future. Also, analyze the challenges and suggest the way forward for promoting regenerative agriculture in the country. (250 words)

KEN-BETWA LINK PROJECT LAUNCHED

Why in News?

- Recently, **Prime Minister Narendra Modi** laid the foundation stone of the Ken-Betwa River Linking National Project in Madhya Pradesh's Khajuraho district. It is expected to be completed within eight years. The project was envisioned in the **1980's.**

Aim of the Project

- The project aims to transport excess water from Madhya Pradesh's Ken River to the Betwa River. It is projected to bring wealth to the Bundelkhand area. The project is intended to benefit the Bundelkhand region, which spans **13** districts in Uttar Pradesh and Madhya Pradesh.

History and Phases

- Unresolved water-sharing disputes between two states caused delays in the project, which was first conceived in the 1980s. With a revised agreement in 2021, it gained momentum from its initial 2015 start date. To carry out the project, the governments of Madhya Pradesh and Uttar Pradesh signed a pact with the Ministry of Jal Shakti on March 22, 2021.
- **Phase I:** Includes powerhouses, the Ken-Betwa Link Canal, the Low-Level Tunnel, the high-level tunnel, and the Daudhan Dam.
- **Phase II:** Lower Orr Dam, Bina Complex, and Kotha Barrage are covered.

Significance of Ken-Betwa Link Project

An important turning point in India's river interlinking initiatives, the Ken-Betwa Link Project aims to alleviate water constraints and advance sustainable development. Important advantages include:

- **Irrigation Support:** Provides water to the Bundelkhand region, which is experiencing drought. **10.62 lakh hectares** are irrigated annually (**8.11 lakh ha in Madhya Pradesh and 2.51 lakh ha in Uttar Pradesh**).
- **Agricultural Productivity:** Enhances agricultural productivity and fortifies rural economies through economic development.
- **Hydro and solar power:** This renewable energy source reduces dependency on fossil fuels by producing **103 MW** of hydropower and solar power **(27 MW).**

- **Safe drinking water:** Supplies more than **62 lakh people** with safe and clean drinking water.
- **Climate adaptation** Alleviates water shortages and promotes resilience to climate change.

Challenges and Concerns Associated

- **Environmental Impacts: 2-3 million** trees will be cut down, and approximately 98 sq km of Panna National Park will be inundated.
- **Wildlife Threats:** The Daudhan Dam may disrupt gharials in the Ken Gharial Sanctuary, damage vulture nesting sites, and impair the tiger population in Panna National Park. Over **10%** of the Panna Tiger Reserve's core area would be submerged as a result of the first project under the National Perspective Plan (NPP) for interlinking rivers.
- **Hydrological Risks:** Experts want transparency in Ken River's hydrological data, while IIT-Bombay warns of a **12%** decrease in September rainfall as a result of a disruption in land-atmosphere feedback.
- **Displacement: 5,228** families in Chhatarpur and **1,400** in Panna districts will be displaced by the project.
- **Issues with Compensation:** Protests draw attention to the impacted communities' limited benefits and insufficient recompense, particularly in Panna.
- **Wildlife and Environmental Clearance:** The Central Empowered Committee (CEC) of the Supreme Court has expressed concerns over the project's economic viability and wildlife clearance.
- **Violation of Precedents:** There has been a breach of precedent. A contentious precedent for extensive infrastructure in national parks and tiger reserves was established when the Union Environment Ministry authorized development inside the Panna Tiger Reserve's core.

Way Forward

The following actions ought to be given top priority in order to guarantee the Ken-Betwa Link Project's success while overcoming the challenges:

- **Balancing Development and Conservation:** The Panna Tiger Reserve's unaffected regions should be better protected, compensatory afforestation should be ensured under the CAMPA Act (2016), and habitat degradation should be minimized.

- **Scientific Assessments:** Carry out open hydrological research and enlist the help of impartial specialists to confirm results and suggest enhancements. By implementing these strategies, the Ken-Betwa Link Project may achieve a balance between environmental sustainability and developmental objectives, guaranteeing resilient and inclusive growth for the area.
- **Wildlife Protection:** Create habitat corridors, relocation projects, and monitoring systems to protect species like tigers, gharials, and vultures.
- **Community Engagement and Compensation:** Provide just compensation in accordance with the Right to Fair Compensation Act (2013), address concerns through consultations, and create long-term livelihood programs for impacted communities.
- **Sustainable Water Management:** Encourage equitable distribution and efficient use of water, and incorporate the project into larger water resource strategies for long-term sustainability.
- **Policy and Legal Reforms:** Tighten rules for infrastructure projects in ecologically sensitive areas and give conservation top priority in wildlife clearance procedures.
- **Monitoring and Accountability:** Create an independent oversight body, publish progress reports on a regular basis, and maintain transparency to preserve public confidence.

Conclusion

The Ken-Betwa project must serve as a model for future initiatives, demonstrating how adherence to **environmental laws, proper planning, and equitable solutions** can enable inclusive and sustainable development while safeguarding ecological and social interests.

UPSC Mains Model Question

Q. Ken-Betwa Link Project is a double-edged sword, offering solutions to water scarcity while posing ecological risks." Critically analyze this statement in light of its environmental and social implications. (250 words)

Geography

EL NIÑO AND LA NIÑA

Current Context

- The Indian Meteorological Department (IMD) recently forecasted an El Niño event impacting the Indian monsoon.
- La Niña conditions were observed in the past two years, contributing to excess rainfall in India.

About

- **El Niño**: A warming of the central and eastern Pacific Ocean, disrupting global weather patterns, including weakening the Indian monsoon.
- **La Niña**: A cooling of the same region, generally strengthening the monsoon.
- Both are phases of the **El Niño-Southern Oscillation (ENSO)** cycle.

Other Relevant Dimensions

- El Niño can cause **droughts in India**, while La Niña can lead to **above-normal rainfall**.
- Impact on **agriculture (Kharif crops), fisheries, and cyclones**.
- Government policies like **National Action Plan on Climate Change (NAPCC)** address such climate variations.

GEOPARKS

Current Context

- India is considering its first UNESCO Global Geopark in **Lonar Crater, Maharashtra**.

About

- Geoparks are **designated areas of international geological significance**.
- Promote **conservation, education, and sustainable tourism**.

Other Relevant Dimensions

- India has **no UNESCO Global Geoparks yet**, despite having sites like **Lonar Lake and the Deccan Traps**.
- Important for **geo-tourism and conservation**.

BASEFLOW

Current Context

- Drought-prone areas in India are witnessing **reduced baseflow due to groundwater depletion**.

About the Topic

- Baseflow is **the portion of river flow sustained by groundwater discharge**.
- Important during **dry seasons**.

Other Relevant Dimensions

- Over-extraction of groundwater reduces baseflow, affecting **river ecology (e.g., Ganga, Yamuna)**.
- **Jal Shakti Abhiyan** and groundwater recharge policies aim to sustain baseflow.

EQUATORIAL PLASMA BUBBLE (EPB)

Current Context

- ISRO is monitoring EPBs for **satellite communication and navigation disruptions**.

About

- EPBs are **irregularities in the ionosphere near the equator**, affecting radio signals.
- Occur after sunset due to **plasma density variations**.

Other Relevant Dimensions

- Impact on **GPS, telecommunication, and space missions** in India.

NEGATIVE LEAP SECOND

Current Context

- Scientists are considering a **negative leap second** to adjust for **Earth's rotational speed increase**.

About

- A leap second is added or removed to **synchronize atomic clocks with Earth's rotation**.
- Negative leap seconds are rare but necessary if **Earth rotates faster**.
- Impacts **telecommunications, GPS systems, and financial markets**.

HEAT DOME

Current Context

- Recently, North India experienced **extreme heat waves linked to a heat dome**.

About

- A heat dome occurs when **high-pressure traps heat over an area for days**.
- Leads to **prolonged heat waves**.
- Increases **heat stress, wildfires, and energy consumption**.
- India's **National Action Plan on Heatwaves** helps mitigate impacts.

BLUE HOLE

Current Context

- Recent discovery of a **new blue hole in the Indian Ocean**.

About

- Blue holes are **underwater sinkholes** found in oceans and coastal areas.
- Important for **marine biodiversity and paleoclimate studies**.
- Potential site for **marine research and conservation in India**.

KALLAKKADAL

Current Context

- Coastal regions in Kerala recently observed **Kallakkadal (meteotsunami)** events.

About

- Kallakkadal refers to **freak waves caused by atmospheric disturbances**.
- Common along India's **southwest coast**.
- Impact on **fishing communities, coastal erosion, and maritime safety**.

HEAT BUDGET OF THE EARTH

Current Context

- Rising **global temperatures and energy imbalance** indicate heat budget changes.

About the Topic

- The **Earth's heat budget** is the balance between **incoming solar radiation and outgoing heat**.
- Governed by **albedo, greenhouse effect, and atmospheric circulation**.
- **Global warming, climate change, and Indian monsoons** are affected.

EARTH'S MAGNETIC FIELD

Current Context

- Recent studies show **weakening of Earth's magnetic field** near the South Atlantic.

About

- Generated by **convection currents in the outer core**.
- Protects from **solar winds and cosmic radiation**.
- **Space weather disruptions, satellite damage, and auroras** in India.

EARTH'S MANTLE

Current Context

- Scientists discovered **water-rich minerals in the deep mantle**.

About

- The mantle is **the layer between Earth's crust and core**.
- Composed of **silicates, peridotite, and convection currents**.
- Mantle plumes influence **volcanism and earthquakes** in India.

ISOSTASY

Current Context

- Recent Himalayan uplift studies linked to **isostatic adjustment**.

About

- Isostasy explains **Earth's crustal balance over the mantle**.
- Affected by **erosion, glaciation, and sedimentation**.
- Important for **Himalayan tectonics and Indian earthquakes**.

INDIAN OCEAN OBSERVING SYSTEM (INDOOS)

Current Context

- India upgraded **IndOOS to enhance monsoon prediction**.

About

- A network of **buoys, satellites, and sensors monitoring ocean conditions**.
- Helps predict **cyclones, monsoons, and climate change impacts**.

COLD LAVA

Current Context

- Indonesia reported **cold lava flows after heavy rains**.

About

- Cold lava (lahar) is **volcanic debris mixed with water, forming deadly mudflows**.
- Relevant for **Andaman volcanic monitoring** in India.

ZERO SHADOW DAY

Current Context

- Cities in India recently observed **Zero Shadow Day** events.

About

- Occurs when **the Sun is directly overhead, casting no shadow**.
- Happens **twice a year in places between Tropic of Cancer and Tropic of Capricorn**.

RINGWOODITE OCEAN

Current Context

- Scientists found evidence of **vast water reservoirs in Earth's mantle**.

About

- Ringwoodite is a **high-pressure mineral that stores water deep inside Earth**.
- Could be **a hidden water cycle affecting Earth's geology**.

ATMOSPHERIC RIVERS

Current Context

- **California and parts of Europe** recently experienced heavy rainfall due to atmospheric rivers.

About

- Long, narrow bands of **moisture-laden air causing intense precipitation**.
- May influence **Indian monsoon and extreme rainfall events**.

HIGH SEAS TREATY

Current Context

- The High Seas Treaty was adopted in March 2023 at the United Nations, aiming to conserve marine biodiversity beyond national jurisdictions.
- The treaty's ratification is a critical step towards achieving Aichi Biodiversity Targets and the **30x30** biodiversity goal under the Post-2020 Global Biodiversity Framework.

About High Seas Treaty

- To ensure sustainable use and conservation of biodiversity in areas beyond national jurisdiction (ABNJ), covering marine genetic resources, area-based management tools (ABMTs), and environmental impact assessments (EIAs).

Key Features

- Establishment of Marine Protected Areas (MPAs).
- Regulation of marine genetic resources.
- Environmental impact assessments for activities in the high seas.

India's Context

- India is a signatory to the treaty and has supported efforts to regulate high seas biodiversity.
- India's commitment to ocean conservation is reflected in policies like the National Coastal Zone Management Plan and Marine Protected Areas along its coastline.

CORAL BLEACHING

Current Context

- Coral bleaching continues to be a significant threat, worsened by global warming and El Niño events, with reports of severe bleaching in the Great Barrier Reef and Indian Ocean.
- Governments and organizations are focusing on coral restoration and climate action to address rising sea temperatures.

About Coral Bleaching

- Coral Bleaching occurs when corals expel symbiotic algae (zooxanthellae) due to stress factors like increased water temperature, ocean acidification, or pollution, leading to loss of color and weakened coral health.
- Consequences:
  - Decreased biodiversity.
  - Disruption of marine ecosystems and fisheries.
  - Decline in coastal protection provided by coral reefs.

India's Context

- India's **Andaman and Nicobar Islands, Gulf of Mannar,** and **Lakshadweep** face frequent coral bleaching events due to rising ocean temperatures.

Government initiatives

- **National Coral Reef Conservation & Management Programme (MoEFCC)** for coral restoration.
- Coral transplantation projects in the Andaman & Nicobar Islands.

- Active participation in **Global Coral Reef Monitoring Network (GCRMN).**
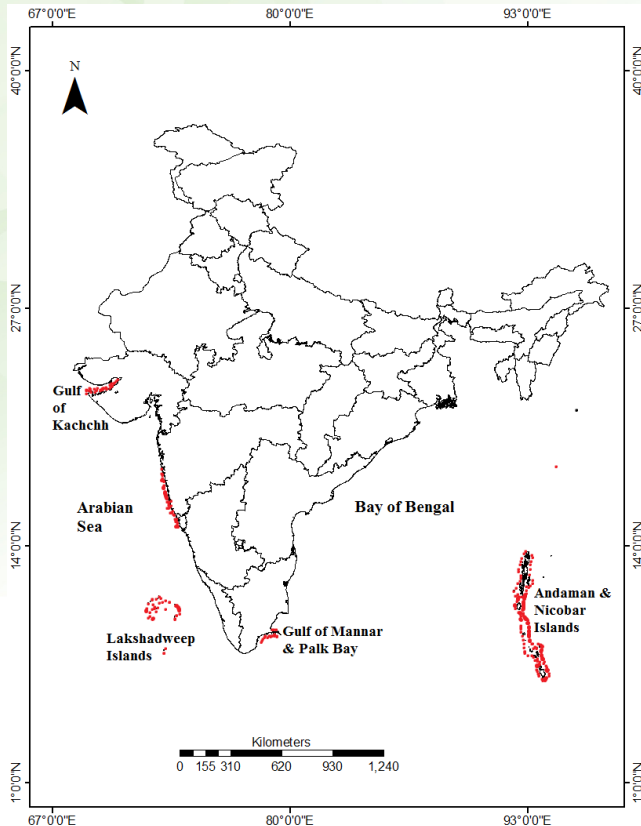
Significant Global Initiatives

- International Marinelife Conservation under the UN **Decade of Ocean Science (2021-2030)** focuses on coral reef restoration.
- Coral Triangle Initiative (CTI) – A multilateral partnership focusing on coral reef protection in the Asia-Pacific region.
- IPCC Special Report on Oceans and Cryosphere (2019): Warns that up to **90%** of coral reefs could experience severe bleaching by 2050 under current warming trends.
- **UN Ocean Report (2024):** Stresses the need for climate action to prevent further coral degradation.

RAMSAR SITES

Current Context

- India added new Ramsar sites in 2024, expanding the total number to 82, strengthening wetland conservation efforts.
- Increased focus on climate resilience and sustainable wetland management under Mission Amrit Sarovar.

About Ramsar Sites

- **Ramsar Convention (1971):** International treaty for wetland conservation, signed in Ramsar, Iran.

- Protect wetlands of international importance for biodiversity, climate regulation, and water security.

Key Features

- Recognizes ecologically significant wetlands.
- Promotes wise use and sustainable management.

India's Context

- India has **82** Ramsar sites (as of 2025), covering over **1.3 million hectares.**
- **Largest Ramsar Site: Sundarbans Wetland, West Bengal.**
- **First Ramsar Sites (1981): Chilika Lake (Odisha) & Keoladeo National Park (Rajasthan).**

Government Initiatives

- National Plan for Conservation of Aquatic Ecosystems (NPCA) – Protects wetlands.
- Wetlands (Conservation and Management) Rules, 2017 – Strengthens legal protection.
- Mission Amrit Sarovar – Focuses on wetland restoration.

Significant Global Initiatives

- Montreux Record – List of threatened Ramsar sites; India has 2 sites (Keoladeo NP, Loktak Lake).
- UN Decade on Ecosystem Restoration (2021-2030) emphasizes wetland conservation.
- Global Wetland Outlook 2024 (Ramsar Secretariat): Reports **35%** wetland loss since 1970, calls for urgent action.

Newly Added Sites

- **Nagi and Nakti bird sanctuaries (Bihar)** - Both are man-made reservoirs (Nagi dam and Nakti dam) and feature dry deciduous forests surrounded by hills.
- **Nanjarayan Bird Sanctuary (Tamil Nadu)** - Nanjarayan Lake a large shallow wetland named after King Nanjarayan (who restored and repaired it).
- **Kazhuveli Bird Sanctuary (Tamil Nadu) -** Brackish shallow lake located on Coromandel Coast in North of Pondicherry.
- **Tawa Reservoir (Madhya Pradesh) -** Located inside Satpura Tiger Reserve and borders Satpura National Park and Bori Wildlife Sanctuary.

GLACIAL LAKE OUTBURST FLOOD

Current Context

- **Increased GLOF risks** due to rapid glacier melting in the **Himalayas**, triggered by **climate change**.
- Recent **Lhonak Lake (Sikkim) GLOF (2023)** caused severe flooding, highlighting the need for **early warning systems**.

About GLOF

- **GLOF occurs when a glacial lake suddenly breaches**, releasing massive water flows downstream.
- **Causes**:
  - Glacier melting due to **global warming**.
  - **Landslides, earthquakes, or ice avalanches** weakening moraine dams.
  - Heavy rainfall increases **hydrostatic pressure** on the lake.

India's Context

- **High-risk areas**: Himalayas (**Uttarakhand, Sikkim, Arunachal Pradesh, Ladakh, Himachal Pradesh**).

Government Initiatives

- **National Disaster Management Authority (NDMA) GLOF Risk Mitigation Guidelines**.
- **Glacial Lake Monitoring Program (ISRO, NRSC)** – Satellite-based tracking of high-risk lakes.
- **Early Warning Systems (EWS)** set up in critical areas.

Significant Global Initiatives

- **UNESCO's Climate Adaptation & GLOF Risk Reduction Program** supports mitigation in high-altitude regions.
- **UNEP and ICIMOD (International Centre for Integrated Mountain Development)** aid Himalayan countries in GLOF risk assessment.

International Reports & Key Takeaways

- **IPCC AR6 Report**: Highlights **increasing GLOF frequency** due to climate change.
- **ICIMOD Report 2024**: Identifies **Glacial Lake Expansion** as a major concern for the Himalayas.

RIVER LINKING PROJECT

Current Context

- **Ken-Betwa River Linking Project** is in **advanced implementation stage**, aiming to **enhance water security** in drought-prone Bundelkhand.
- **Godavari-Cauvery Link proposal** revived for addressing **water scarcity** in Southern India.

About River Linking Project

- **Objective**: Transfer **surplus water** from **flood-prone rivers** to **water-deficient regions** through **canals, reservoirs, and pipelines**.

Key Components

- **Himalayan Component**: Connecting rivers from **Ganga-Brahmaputra basin**.
- **Peninsular Component**: Linking **Godavari, Krishna, and Cauvery rivers**.

India's Context

- Implemented under **National River Linking Project (NRLP)**, managed by **National Water Development Agency (NWDA)**.
- **Ken-Betwa Link** (Madhya Pradesh–Uttar Pradesh) – First river-linking project under execution.
- **Par-Tapi-Narmada Link** (Gujarat-Maharashtra) – Pending clearance.
- **Godavari-Krishna-Pennar-Cauvery Link** – Proposed for South India.

Benefits

- **Drought & flood mitigation**.
- **Irrigation & drinking water supply**.
- **Hydropower generation**.

Challenges

- **Environmental concerns** – Large-scale deforestation and displacement.
- **Inter-state water disputes**.
- **High costs** and feasibility issues.

Significant Global Initiatives

- **China's South-North Water Transfer Project** – World's largest inter-basin water transfer.
- **Mekong River Commission** – Manages cross-border river water sharing in Southeast Asia.
- **UN World Water Development Report 2024**: Stresses importance of **sustainable water management**.
- **IPCC AR6 Report**: Highlights risks of **river diversion on ecosystems** and climate resilience.

ENVIRONMENTAL DNA (EDNA)

Current Context

- Used for biodiversity monitoring in Indian wetlands and marine ecosystems under conservation projects.

About eDNA

- Genetic material shed by organisms into the environment (water, soil, air).
- Helps in species identification without direct observation.
- Used for tracking invasive species, endangered wildlife, and water quality.

India's Context

- CSIR and MoEFCC using eDNA for Ganga River biodiversity assessment.

GLOBAL CARBON BUDGET REPORT

Current Context

- Global Carbon Budget 2024 warns carbon emissions remain high, making **1.5°C** target difficult.

About

- Annual report by Global Carbon Project (GCP) analyzing CO_2 sources, sinks, and atmospheric levels.
- Tracks emissions from fossil fuels, land use changes, and ocean/terrestrial absorption.

India's Context

- India's emissions grew by **~6%** in 2023, but per capita emissions remain lower than global average.
- Government push for renewable energy under Net-Zero 2070 goal.

Key Facts

- CO_2 levels highest in history (**~419 ppm**).
- Deforestation, fossil fuel use are major contributors to emission rise.

BIOLUMINESCENCE

Current Context

- Bioluminescent plankton spotted along India's Konkan and Andaman coasts, attracting ecological interest.

About

- Natural light emission by organisms like jellyfish, plankton, fungi due to a chemical reaction involving luciferin.
- Found in deep-sea creatures, fireflies, and some fungi.

India's Context

- Observed in Maharashtra, Goa, and Andaman beaches.
- Used in marine ecosystem studies and pollution monitoring.

TIGER RESERVES

Current Context

- As of December 2024, India has designated **57** tiger reserves under Project Tiger, aimed at conserving the Bengal tiger and its habitats.
- The most recent addition is the Ratapani Tiger Reserve in Madhya Pradesh, established in 2024.

About

- The largest reserve is Nagarjunsagar-Srisailam Tiger Reserve, spanning approximately **3,296.31 square kilometers** across Andhra Pradesh and Telangana.

- The first and oldest reserve is Jim Corbett Tiger Reserve in Uttarakhand, established in 1973-74.
- These reserves collectively cover over **72,000 square kilometers**, playing a crucial role in India's wildlife conservation efforts.

CORAL TRIANGLE

Current Context

- Coral Triangle Initiative (CTI) nations are strengthening marine conservation amid rising coral bleaching events due to climate change.

About

- Marine biodiversity hotspot covering Indonesia, Malaysia, Papua New Guinea, the Philippines, Solomon Islands, and Timor-Leste.
- Known as the "**Amazon of the Seas**" due to its rich coral and marine species diversity.
- Home to **76%** of the world's coral species and critical for global fisheries.

India's Context

- India is not part of the Coral Triangle but collaborates in regional marine conservation efforts.
- Focus on coral reef restoration in Andaman & Nicobar and Lakshadweep.

Significant Global Initiatives

- Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF) – A multilateral conservation program.
- The UN Ocean Decade (2021-2030) emphasizes coral ecosystem resilience.

UN-REDD

Current Context

- UN-REDD is gaining prominence after **COP28**, where countries emphasized **nature-based solutions** and **carbon trading mechanisms**.
- India is exploring **carbon credit mechanisms** under the **Green Credit Programme**, which aligns with REDD+.

About UN-REDD

- **Launched:** 2008
- **Managed by:** FAO, UNDP, UNEP
- **Objective:** Supports developing nations in implementing REDD+ strategies to mitigate climate change by reducing deforestation and forest degradation.

Key Aspects of REDD+

- Reducing emissions from deforestation & degradation
- Conservation & enhancement of forest carbon stocks
- Sustainable forest management**:**
- Multilateral & private sector-based, includes **Result-Based Payments (RBP)**.

India's Context

- India follows REDD+ under **National REDD+ Strategy (2018)**.
- **Green India Mission (GIM)**
- **National Afforestation Programme (NAP)**
- **CAMPA (Compensatory Afforestation Fund)**
- India aims to **increase forest cover to 33%** as per the National Forest Policy.

Significant Global Initiatives

- **COP26 & COP28:** Strengthened commitments to REDD+ in carbon markets & financing.
- **Paris Agreement (Article 5):** Recognizes REDD+ as a key tool for climate mitigation.
- **Forest Carbon Partnership Facility (FCPF):** Supports REDD+ readiness in developing nations.
- **UNEP Emissions Gap Report 2024:** Highlights **deforestation as a major contributor** to carbon emissions.
- **IPCC AR6 Report:** Emphasized REDD+ as a **cost-effective** carbon mitigation strategy.

Related News

- India's **Green Credit Programme** explores synergy with REDD+ for carbon financing.
- **Amazon Fund** expanding to include more countries under REDD+ financing

INTERNATIONAL ARRANGEMENT ON FORESTS (IAF)

Current Context

- Discussions at **COP28** and the **United Nations Forum on Forests (UNFF)** emphasized strengthening IAF to achieve **Global Forest Goals (GFGs) by 2030**.
- Increased focus on **sustainable forest management (SFM)** and linking forests with carbon markets.

About IAF

- **Established:** 2000 by the **United Nations Economic and Social Council (ECOSOC)**.
- **Objective:** Strengthen **global forest governance** and promote **Sustainable Forest Management (SFM)**.

Components

- **United Nations Forum on Forests (UNFF)** – policy platform for forest issues.
- **UN Strategic Plan for Forests (2017-2030)** – outlines **6 Global Forest Goals (GFGs)**.
- **Collaborative Partnership on Forests (CPF)** – coordinates international efforts.
- **Non-legally binding**, voluntary commitments for forest conservation.

India's Context

India participates in UNFF discussions and aligns with IAF through:

- **National Forest Policy (1988)** – aims for **33% forest cover**.
- **Green India Mission (GIM)** – under NAPCC, promotes afforestation.
- **Compensatory Afforestation Fund Act (CAMPA)** – funds reforestation efforts.

Significant Global Initiatives

- **Glasgow Leaders' Declaration on Forests (COP26):** Over **140 countries** pledged to halt deforestation by 2030.
- **Bonn Challenge (2011):** Global initiative to restore **350 million hectares of degraded forests by 2030**.
- **REDD+ (under UNFCCC):** Financial incentives for reducing emissions from deforestation.
- **FAO's Global Forest Resources Assessment 2025:** Warns of continued deforestation despite global pledges.
- **IPCC AR6 Report:** Highlights forest conservation as a **low-cost** carbon sequestration strategy.

MANGROVE CONSERVATION

Current Context

- **COP28 discussions** emphasized mangroves as **natural carbon sinks** and key to **climate resilience**.
- **India launched the MISHTI (Mangrove Initiative for Shoreline Habitats & Tangible Incomes) scheme** under Budget 2023-24 to expand mangrove cover.
- **UNESCO and IUCN reports** highlight mangrove loss due to **coastal development and climate change**.

About Mangrove Conservation

- **Mangroves:** Salt-tolerant forests found in intertidal regions of tropical and subtropical coastlines.
- India has **over 4,975 sq. km** of mangrove cover (**State of Forest Report 2023**).

Importance

- Act as **carbon sinks**, mitigating climate change.

- Provide **coastal protection** against cyclones, storm surges, and erosion.
- Support **biodiversity**, including fish breeding grounds.

Threats
- **Deforestation** for aquaculture, urbanization.
- **Sea-level rise & climate change** affecting growth.
- **Pollution & encroachments** degrading ecosystems.

Largest mangrove ecosystems in India
- **Sundarbans (West Bengal) – Largest, UNESCO site.**
- **Mahanadi, Godavari, Krishna delta (Odisha, Andhra Pradesh).**
- **Pichavaram (Tamil Nadu), Bhitarkanika (Odisha).**

Government Initiatives
- **MISHTI Scheme** – Promotes mangrove plantation along India's coastline.
- **National Coastal Mission** – Focuses on coastal ecosystem restoration.
- **State-specific programs** – Tamil Nadu, Gujarat, Odisha have active restoration projects.

Significant Global Initiatives
- **Mangrove Alliance for Climate (MAC) – Launched at COP27**, promotes global mangrove conservation (India is a member).
- **Blue Carbon Initiative** – Focuses on carbon sequestration in mangroves.
- **UNESCO World Heritage Sites Protection** – Recognizes key mangrove ecosystems.
- **FAO's Global Forest Resources Assessment 2025**: Reports a **decline in global mangrove cover** despite conservation efforts.
- **IPCC AR6 Report**: Highlights mangrove restoration as a **cost-effective climate adaptation strategy**.

EUROPEAN UNION DEFORESTATION REGULATION (EUDR)

Current Context
- **EUDR came into effect in 2023**, requiring companies to ensure that commodities like **soy, palm oil, coffee, and timber** are not linked to deforestation.
- **India's exports (coffee, leather, timber) may face stricter scrutiny**, impacting trade with the EU.

About EUDR
- Aims to prevent the sale of **deforestation-linked products** in the EU market.

- Covers **seven commodities**: soy, palm oil, cattle, coffee, cocoa, rubber, and timber.
- Requires **due diligence** from companies to prove deforestation-free supply chains.

India's Context
- India is **not directly affected**, but exporters of **coffee, rubber, timber, and leather** may need to comply.
- Concerns raised over **increased compliance costs** for Indian businesses.
- **India-EU trade talks** discussing **EUDR compliance challenges** for Indian exporters.
- **Indonesia, Malaysia opposing EUDR**, citing discrimination against palm oil.

FOREST ECOSYSTEM RESTORATION INITIATIVE (FERI)

Current Context
- **FERI supports the post-2020 Global Biodiversity Framework (GBF)** under the **Convention on Biological Diversity (CBD)**.
- Increased focus on **forest restoration** to achieve the 30x30 **biodiversity goal** (protecting 30% of land & ocean by 2030).

About FERI
- **Launched:** 2015 under **CBD Secretariat**.
- **Objective:** Supports developing countries in restoring degraded forests for **biodiversity conservation** & **climate resilience**.
- **Focus Areas:** Technical support, capacity building, and funding for large-scale forest restoration projects.

India's Context
India is a **CBD signatory** and aligns with FERI through:
- **Green India Mission (GIM)** – Afforestation & ecosystem restoration.
- **National Afforestation Programme (NAP)** – Community-based reforestation.
- **CAMPA (Compensatory Afforestation Fund)** – Supports degraded land restoration.

Significant Global Initiatives
- **UN Decade on Ecosystem Restoration (2021-2030)** – Led by UNEP & FAO to restore degraded ecosystems.
- **Bonn Challenge (2011)** – Aims to restore **350 million hectares of forests by 2030**.
- **FAO's Global Forest Resources Assessment 2025**: Highlights need for urgent restoration efforts.

- **IPBES Report 2024**: Warns that **ecosystem degradation threatens 40% of global biodiversity**.

INDIAN STATE OF FOREST REPORT (ISFR) 2023

Current Context

- **ISFR 2023** released by **Forest Survey of India (FSI)** shows positive trends in **forest cover** despite challenges like climate change and urbanization.
- Increased focus on **forest restoration** and **sustainable management** aligned with India's **climate action goals** for **net-zero emissions by 2070**.

About ISFR 2023

- **Released by FSI** under **MoEFCC** (Ministry of Environment, Forest and Climate Change).
- Provides data on **forest cover**, **tree cover**, and **biodiversity** across India.

Key findings

- **Total Forest and Tree Cover**: **80.9 million hectares** (24.56% of the total area).
- **Increase in forest cover**: **1,540 sq. km** increase from 2019.
- **Carbon Stock**: Estimated at **7,204 million tonnes** of carbon.
- **Mangrove cover**: Increase of **17 sq. km**.

Recent Trends

- India aims to achieve **33% forest cover** (National Forest Policy, 1988).
- **Madhya Pradesh** has the largest forest cover in India.
- **Himachal Pradesh, Kerala** show significant increase in tree cover.
- **Haryana, Punjab** have seen decline in forest cover.
- **Madhya Pradesh** declared as India's top state for **forest conservation** in ISFR 2023.

ENVIRONMENT AND ECOLOGY

INDIA STATE OF FOREST REPORT, 2023
(ISFR 2023)

Recent Context

- The "India State of Forest Report, 2023" (ISFR 2023) was recently released by the Environment, Forests, and Climate Change Minister at the Forest Research Institute in Dehradun.

About

- The Ministry of Environment, Forests, and Climate Change (MoEFCC) oversees the Forest Survey of India (FSI), which publishes the India State of Forest Report (ISFR) every two years. **The ISFR 2023 is the 18th edition, having been first published in 1987.**

Major Findings of the Report (ISFR 2023)

1. **Total Forest and tree cover:** India's total forest and tree cover is **8,27,357** sq km **(25.17% of its geographical area)**.
- **Forest cover:** 7,15,343 square kilometers **(21.76%).**
- **Tree cover:** 1,12,014 square kilometers **(3.41%).**
2. **States/UTs with High Forest Cover:** 19 states/UTs have forest cover that exceeds **33%** of their land area.
- 8 states/UTs (Mizoram, Lakshadweep, A&N Islands, Arunachal Pradesh, Nagaland, Meghalaya, Tripura, and Manipur) have forest cover of at least **75%.**
3. **Increased Forest and Tree Coverage**
- **Total increase: 1,445** sq km (**156 sq km of forest and 1,289 sq km of trees**).
- **Chhattisgarh, Uttar Pradesh, Odisha, and Rajasthan** have seen the most significant increases in forest and tree cover.
- **Mizoram, Gujarat, and Odisha have experienced the greatest increases in forest coverage. cover.**
- **Mizoram, Gujarat, and Odisha have experienced the greatest increases in forest coverage.**

4. **States with the most forest and tree coverage (by area):** Madhya Pradesh, Arunachal Pradesh, and Maharashtra.
- **Forest Coverage Only: Madhya Pradesh, Arunachal Pradesh, and Chhattisgarh.**
5. **Highest Percentage of Forest Cover:** Lakshadweep ranks top and has the highest forest cover at **91.33%**, followed by Mizoram at **85.34%** and the Andaman & Nicobar Islands at **81.62%.**
6. The **mangrove cover in India has shrunk by 7.43 sq km to 4,991.68 sq km. Gujarat had the largest loss of mangroves.**
7. **Timber Production Potential:** Outside forests, trees have an estimated yearly potential of **91.51** million cubic meters.
8. **Bamboo: T**he total area of the bamboo-bearing area is **1,54,670** sq km. The area has **grown by 5,227 sq km** since the last evaluation in **2021**.
9. **Carbon Stock:** India's carbon stock has reached **30.43 billion tonnes of CO2 equivalent**, achieving **2.29** billion tonnes of additional carbon sink since **2005**, nearing the **2030** target of **2.5–3.0 billion** tonnes under the NDC.

India's Global Commitments on Forests and the Environment

- **Ramsar Convention on Wetlands (1971):** This international treaty recognizes the ecological importance of wetlands, such as mangroves, and encourages their conservation and sustainable usage.
- **UN Framework Convention on Climate Change (1992):** The United Nations Framework Convention on Climate Change **(UNFCCC)** is an international convention that addresses climate change and its effects. As a convention signatory, India is required to report on greenhouse gas **(GHG)** emissions as well as activities connected to land use, land-use change, and forestry.
- **Convention for Biological Diversity (CBD):** The **CBD**, signed at the **1992** Earth Summit in Rio de Janeiro and enforced in 1993, requires India to conserve biodiversity and promote sustainable natural resource use. Meet Aichi Biodiversity Targets, such as forest habitat conservation (Target 5).

- **UN Convention to Combat Desertification (UNCCD):** This legally binding convention, adopted in **1994** and implemented in **1996**, compels India to combat desertification and drought-related consequences while supporting sustainable land management.
- **The Kyoto Protocol (1997):** This protocol makes the **UNFCCC** operative by requiring developed nations to meet specific GHG emission reduction objectives.
- **Bonn Challenge (2011):** This global program, launched by the **German government and IUCN**, aims to repair degraded areas. India has agreed to restore **26 million** hectares of damaged land by **2030**.
- **New York Declaration of Forests (NYDF) (2014):** The **NYDF**, launched at the United Nations Climate Summit, intends to reduce deforestation by half by **2020** and remove it completely by **2030**. Encourage sustainable forest management and restoration.
- **Paris Agreement (2015):** It is a landmark agreement under the **UN Framework Convention on Climate Change** that focuses on reducing global warming to less than **2°C**, preferably **1.5°C**, and underlines the essential role of forests in mitigation and adaptation.
- **Sustainable Development Goals (SDGs):** India actively pursues SDG 15, which focuses on forest conservation and restoration. SDGs include climate action, life below water, no poverty, zero hunger, good health and well-being, and clean water and sanitation.

Challenges for India's Forests

- **Forest Cover Decline:** Urbanization, agricultural development, and infrastructure projects have led to significant declines in moderately dense forest (MDF) and open forest (OF) across multiple states.
- **Eco-Sensitive Zones:** Over the last decade, forest cover in **Western Ghats' eco-sensitive zones has fallen by 58.22 square kilometers.**
- **Biodiversity Hotspots:** Declines in wooded regions within biodiversity hotspots endanger ecological equilibrium and species survival.
- **Forest Fire Vulnerability Incidence of Fires:** An increase in forest fires has destroyed significant tracts of forest, diminishing biodiversity and regeneration capability.
- **Most Affected States:** In the **2023-24** season, **Uttarakhand, Odisha, and Chhattisgarh** had the most fire incidents.
- **High-Risk Zones:** About **32.06% of forests** are designated as **"highly fire-prone."**

- **Pressure on Forest Resources:** Forest ecosystems are under unsustainable strain due to the growing demand for fuelwood, **non-timber forest products (NTFPs)**, and lumber.
- **Habitat loss and fragmentation:** urban sprawl, road development, and mining are some of the projects that lead to habitat fragmentation, especially in the Western Ghats and Himalayan regions. The loss of contiguous habitats has a negative impact on ecosystems and puts wildlife populations at risk.
- **Management and Monitoring Difficulties:** Illegal logging and encroachment are made worse in wooded regions by inadequate monitoring and enforcement systems.

Way Forward

- **Uphold and Enforce Existing Regulations:** Implementing policies should be strengthened by upholding current forest conservation regulations, such as the Forest (Conservation) **Act of 1980**, and enforcing severe penalties for infractions including encroachment and illegal logging.
- **Promote Sustainable Forest Management (SFM)** by putting into practice scientific forest management techniques that strike a balance between resource use and conservation, such as sustainable non-timber forest product (NTFP) harvesting.
- **Preserving Biodiversity and Raising Awareness:** To improve climate resilience and biodiversity, prioritize conservation efforts in environmentally fragile areas such as the Western Ghats, Northeast India, and mangrove habitats. Furthermore, programs like **"Ek Ped Maa Ke Naam"** should be used to create public awareness about the necessity of forest conservation.
- **Increase Afforestation Efforts:** To improve carbon sequestration and rehabilitate degraded landscapes, scale up programs like the Green India Mission and Bonn Challenge.
- **Robust Technology for Surveillance:** For efficient threat assessment, monitoring, and response, make use of GIS mapping, satellite images, and real-time forest fire alert systems. x
- **Community Involvement/Participation:** To guarantee sustainable use and conservation of forest resources, increase the participation of local communities and indigenous people through initiatives like **Joint Forest Management (JFM)**.

Conclusion

In order to preserve and restore forests for future generations, strong policies, active community involvement, and technological solutions are required to address the issues of deforestation, degradation, and climate change. India's forests play a critical role in maintaining ecological balance, preserving biodiversity, and mitigating climate change.

Mains Model Question

Q. The India State of Forest Report 2023 recognizes substantial gains in forest cover, carbon stock, and biodiversity protection but also identifies issues such as forest cover decline, fire risk, and habitat fragmentation. In light of India's worldwide commitments and emerging environmental issues, discuss the key findings of the India State of Forest Report 2023 and provide a comprehensive strategy for sustainable forest management and conservation for India. (250 words)

Environment and Ecology

IUCN RED LIST OF THREATENED SPECIES

Current Context

- Recently, IUCN updated its Red List of Threatened Species, highlighting the conservation status of various species globally.

Key Points

- Provides information on species at risk of extinction, categorized into nine groups: Not Evaluated, Data Deficient, Least Concern, Near Threatened, Vulnerable, Endangered, Critically Endangered, Extinct in the Wild, and Extinct.
- Helps in prioritizing conservation efforts and raising awareness about biodiversity loss.

Key Updates

- **La Gomera giant lizard:** Status improved from Critically Endangered to Endangered.
- **Copiapoa cacti:** 82% of species at risk of extinction.
- **Bornean Elephant:** Now listed as Endangered.

SUSTAINABLE FINANCE FOR TIGER LANDSCAPES CONFERENCE (SFTLC)

Current Context

- Bhutan hosted the SFTLC, supported by the Tiger Conservation Coalition (TCC), to mobilize funds for tiger conservation.

Key Points

- To secure **$1 billion** by 2034 for tiger conservation through innovative financial strategies.

Initiatives

- **Tiger Landscapes Investment Fund:** Promotes nature-positive business approaches.
- **Tiger Bonds:** Introduced by the Asian Development Bank to engage private investors.

Tiger Conservation in India

- **Project Tiger (1973):** A centrally sponsored scheme for in-situ conservation.
- **NTCA:** Statutory body under the Wildlife Protection Act, 1972.
- **Global Tiger Initiative (2008):** World Bank-led initiative for tiger conservation.

INTERNATIONAL BIG CAT ALLIANCE (IBCA)

Current Context

- India proposed to join the IBCA, aiming to strengthen global cooperation for big cat conservation.

Key Points

- **Launch:** Initiated by India in 2023, marking 50 years of Project Tiger.
- **Objective:** To conserve seven big cat species (tiger, lion, leopard, snow leopard, cheetah, jaguar, and puma).
- **Membership:** Open to all UN member countries and international organizations.
- **Funding: Rs. 150 crores** allocated for five years (2023-28).
- **Conservation Status in India:** All five big cats in India are listed under Schedule I of the Wildlife Protection Act.

ELEPHANT CENSUS 2023

Current Context

- A synchronized elephant population census was conducted in Southern India, revealing key insights into elephant conservation.

Key Findings

- **Karnataka:** Highest elephant population among Southern states (over **6,000** elephants).
- **Juvenile Mortality: 40%** death rate among juvenile elephants due to Elephant Endotheliotropic Herpesviruses (EEHVs).

Conservation Efforts

- **Project Elephant (1992):** Centrally sponsored scheme for elephant conservation.
- **MIKE Programme:** Monitors illegal killing of elephants.

STATE OF THE RHINO 2024 REPORT

Current Context

- The International Rhino Foundation (IRF) released the State of the Rhino 2024 Report, highlighting the status of rhino species globally.

Conservation Initiatives

- **Indian Rhino Vision 2020:** Aims to increase the population of greater one-horned rhinos.

- **Global Rhino Population:** Approximately 28,000 rhinos across five species.
- **Poaching:** Increased by 4% in Africa from 2022 to 2023.
  - **New Delhi Declaration on Asian Rhinos (2019):** Focuses on conserving Asian rhino species.

GREAT INDIAN BUSTARD (GIB)

Current Context

- The Ministry of Environment, Forest and Climate Change (MoEFCC) approved funds for the next phase of the Bustard Recovery Program (2024-2029).

Key Points

- **Conservation Status:** Critically Endangered.
- **Threats:** Habitat loss, power line collisions, and pesticide use.

Conservation Efforts

- **Bustard Recovery Program:** Focuses on conservation breeding, habitat management, and research.
- **Supreme Court Order:** Modified restrictions on power lines in GIB habitats.

CROCODILE CONSERVATION PROJECT

Current Context

- The Crocodile Conservation Project completed 50 years in 2023, marking a milestone in reptile conservation.

Key Points

- **Launch:** Initiated in 1975 in Odisha's Bhitarkanika National Park with UNDP and FAO support.
- **Achievements:** Successful increase in saltwater crocodile populations.
- **Bhitarkanika National Park:** A Ramsar site and India's second-largest mangrove ecosystem.

FUNGA: RECOGNITION AND CONSERVATION

Current Context

- The Fungi Foundation advocated for the inclusion of "Funga" alongside flora and fauna in biodiversity discussions.

Key Points

- Funga refers to the diversity of fungi in a given area.

Significance

- **Ecosystem Role:** Fungi play crucial roles in decomposition, nutrient cycling, and carbon storage.
- **Medicinal Value:** Source of antibiotics (e.g., penicillin) and potential psychotherapies (e.g., psilocybin).

Conservation Efforts

- Global initiatives like the IUCN Fungal Conservation Committee and the Global Fungal Red List Initiative.

WORLD NETWORK OF BIOSPHERE RESERVES (WNBR)

Current Context

- UNESCO added 11 new biosphere reserves to the WNBR, bringing the total to 759 sites in 136 countries.

Key Points

- **Man and Biosphere (MAB) Programme:** Launched in 1971 to promote sustainable relationships between people and their environments.
- **Biosphere Reserves in India: 12 out of 18** Indian biosphere reserves are recognized under UNESCO's MAB Programme.
- **Zones:** Core (strictly protected), Buffer (sustainable activities), and Transition (socio-economic development).

ECO-SENSITIVE AREAS (ESAS)

Current Context

- The Karnataka government rejected the Kasturirangan committee report on protecting the Western Ghats as an ESA.

Key Points

- **Definition:** ESAs are areas with significant environmental resources requiring special conservation efforts.
- **Western Ghats:** One of the world's biodiversity hotspots, covering **6%** of India's land area.

Conservation Efforts

- **Kasturirangan Committee:** Proposed **37%** of the Western Ghats as ESA.
- **WGEEP (2011):** Recommended designating the entire Western Ghats as an Ecologically Sensitive Area (ESA).

IUCN (INTERNATIONAL UNION FOR CONSERVATION OF NATURE)

Current Context

- IUCN's **2024 Red List** highlights the **alarming decline** of species, with over **41% of amphibians** and **25% of mammals** threatened by extinction.
- IUCN plays a key role in **biodiversity conservation** and shaping policies for the **post-2020 global biodiversity framework**.

About

- Founded in **1948**, IUCN is a global organization that works on nature conservation and sustainable use of natural resources.
- It brings together **governments, NGOs, scientists**, and experts to assess the conservation status of species and ecosystems.
- The **IUCN Red List** is the world's most comprehensive database on the conservation status of species.

India's Context

- India is a **founding member** of IUCN and has **110 species** listed on the **Red List**.
- Indian government initiatives like **National Biodiversity Action Plan (NBAP)** align with IUCN's objectives.
- India has taken leadership in the Global **Tiger Recovery Programme** under IUCN.

CITES (CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA)

Current Context

- CITES is focusing on **combating illegal wildlife trade**, with an increasing number of species under protection, especially **tigers, elephants**, and **rhinoceros**.
- India's strong push for **Asian Elephant protection** under CITES continues in the **2024 CoP (Conference of the Parties)** discussions.

About

- Established in **1975**, CITES is an international agreement aimed at ensuring that **international trade in wild animals and plants** does not threaten their survival.
- It operates through a **list of three appendices**:
  - **Appendix I**: Species endangered by trade.
  - **Appendix II**: Species that may become threatened unless trade is controlled.
  - **Appendix III**: Species protected in at least one country.

India's Context

- India is a **signatory** and has contributed to **CITES policies**, especially regarding **tiger conservation** and **illegal ivory trade**.
- **Project Elephant** and **Project Tiger** align with CITES goals in India.
- India has **CITES-listed species** such as **Royal Bengal Tiger**, **Asian Elephant**, and **Indian Rhinoceros**.

Significant Global Initiatives

- **CITES CoP (Conference of the Parties)**: Held every 2-3 years to discuss **wildlife trade regulations**.

WWF (WORLD WIDE FUND FOR NATURE)

Current Context

- WWF continues to drive **climate action and biodiversity conservation**, with increased emphasis on **sustainable agriculture** and **forest protection**.
- The organization is active in **helping nations** implement **nature-based solutions** to combat **climate change** and **ecosystem degradation**.

About

- Founded in **1961**, WWF is one of the world's largest and most respected environmental NGOs, focusing on the conservation of nature and **reducing the human impact on the environment**.
- It operates in **100+ countries**, working on **wildlife conservation**, **climate change mitigation**, and **sustainable development**.
- Known for the **WWF Panda logo**, symbolizing conservation efforts.

India's Context

- WWF India works on **biodiversity conservation**, **water management**, and **forest restoration**, with projects in **Kaziranga National Park**, **Sundarbans**, and **Himalayan ecosystems**.
- The organization plays a pivotal role in **sustainable palm oil** and **wildlife trade regulation** efforts in India.
- WWF India also partners with the government and industries to promote **green technologies** and **sustainable livelihoods**.

Significant Global Initiatives

- **Earth Hour**: A global event where individuals and businesses turn off their lights to raise awareness about **climate change**.

- **Living Planet Report**: Provides insights into the state of the world's biodiversity and ecosystems, urging urgent action to prevent further losses.

UNFCCC COP29

Current Context

- **COP29 (2024)** was held in **Dubai, UAE**, focusing on **accelerating climate action** and **enhancing emissions reduction commitments** to meet the **Paris Agreement goals**.
- The conference highlighted **increased funding for climate adaptation** in vulnerable regions and **progress on climate finance** for developing countries.

About

- The **UNFCCC (United Nations Framework Convention on Climate Change)** is an international treaty aimed at addressing climate change.
- **COP (Conference of the Parties)** is an annual meeting of countries signatory to the UNFCCC to assess progress and negotiate agreements on climate action.
- COP29 was pivotal in advancing **nationally determined contributions (NDCs)** and **global stocktake**.

India's Context

- India reiterated its commitment to **Net-Zero by 2070** and called for **equity** in climate finance at COP29.
- India's proposal for **climate adaptation financing** was supported, especially for **vulnerable regions** like **the Indian Ocean**.
- The country presented its **mission for sustainable energy transitions** and **carbon markets**.

Significant Global Initiatives

- **Paris Agreement**: The core international treaty on climate change, aiming to limit global warming to **well below 2°C**.
- **Global Climate Finance Pledge**: Countries have pledged to raise **$100 billion annually** for climate mitigation and adaptation by 2025.
- **IPCC AR6 Report**: Emphasizes **urgent action** required to limit warming to **1.5°C**, with **COP29** seen as a critical turning point.

Key Outcomes of COP29

Enhanced Climate Finance Commitments:

- Developed nations pledged to **raise $100 billion annually** for **climate adaptation and mitigation** by 2025, as agreed in previous COPs.
- Establishment of a **climate adaptation fund** for vulnerable nations, especially Small Island Developing States (SIDS).

Carbon Pricing Mechanism

- Introduction of **a global carbon market** to facilitate emissions trading, helping countries meet their **Nationally Determined Contributions (NDCs)**.
- Developed countries committed to supporting developing nations in transitioning to **low-carbon economies**.

Enhanced NDCs (Nationally Determined Contributions)

- Countries updated their **NDCs**, with stronger commitments to **reduce emissions** and enhance **climate resilience**.
- **India** emphasized its **Net-Zero 2070 goal** and called for **climate equity**.
- Global Stocktake:
  - A **global stocktake** of progress towards the **Paris Agreement's 1.5°C goal** was conducted, with **urgent actions** identified to close the gap between current pledges and required actions.
- Climate Adaptation and Loss & Damage:
  - **The Global Adaptation Goal** framework was adopted to assess the progress of adaptation efforts, including **support for the most vulnerable communities**.
  - **Loss and Damage fund** discussions were advanced, with a focus on **funding for nations facing extreme weather events**.

GLOBAL ENVIRONMENT FACILITY (GEF)

Current Context

- GEF continues to provide financial support for **climate change mitigation**, **biodiversity conservation**, and **pollution reduction**.
- In 2024, GEF allocated **$5 billion** for **climate adaptation and conservation projects** in developing countries.

About

- Established in **1991**, GEF is an international financial institution that supports projects related to **environmental protection** and **sustainable development**.
- It focuses on issues like **climate change**, **biodiversity**, **international waters**, and **land degradation**.
- Operates through a **partnership of 18 agencies**, including the **World Bank**, **UNDP**, and **UNEP**.

India's Context

- India has been a **beneficiary** of GEF funding, with projects on **biodiversity conservation**, **solar energy**, and **eco-friendly agriculture**.
- India's **GEF-funded projects** include those aimed at **sustainable forest management** and **coastal ecosystem protection**.

- The **National Action Plan on Climate Change (NAPCC)** aligns with GEF's goals.

- **GEF-7** (2018-2022) focused on **nature-based solutions** and **circular economy initiatives**.
- **GEF Small Grants Programme** supports **community-level environmental projects** in developing nations.

- **GEF-8 Replenishment** (2024-2028): Focus on **nature restoration**, **green energy**, and **resilient infrastructure**.
- GEF's **Global Commons Report** emphasizes the need for **multilateral collaboration** to address **transnational environmental challenges**.

ANTARCTIC TREATY

- The **Antarctic Treaty** remains central to preserving **Antarctica's status as a global scientific preserve** and **environmental safeguard**. In recent years, **climate change impacts** and **global cooperation for marine conservation** have led to discussions on strengthening treaty provisions.

- Signed in **1959**, the Antarctic Treaty establishes **Antarctica as a zone for peaceful scientific research** and prohibits **military activity** and **nuclear testing** on the continent.
- It emphasizes **international cooperation**, **environmental protection**, and **conservation of marine life**.
- The treaty is supplemented by **protocols** on **environmental protection** and **conservation of marine living resources** (CCAMLR-Convention for the Conservation of Antarctic Marine Living Resources).

- India is a **consultative party** to the treaty and conducts **scientific research** in Antarctica through its **stations: Maitri** and **Bharati**.
- India has committed to **environmental conservation** in Antarctic regions, including **marine protected areas** and **ecosystem-based management** of fisheries.
- India has been involved in **Polar Code** and **Antarctic environmental governance** discussions.

UNEP (UNITED NATIONS ENVIRONMENT PROGRAMME)

- UNEP continues to lead global efforts in addressing **climate change**, **biodiversity loss**, and **pollution**. Its **2024 report** emphasizes the urgent need for **global action** on **environmental sustainability** and the acceleration of **nature-based solutions**.

- Established in **1972**, UNEP is the **leading global environmental authority** within the United Nations system, responsible for coordinating **environmental policies** and assisting countries in implementing sustainable practices.
- UNEP provides **scientific assessments**, develops **global environmental agreements**, and promotes **green economy initiatives**.

- India actively collaborates with UNEP on **climate change policies**, **sustainable development**, and **environmental governance**.
- UNEP's **Bhartiya Paryavaran Sansthan** works on **air quality** and **resource efficiency** in India.
- India's participation in **International Environment Governance** strengthens UNEP's global outreach.

- **Global Environmental Outlook (GEO)**: UNEP's flagship report that assesses the state of the global environment and the progress of international agreements.
- **Clean Seas Campaign**: UNEP's initiative aimed at reducing **marine plastic pollution** globally.
- **UN Decade on Ecosystem Restoration (2021-2030)**: UNEP plays a key role in promoting **ecosystem restoration** across the globe.

WMO (WORLD METEOROLOGICAL ORGANIZATION)

- WMO plays a critical role in **global climate monitoring** and addressing **extreme weather events**. The **2024 report** highlights a **rise in extreme climate events** due to global warming and the importance of **early warning systems**.

- Established in **1950**, WMO is a specialized agency of the **United Nations** that provides **leadership and expertise** in

international cooperation on **weather**, **climate**, **hydrology**, and **geophysical sciences**.

- It works to enhance the **global observation systems** for **weather forecasting** and climate prediction and promote **sustainable water resource management**.

- India is an active member of WMO and contributes to its efforts in **weather prediction** and **climate monitoring**.
- India's **Indian Meteorological Department (IMD)** collaborates with WMO on **weather data sharing** and **climate research**.
- India has also participated in the **Global Framework for Climate Services (GFCS)**, a WMO initiative to help countries improve climate resilience.

Significant Global Initiatives

- **Global Climate Observing System (GCOS)**: A WMO initiative to monitor and predict global climate changes.
- **World Climate Conference**: Held every few years to address the **impacts of climate change** and **advances in climate science**.
- **Early Warning Systems**: WMO focuses on improving early warning systems for **extreme weather events**, particularly in **developing countries**.
- **WMO's State of the Climate 2024 Report**: Highlights **record global temperatures**, the increasing frequency of **extreme weather events**, and the need for **global climate action**.

NDCS (NATIONALLY DETERMINED CONTRIBUTIONS)

Current Context

- NDCs are central to the **Paris Agreement**, with countries submitting their updated climate pledges at **COP29**. There is increasing pressure for stronger commitments to limit **global warming** to **1.5°C** above pre-industrial levels.
- Countries are under review for progress in **emission reductions** and **climate adaptation** efforts.

About

- NDCs are **climate action plans** submitted by countries under the **Paris Agreement** that outline each country's goals to reduce **greenhouse gas emissions** and adapt to **climate impacts**.
- Countries are required to **update their NDCs** every **five years**, with progressively stronger targets.
- NDCs are tailored to national circumstances, capacities, and priorities.

India's Context

- India's **NDCs** include commitments to **reduce emissions intensity** by **33-35% by 2030** (from 2005 levels), increase **renewable energy capacity** to **500 GW by 2030**, and achieve **Net Zero by 2070**.
- India has emphasized **climate justice** and the need for **financial support** and **technology transfer** from developed nations to meet these targets.

Significant Global Initiatives

- The **NDC Partnership** supports countries in **enhancing their NDCs** and **mobilizing resources** for implementation.
- The **Global Stocktake** (2023) evaluated global progress towards the goals of the **Paris Agreement**, urging countries to strengthen their NDCs to meet **1.5°C** and **2°C** targets.

International Reports & Key Takeaways

- **UNFCCC NDC Synthesis Report (2024)**: Most countries are not on track to meet their NDC targets, indicating a need for more ambitious climate commitments.
- **IPCC Special Report on 1.5°C**: Highlights that **global emissions must peak by 2025** to stay on track for the **1.5°C** target, urging countries to **strengthen NDCs**.

GREENWASHING

Current Context

- Greenwashing is increasingly scrutinized as consumers demand more **genuine sustainability**. Governments and organizations are cracking down on misleading environmental claims, with stricter regulations.

About

- Greenwashing refers to the practice of companies **misleading consumers** about the environmental benefits of their products or services. It aims to appear more **eco-friendly** than they truly are.
- India has introduced guidelines by the **Bureau of Indian Standards (BIS)** to curb greenwashing, promoting transparency in **eco-labeling** and **sustainability claims**.

CARBON BORDER ADJUSTMENT MECHANISM (CBAM)

Current Context

- The **EU** is implementing the **CBAM** to address **carbon leakage**, ensuring that imports meet **EU climate standards**. This move is gaining attention globally as it may influence international trade policies.

About

- CBAM is a **tax on imported goods** based on their **carbon content** to level the playing field between domestic industries subject to carbon pricing and foreign industries with less stringent regulations.
- India has raised concerns about the **impact of CBAM** on its exports, especially in sectors like **steel, aluminum**, and **cement**. India is working on strategies to enhance **sustainability** while addressing trade implications.
- The **EU** is leading in CBAM implementation, and discussions are ongoing in **WTO** regarding its potential **trade and environmental implications**.

WATER CREDIT

Current Context

- **Water credit systems** are gaining traction as part of efforts to address **water scarcity** and **improve water management**. These systems allow businesses and individuals to invest in water-saving initiatives.

About

- Water credit refers to a **market-based mechanism** where businesses or individuals can earn credits by investing in water conservation projects or improving water efficiency. These credits can be sold to others to meet sustainability goals.
- In India, water credit systems are being explored to address **water stress** and support **rural water management** programs. Initiatives like **Water.org** are helping **empower communities** through access to clean water.

AIR QUALITY MANAGEMENT EXCHANGE PLATFORM (AQMX)

Current Context

- AQMx is gaining attention as a **global collaboration platform** to enhance **air quality management** by sharing data, best practices, and policy innovations.

About

- AQMx is a **knowledge-sharing platform** that facilitates international cooperation on **air pollution control**, promoting **data exchange**, **capacity building**, and **technology transfer** for effective air quality management.
- India is leveraging AQMx to strengthen its **National Clean Air Programme (NCAP)** and improve **real-time air quality monitoring**, especially in major cities facing severe **air pollution**.

FUEL GAS DESULFURIZATION (FGD)

Current Context

- FGD is crucial in reducing **SO₂ emissions** from **thermal power plants** and industries. Stricter **global emission norms** are driving its adoption.

About

- FGD is a **pollution control technology** that removes **sulfur dioxide (SO₂)** from flue gases emitted by **coal-fired power plants** and industrial processes. Methods include **wet, dry, and semi-dry scrubbing**.
- FGD helps in **reducing acid rain**, **improving air quality**, and **complying with global emission standards**, but challenges include **high costs and water usage**.
- India has made **FGD mandatory** for **coal-based power plants** under **MoEFCC norms** to reduce air pollution. **NTPC** and private players are installing FGD units to meet **2027 emission deadlines**.

Global Initiatives

- Countries like **China and the USA** have implemented large-scale FGD systems. The **Paris Agreement** and WHO's **air quality guidelines** emphasize **SO₂ reduction**.

WATER CONSERVATION

Current Context

- With increasing **water scarcity**, governments are strengthening **policies and programs** for **sustainable water management**.

About

- Water conservation refers to **efficient management** and **sustainable use** of water resources to prevent **depletion**. Methods include **rainwater harvesting, wastewater recycling, and efficient irrigation**.

Status of Groundwater in India

- India is the **largest extractor of groundwater (25%** of global use).
- **Over 60% of irrigation and 85% of drinking water** needs depend on groundwater.
- As per **Indian State of Forest Report (ISFR) 2023**, **256 out of 755 districts** are **water-stressed** due to over-extraction.

Water Deficit Regions in India

- **Highly Water-Stressed States**: **Rajasthan, Punjab, Haryana, Uttar Pradesh, Gujarat, Madhya Pradesh, Tamil Nadu, Karnataka**.

- **Critical Urban Centers**: **Delhi, Bengaluru, Chennai, Hyderabad** face acute water shortages.

India's Initiatives

- **Jal Shakti Abhiyan** – Focuses on **rainwater harvesting** and **aquifer recharge**.
- **Atal Bhujal Yojana** – Aims at **groundwater management** in critical regions.
- **Namami Gange Programme** – Focuses on **river rejuvenation** and **pollution control**.
- **PM Krishi Sinchayee Yojana** – Promotes **efficient irrigation** (Per Drop More Crop)

NATIONAL WATER AWARDS

Current Context

- The **5th National Water Awards (2024)** recognized **best practices in water conservation** across states, organizations, and individuals. **Uttar Pradesh** won the **Best State Award** for its efforts in groundwater recharge and river rejuvenation.

About

- Instituted by the **Ministry of Jal Shakti (Department of Water Resources, RD & GR)** in **2018**, the National Water Awards recognize efforts in **water conservation, rainwater harvesting, and efficient water management**.

MAJOR WASTE MANAGEMENT CONVENTIONS

Basel Convention (1989)

- Regulates transboundary movement of hazardous wastes and promotes environmentally sound disposal.
- India is a party and follows its guidelines for e-waste, plastic waste, and biomedical waste management.

Stockholm Convention (2001)

- Controls Persistent Organic Pollutants (POPs), banning or restricting toxic chemicals like DDT and PCBs.
- India is a signatory and has taken steps to phase out harmful industrial chemicals.

Rotterdam Convention (1998)

- Regulates the trade of hazardous chemicals by requiring prior informed consent (PIC) before export.
- India follows PIC guidelines for chemicals like pesticides and industrial toxins.

Minamata Convention (2013)

- Controls mercury pollution, restricting its use in industries like gold mining and thermometers.

- India ratified it in 2018, implementing mercury-free policies.

GLOBAL FRAMEWORK ON CHEMICALS (GFC) FUND

Current Context

- The **GFC Fund**, launched at **ICCM5 (2023)**, aims to **mobilize financing** for sound chemical and waste management, supporting **developing countries** in reducing hazardous chemical pollution.

About

- Established under the **SAICM Beyond 2020** framework, the fund promotes **safe chemical production, use, and disposal** in alignment with **UN Sustainable Development Goals (SDGs)**.
- India participates in **global chemical safety initiatives** and has strengthened **Hazardous Waste Management Rules** to align with **international standards**.

PLASTIC POLLUTION

Current Context

- **UNEA-led Global Plastics Treaty negotiations** are ongoing to establish a **legally binding agreement** to curb plastic pollution.
- India is **phasing out single-use plastics** and strengthening **plastic waste management rules**.

About

- Plastic pollution is the accumulation of **non-biodegradable plastic waste** in **land, water bodies, and the atmosphere**, leading to **environmental and health hazards**.
- Major sources include **single-use plastics, microplastics, and mismanaged waste disposal**.

India's Context

- **Plastic Waste Management Rules, 2016 (amended 2022)** mandate **Extended Producer Responsibility (EPR)** for plastic producers.
- **Single-use plastics banned** since July 2022.
- India promotes **biodegradable alternatives, recycling, and waste-to-energy initiatives**.

Global Initiatives

- **Global Plastics Treaty (under negotiation, UNEA)** aims for **plastic production reduction and waste management**.
- **Basel Convention (2019 amendment)** regulates **plastic waste trade**.

MERCURY POLLUTION

Current Context

- Global efforts to **phase out mercury use** are increasing under the **Minamata Convention**. India is **strengthening regulations** on mercury emissions from **thermal power plants and industries**.

About

- Mercury pollution arises from **coal combustion, mining, industrial waste, and improper disposal of mercury-containing products**.
- Mercury is a **neurotoxin** that accumulates in **water bodies, affecting human health and ecosystems**.

India's Context

- India **ratified the Minamata Convention (2018)** and has **restricted mercury use** in products like **thermometers, CFLs, and batteries**.
- **Coal-fired power plants** remain a major source of mercury emissions.

Global Initiatives

- **Minamata Convention (2013)** aims to **eliminate mercury use and emissions** globally.
- **UNEP's Global Mercury Assessment** tracks mercury pollution trends.

PERSISTENT ORGANIC POLLUTANTS (POPS)

Current Context

- The **Stockholm Convention** is updating the **list of banned POPs**, urging countries to **phase out harmful industrial chemicals**. India is strengthening **regulations on pesticide and industrial waste management**.

About

- POPs are **toxic, long-lasting chemicals** that accumulate in the **environment, food chains, and human bodies**.
- Common POPs include **DDT, dioxins, furans, and polychlorinated biphenyls (PCBs)**.

India's Context

- India **ratified the Stockholm Convention (2006)** and has **banned several POPs** like **DDT for agriculture** while still allowing limited **malaria control use**.
- Strengthened **Hazardous Waste Management Rules** to regulate industrial POP emissions.

Global Initiatives

- **Stockholm Convention (2001)** aims to **eliminate or restrict** POPs.

PM2.5 AND PM10

Current Context

- **Air pollution levels remain high in major Indian cities**. Government is expanding initiatives like **National Clean Air Programme (NCAP)** to reduce **particulate matter (PM) levels**.

About

- **PM2.5** (fine particles ≤2.5 μm) and **PM10** (coarse particles ≤10 μm) are **airborne pollutants** from **vehicular emissions, industrial activities, construction dust, and biomass burning**.
- PM2.5 is more dangerous as it **penetrates deep into the lungs and bloodstream**, causing **respiratory and cardiovascular diseases**.

India's Context

- **NCAP** aims to **reduce PM levels by 40% by 2026** in **non-attainment cities**.
- **GRAP (Graded Response Action Plan)** is implemented in **Delhi-NCR** to control pollution during winter months.

DEMAND FOR GRANTS (2025-26) OF MINISTRY OF JAL SHAKTI

Current Context

- Standing Committee on Water Resources tabled Fourth Report on Demand for Grants (2025-26) of Ministry of Jal Shakti.

Key Highlights of Report

- **Reduction in Per Capita Availability:** Due to population growth and rising demand.
- **Decreasing Water Quality :** industrial discharge, agricultural runoff, and domestic sewage has led to a decline in water quality.
- **Overexploitation of Groundwater Resources:** agriculture, industry, and domestic use is depleting aquifers at an unsustainable rate.
- **Lower Efficiency:** Inefficient irrigation systems, leaky distribution networks, and outdated infrastructure result in suboptimal water usage.
- **Under-utilization of funds**: Only **60%** of the budget allocated for 2024-25 was used till the end of three quarters.

Way forward

- **Revision of the National Water Policy and implementation of the revised policy** is crucial to address issues of water shortage.

PM SURYA GHAR MUFT BIJLI YOJANA (PMSGMBY)

Current Context

- It crosses the milestone of **10 lakh** installations.

About

- It is the world's largest domestic rooftop solar initiative under the Ministry of new and renewable energy.It has been launched in 2024.

Objective

The scheme provides households with free electricity through the installation of subsidized rooftop solar panels, significantly reducing their energy costs.

- **Tenure :** Till FY 2026-27
- Subsidy Details :

Average Monthly Electricity Consumption (units)	Suitable Rooftop Solar Plant Capacity	Subsidy Support
0-150	1-2 kW	₹ 30,000/- to ₹ 60,000/-
150-300	2-3 kW	₹ 60,000/- to ₹ 78,000/-
> 300	Above 3 kW	₹ 78,000/-

Impact

- **Household Savings and Income Generation**.
- **Expansion of Solar Capacity:** Projected to add 30 GW of solar capacity.
- **Environmental Benefits**: Reducing CO2 emissions by **720 million tonnes**, making a substantial positive impact on the environment.
- **Job Creation:** The scheme is also expected to create approximately **17 lakh** direct jobs across various sectors.

MINIMUM DIETARY DIVERSITY (MDD)

Current Context

- UN statistical Commission adopted new SDG indicator on minimum dietary diversity.

Significance

- It Tracks progress toward ending malnutrition and achieving SDG 2 (Zero Hunger).
- It specifically tracks nutritional needs of women (MDD-W) and children (MDD-C), who are most vulnerable to malnutrition.

Status of India(2019-21)

- Central region of India **80%** of children with MDDF (minimum dietary diversity failure)

Way forward

- To design effective actions, evaluate results, and track progress over time, we must understand what individuals who are vulnerable to malnutrition actually eat—not just what is available in the market.

MADHAV NATIONAL PARK

Current Context

- India has added the **58th** tiger reserve with the recent entry being **Madhav National Park in Madhya Pradesh.**

About

- **Location:** Chambal region , MP
- **Fauna:** Crocodile,Cheetal,Jackal,Tiger.
- **Flora:** Tropical dry deciduous mixed forest and dry thorn forest. Kardhai is the dominant tree species.
- **Government Efforts to conserve tigers:** Project Tiger , International Big Cat Alliance.
- **National Tiger Conservation Authority (NTCA)** has granted in-principle approval for the designation of Madhav National Park in Shivpuri district as a Tiger Reserve.

SEAGRASS MEADOWS – THE EMERGING CARBON SINK

Current Context

World marks World Seagrass Day on March 1st.

About

Seagrasses are marine flowering plants that are found in shallow waters across the world, from the tropics to the Arctic Circle. They form large underwater meadows, hence creating highly productive and biologically rich habitats.

Significance

- **Highly efficient carbon sinks.**
- **Buffering ocean acidification**- Seagrasses enhance the resilience of vulnerable ecosystems, such as coral reefs.
- **Coastal populations** - They act as the first line of defence against floods and storms by reducing wave energy.

India's Commitment to Seagrass Conservation

- **National Policy on Marine Fisheries**: Highlights the importance of seagrasses, along with mangroves and coral reefs, in coastal marine ecosystems.
- **Indian Govt.** has Initiated a project in Andhra Pradesh, Maharashtra, and Odisha on increasing climate resilience of India's coastal communities through **Global Climate Fund (GCF)** for protecting India's natural ecosystems like mangroves and seagrasses.

ACTIVATED CARBON

Current Context

- Activated carbon sector in very bad situation because coconut shell availability suddenly falls.

About

- Activated carbon is carbon produced from bamboo, coconut husk, willow peat, wood, coir, lignite, coal, and petroleum pitch.
- It has applications in Water Treatment,Cholesterol Reduction, Wine-Making.

Challenges

- Increasing manufacturing cost and shrinking coconut shell availability.

BIOFUELS

Current Context

- India stands strong as the third largest biofuel producer as said by the Minister of Petroleum and Natural Gas.

About

- Biofuels are derived from renewable biomass resources and wastes such as Used Cooking Oil, Plastic, Municipal Solid Waste, waste gases, etc.
- Provide higher degree of national energy security in an environmentally friendly and sustainable manner by supplementing conventional energy resources, reducing dependence on imported fossil fuels and meet the energy needs of India's urban and vast rural population.

- **India has achieved 19.6% ethanol blending** in petrol as of January 2025 and is on track to reach **20%**, five years ahead of its original 2030 target.

Significance of Biofuels

- Enables a circular economy.
- Fulfilment of energy demand.

Challenges in Biofuel production

- land use competition, feedstock availability and cost, technical limitations, sustainability issues, and infrastructure and market constraints.

GHARIALS

Current Context

- Madhya Pradesh Chief Minister released **10** gharials, a critically endangered species, into the Chambal river at the National Chambal Gharial Sanctuary in Morena.

About

- MP hosts over **80%** of India's gharial population, It is critically endangered and comes under schedule **1 of WPA 1972** and Appendix 1 of CITES.
- Its habitat is freshwater rivers with sandy banks.Project Crocodile was started in 1975
- **Saltwater crocodile**(Least concern) found in sundarbans and **Mugger Crocodile**(Vulnerable) found in Ganga river.

OLIVE RIDLEY TURTLE

Current Context

- 2025 Saw the Biggest Mass Nesting of Turtles in Odisha's Rushikulya in at Least **20 Years**.

About

- **Conservation Status IUCN Status-** Vulnerable
- CITES - Appendix I
- **Wildlife Protection Act, 1972** - Schedule 1
- Warm tropical waters of the Pacific, Atlantic, and Indian Oceans.
- **Major Nesting Sites in India:** Gahirmatha, Rushikulya, and Devi River (Odisha).

SVALBARD GLOBAL SEED VAULT

Current Context

- The Svalbard Global Seed Vault also known as Arctic doomsday seed vault gets more than **14,000** new samples

About

- **Location:** Norwegian Arctic Island
- It acts as a backup of seeds in case of any emergency like nuclear war, human conflict, climate change etc.

MELTING GLACIERS

Current Context

- A study has found that melting glaciers have contributed nearly **2 cm** to global sea level rise since the start of the 21st century.

Consequences of Sea-Level Rise

- Human Settlements within 10km of coast will be vulnerable
- Freshwater contamination that will affect agriculture and drinking water supplies

PROJECT CHEETAH

Current Context

- Frequent chemical immobilizations induce severe stress in cheetahs.

About

- It aims to settle African cheetahs in India, where the Asiatic subspecies went extinct.

Challenges involved

- Significant differences in habitat between India and Africa pose challenges for long-term cheetah survival.
- Frequent chemical immobilizations induce severe stress in cheetahs.
- Due to minimal involvement of local communities and past displacements of indigenous people for conservation

GAP IN WATER AVAILABILITY

Current Context

- Global warming will change precipitation patterns.

Status in India

- Water gaps are expected to rise the most in the Ganges Brahmaputra, Godavari River basins, etc
- India is among the countries facing the largest water gaps.
- **India holds 18% of the global population but only 4% of its water resources.**

Factors Driving Water Crisis

- Overpopulation , Poor water management.
- Climate change.

FUNGI

Current Context

- A recent assessment by the International Union for Conservation of Nature (IUCN) reveals that nearly one-third of the evaluated fungi species are at risk of extinction due to factors like deforestation and agricultural expansion.

About

- Fungi play a critical role in ecosystems, contributing to decomposition, nutrient cycling, and forming symbiotic relationships with plants.
- They are also integral to human industries, aiding in the production of medicines, bread, and beer.

Key Findings

- **Assessment Scope:** Out of approximately **2.5 million** estimated fungi species, only **1,300** have been formally evaluated.
- **Threat Levels:** Of these assessed species, 411 are threatened with extinction.

OPERATION BRAHMA

Current Context

- Following a devastating **7.7** magnitude earthquake that struck Myanmar on March 28, 2025, India launched 'Operation Brahma' to provide humanitarian assistance to the affected regions.

About

- The earthquake caused widespread destruction in Myanmar, resulting in significant loss of life and property.

Key Actions

- **Aid Deployment:** India dispatched search and rescue teams, medical personnel, and relief supplies, including blankets, hygiene kits, and food packets, to assist in the relief efforts.
- **Field Hospital:** A field hospital was established near Mandalay to provide immediate medical care to the injured.

Significance

- India's prompt response underscores its commitment to regional solidarity and humanitarian assistance, strengthening bilateral relations with Myanmar.

PERMAFROST

Current Context

- Recent studies indicate that permafrost in the Kashmir Himalayas is melting at an accelerated rate due to rising global temperatures, posing new environmental challenges to the region.

About

- Permafrost refers to ground that remains frozen for at least two consecutive years and is critical for maintaining the structural integrity of mountainous terrains.

Key Concerns

- **Landslides and Infrastructure Damage:** Thawing permafrost can destabilize slopes, leading to increased landslides and damage to infrastructure.
- **Water Resources:** Melting permafrost affects the hydrological cycle, potentially altering water availability for local communities.

IUCN GREEN LIST

Current Context

- The International Union for Conservation of Nature (IUCN) continues to expand its Green List, recognizing protected and conserved areas that meet high standards of effective management and governance.

About

- The IUCN Green List serves as a global standard for best practices in area-based conservation, promoting successful conservation outcomes.
- Green-listed sites gain international recognition, which can enhance funding opportunities and community support.

OKJÖKULL

Current Context

- Okjökull, a glacier in Iceland, was officially declared dead, becoming the first glacier lost to climate change.

About

- Okjökull, once spanning **16 square kilometers**, lost its glacier status after melting down to less than 1 square kilometer.
- The loss of Okjökull has been documented as a stark indicator of the accelerating effects of global warming on glacial regions.

Challenges

- Addressing climate change requires coordinated international efforts to reduce greenhouse gas emissions and implement sustainable environmental policies.

PLACES IN NEWS

Places in News

NAGORNO-KARABAKH REGION

Current Context

- Azerbaijan launched a military offensive in 2023, leading to Armenian withdrawal and displacement of ethnic Armenians.

Location

- A landlocked region in the South Caucasus, within Azerbaijan but historically claimed by ethnic Armenians.

Geopolitical Significance

- A conflict-prone area between Armenia and Azerbaijan; witnessed wars in 1991-94 and 2020.
- Mediated by Russia, Turkey, and international organizations like the OSCE Minsk Group.
- **Strategic Importance**: Lies near important energy pipelines connecting the Caspian region to Europe.

UKRAINE

Current Context

- Annexation of Crimea by Russia (2014).
- **Full-scale invasion by Russia (2022) led to global geopolitical shifts.**

Location

- Eastern Europe; bordered by Russia, Belarus, Poland, Slovakia, Hungary, Romania, Moldova, and the Black Sea.
- Black Sea ports (e.g., Odessa) crucial for global trade.
- **Capital**: Kyiv

Geopolitical Importance

- Largest country in Europe (excluding Russia).

- Major grain exporter; known as the "Breadbasket of Europe."

International Alignments

- Seeking NATO and EU membership; faces opposition from Russia.
- Gave up nuclear weapons under the 1994 Budapest Memorandum.

LEBANON (BEIRUT)

Current Context

- **Economic crisis ongoing since 2019, with hyperinflation and banking sector collapse**.
- Political instability due to lack of government formation and Hezbollah's influence.
- Israel-Hezbollah tensions rising due to regional conflicts.

Location

- **Western Asia**, bordered by **Syria (north & east), Israel (south), and the Mediterranean Sea (west)**.

Geopolitical Significance

- Historic trade hub linking **Europe, the Middle East, and Africa**.
- Hosts large numbers of **Palestinian and Syrian refugees**.

International Involvement

- Involved in regional conflicts; presence of **UN peacekeeping forces (UNIFIL)**.
- Dependent on foreign aid from the IMF**, France, and Gulf countries**.

Strategic Importance

- Capital **Beirut** is a major **Mediterranean port city**.
- **The Lebanese banking sector** was once a financial hub but has collapsed.

TÜRKIYE (ANKARA)

Current Context

- Major earthquakes in **February 2023** caused widespread destruction.
- **Strained relations with NATO** over Sweden's membership.
- **Mediating role in Russia-Ukraine war**, involved in **Black Sea Grain Initiative**.

Location

- **Transcontinental country** in **both Europe and Asia**, bordering **Greece, Bulgaria, Syria, Iraq, Iran, Armenia, and Georgia**.

Geopolitical Significance

- Controls the **Bosporus and Dardanelles Straits**, key maritime chokepoints.

- **Ankara** is the political capital, while **Istanbul** is the financial hub.
- Hosts **US military bases**, including **Incirlik Air Base**.

International Involvement

- Member of **NATO, G20, and the Organization of Turkic States**.
- **Supports Azerbaijan** in the Nagorno-Karabakh conflict.
- **Intervened militarily in Syria and Libya** in recent years.

KURSK REGION

Current Context

- **Ukrainian Incursion (2024):** Ukrainian forces briefly occupied parts of Kursk Oblast. Russia later reclaimed over 40% of lost territory.
- **Corruption Allegations:** Russian officials allegedly embezzled $33 million meant for regional defense, worsening vulnerabilities.
- **Russia declared an emergency** in the Kursk Region.

Historical Significance

- **Battle of Kursk (1943):** Largest tank battle in history; Soviet victory over Nazi Germany.
- **Strategic Importance:** Key region in WWII and ongoing Russia-Ukraine conflict.

NORD STREAM

Current Context

- **Nord Stream pipelines were sabotaged in September 2022**, causing global energy concerns.
- **Europe reduced dependence on Russian gas** after the Ukraine war.

Geopolitical Significance

- **Two major pipelines (Nord Stream 1 & 2) run under the Baltic Sea**, connecting **Russia to Germany**.
- Key pipeline for **Russian gas exports to Europe**.
- Suspended due to **EU sanctions on Russia**.
- Was supplying **over 40% of Germany's natural gas** before being halted.

International Involvement

- **Germany, Russia, and NATO involved in security concerns** after the sabotage.
- Investigations ongoing; no confirmed culprit.

BALTIC SEA

Current Context

- **Nord Stream pipeline sabotage (2022) increased tensions** in the region.
- **Finland and Sweden joining NATO**, shifting military balance.

Location

- Located in **Northern Europe**, surrounded by **Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Russia, and Sweden**.

Geopolitical Significance

- Strategic for **NATO-Russia naval movements**.
- Important trade route for **oil and gas exports**.
- **Kiel Canal and the Gulf of Finland** are crucial for maritime traffic.

International Involvement

- Increased **NATO presence** after the Russia-Ukraine war.

GULF OF ADEN

Current Context

- **Rise in pirate attacks near Yemen and Somalia (2023)**.
- Key route for **Red Sea trade, impacted by Houthi rebel activities**.

Location

- **Between Yemen (north) and Somalia (south)**, linking the **Red Sea and Arabian Sea**.

Geopolitical Significance

- Vital for **global oil and cargo shipping**.
- **Connects Indian Ocean trade to Europe via Suez Canal**.
- **Bab el-Mandeb Strait** controls access between the Gulf and the Red Sea.

International Involvement

- **NATO and the Indian Navy conduct anti-piracy operations**.
- **China and the US have naval bases in nearby Djibouti**.

Location
- **Horn of Africa**, bordered by **Ethiopia, Kenya, Djibouti, and the Indian Ocean**.

Geopolitical Significance
- **Piracy in the Indian Ocean** affecting global trade.
- **UN, US, and African Union (ATMIS) conduct counterterrorism operations**.
- **Mogadishu port is key for East African trade**.

ABU MUSA ISLAND

Current Context
- **Disputed between Iran and the UAE** over territorial control.

Location
- **In the Persian Gulf**, near the **Strait of Hormuz**.

Geopolitical Significance
- Occupied by **Iran**, claimed by the UAE.
- **US and Gulf countries monitor Iran's control over the island**.
- Near **major global oil shipping routes**.

SENKAKU ISLANDS

Current Context
- The Senkaku Islands are a major point of contention between China and Japan. Recently, China has increased its naval presence in the region, leading to heightened tensions.

Location & Borders
- Located in the East China Sea, approximately 170 km northeast of Taiwan and 330 km west of Okinawa, Japan.

International Memberships
- Japan, which administers the islands, is a member of **G7, G20, QUAD,** and other international organizations.

Geopolitical & Strategic Significance
- The islands have rich fishing grounds and potential underwater oil and gas reserves.

SOMALIA (MOGADISHU)

Current Context
- **Ongoing conflict with Al-Shabaab militants**.
- Facing **severe drought and famine (2023)**.

- Their location is crucial for maritime trade routes in the East China Sea.
- The dispute is central to Japan-China relations, affecting regional security and U.S. strategic interests in the Indo-Pacific.

Senkaku (JPN)
Diaoyu (PRC)
Tiaoyutai (ROC)
Islands

SAHEL REGION

Current Context
- The region has seen rising instability due to jihadist insurgencies, military coups (Mali, Burkina Faso, Niger), and climate challenges affecting food security.

Location & Borders
- A semi-arid belt stretching across Africa from Senegal to Sudan, forming a transition zone between the Sahara Desert and the savanna regions.
- It includes parts of Chad, Mali, Niger, Burkina Faso, Sudan, and others.

International Memberships
- G5 Sahel (Mauritania, Mali, Burkina Faso, Niger, Chad), African Union.

Geopolitical & Strategic Significance
- The region is a hub for militant Islamist groups, impacting global security.
- It has vast reserves of uranium, gold, and other minerals.
- France, the U.S., and Russia have growing security and military interests here.
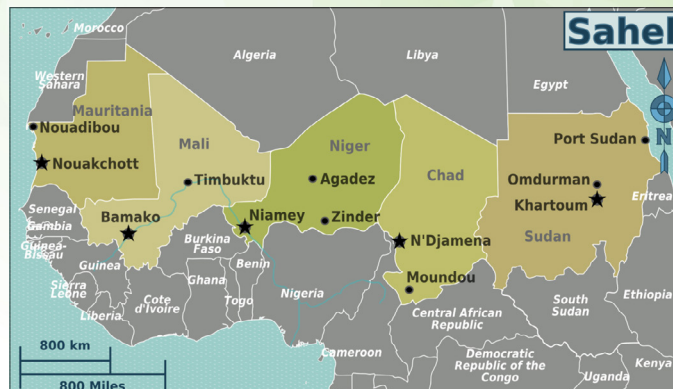
KURDISH REGION

Current Context
- The Kurdish population is involved in struggles for autonomy across multiple countries. Clashes between Turkey and Kurdish militant groups, as well as tensions in Iraq's Kurdistan Region, remain ongoing.

Location & Borders
- Spans parts of Turkey, Iraq, Syria, and Iran. The Iraqi Kurdistan Region has partial autonomy.

International Memberships
- Not a sovereign state; however, the Kurdish Regional Government (KRG) in Iraq has diplomatic relations with many countries..

Geopolitical & Strategic Significance
- The region has significant oil reserves, particularly in Iraq.
- Kurdish militias are key U.S. allies in the fight against ISIS in Syria and Iraq.
- Turkey considers Kurdish separatism a major national security threat.

TIGRAY, ETHIOPIA

Current Context
- The Tigray region recently witnessed a brutal civil war between the Ethiopian federal government and the Tigray People's Liberation Front (TPLF), leading to humanitarian crises.

Location & Borders
- Northern Ethiopia, bordering Eritrea and Sudan.

International Memberships
- Ethiopia is a member of the African Union, IGAD (Intergovernmental Authority on Development).

Geopolitical & Strategic Significance

- The conflict has threatened stability in the Horn of Africa.
- Ethiopia's relations with Eritrea, Sudan, and Egypt (due to the Nile water dispute) are influenced by the situation in Tigray.
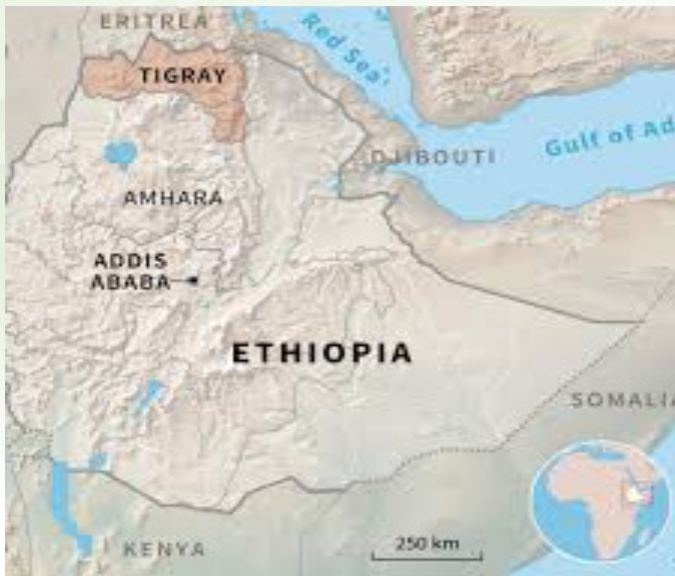
YEMEN

Current Context

- Yemen is embroiled in a **prolonged civil war between the Saudi-backed government and Iran-support Houthi rebels.** The conflict has led to humanitarian crises and global security concerns due to Houthi attacks on Red Sea shipping routes.
- The United States carried out new air strikes on Houthis in Yemen.

Location & Borders

- Southwestern Arabian Peninsula; borders Saudi Arabia and Oman.

International Memberships

- Arab League, GCC (observer), United Nations.

Sea Borders

- Borders the Red Sea, Gulf of Aden, and the Arabian Sea.

Geopolitical & Strategic Significance

- Controls the Bab el-Mandeb Strait, a vital maritime chokepoint.
- The civil war has global implications, involving Saudi Arabia, Iran, and the U.S.

KACHIN STATE

Current Context

- Kachin State in Myanmar has seen ongoing armed conflict between ethnic Kachin insurgents and the Myanmar military.

Location & Borders

- Northern Myanmar; borders China and India.

Geopolitical & Strategic Significance

- The region is rich in jade and other natural resources.
- Its location affects Myanmar-China relations, with China having economic and strategic interests.
- Myanmar is a member of ASEAN.

SUDAN

Current Context

- **Sudan is facing internal conflict between the army and paramilitary forces,** leading to mass displacement and economic turmoil.

Location & Borders

- Borders Egypt, Libya, Chad, Central African Republic, South Sudan, Ethiopia, and Eritrea.

International Memberships

- African Union, Arab League.

Sea Borders

- Red Sea.

Geopolitical & Strategic Significance

- Controls key access to the Red Sea and trade routes.
- Has vast gold and oil reserves.

RED SEA AND HOUTHIS

Current Context
- Houthi rebels have been attacking commercial ships in the Red Sea, disrupting global trade.

Geopolitical & Strategic Significance
- The Red Sea connects the Suez Canal to the Arabian Sea.
- Any conflict in the region threatens global energy security and trade.

CHECHNYA

Current Context
- Chechnya remains a security concern for Russia, with occasional insurgent activities.

Location & Borders
- Part of Russia, in the North Caucasus.

Geopolitical & Strategic Significance
- Has been the site of two wars against Russian control.
- Plays a role in Russia's domestic and regional security policies.
- Part of the Russian Federation.

ISRAEL

Current Context
- Israel is engaged in conflict with Hamas and is at odds with Iran-backed groups.

Location & Borders
- Borders Lebanon, Syria, Jordan, Egypt, and Palestine.
- Sea borders Mediterranean Sea.

Geopolitical & Strategic Significance
- A key U.S. ally in the Middle East.
- Its tech and defense industries have global influence.
- **International memberships:** United Nations, OECD.

Israel — States and Capitals with Major Cities

JORDAN

Current Context
- Jordan remains a stable country in a volatile Middle East, hosting a large number of refugees from Syria and Palestine.

Location & Borders
- Borders Syria, Iraq, Saudi Arabia, Israel, and Palestine.
- Has a small coastline along the Red Sea (Gulf of Aqaba).

International Memberships
- Arab League, United Nations, OIC.

Geopolitical & Strategic Significance
- A key U.S. ally in the region.
- Acts as a buffer between Israel and Arab nations.

BLUE LINE, LEBANON

Current Context
- The Blue Line is a United Nations-demarcated border between Israel and Lebanon. Tensions persist due to Hezbollah's activities and Israeli border security concerns.

Location & Borders
- Separates southern Lebanon from northern Israel.

Geopolitical & Strategic Significance
- Frequent flashpoint for Israel-Hezbollah conflicts.
- Affects regional security in the Levant.
- Lebanon and Israel are members of the United Nations, but no diplomatic relations exist between them.

IRAQ

Current Context
- Iraq faces political instability, Iran-backed militias, and occasional ISIS insurgencies.

Location & Borders
- Iran, Kuwait, Saudi Arabia, Jordan, Syria, and Turkey.
- Small coastline on the Persian Gulf.

International Memberships
- OPEC, Arab League, United Nations.

Geopolitical & Strategic Significance

- Major oil-producing country.
- Its stability is crucial for Middle Eastern security.

IRAN

Current Context

- Iran faces economic sanctions, nuclear program disputes, and regional proxy conflicts.
- Iran's Revolutionary Guards have unveiled new missile systems in the Gulf on Greater Tunb, Lesser Tunb, and Abu Musa; three strategic islands near the Strait of Hormuz.

Location & Borders

- Iraq, Turkey, Armenia, Azerbaijan, Turkmenistan, Afghanistan, and Pakistan.
- **Sea borders:** Persian Gulf, Gulf of Oman, Caspian Sea.

International Memberships

- OPEC, SCO, UN, BRICS (as of 2024).

Geopolitical & Strategic Significance

- Controls the Strait of Hormuz, a critical oil chokepoint.
- A major player in Middle Eastern geopolitics.

Source : Vectorstock

UZBEKISTAN

Current Context

- Uzbekistan is emerging as a key player in Central Asia's connectivity and trade.

Location & Borders

- Kazakhstan, Kyrgyzstan, Tajikistan, Afghanistan, and Turkmenistan.
- It is landlocked.

International Memberships

- SCO, CIS, United Nations.

Geopolitical & Strategic Significance

- Rich in natural gas and minerals.
- Key transit country for China's Belt and Road Initiative (BRI).

UAE

Current Context

- UAE has normalized ties with Israel under the Abraham Accords and is strengthening trade relations with India and China.

Location & Borders

- Borders Saudi Arabia and Oman.
- **Sea borders:** Persian Gulf, Gulf of Oman.

International Memberships

- GCC, OPEC, United Nations.

Geopolitical & Strategic Significance

- Controls strategic ports like Jebel Ali.
- A major financial and energy hub.

THAILAND

Current Context

- Thailand is balancing relations between the U.S. and China while managing internal political tensions.

Location & Borders

- Borders Myanmar, Laos, Cambodia, and Malaysia.
- **Sea borders:** Andaman Sea, Gulf of Thailand.

International Memberships

- ASEAN, United Nations.

Geopolitical & Strategic Significance

- A key player in ASEAN's economic and security framework.
- A major tourism and manufacturing hub.

Main Cities of Thailand & Location Map

PHILIPPINES

Current Context

- Philippines is engaged in maritime disputes with China over the South China Sea.

Location & Borders

- An archipelago in Southeast Asia; maritime borders with China, Taiwan, Vietnam, Malaysia, Indonesia.
- **Sea Borders:** Pacific Ocean, South China Sea, Celebes Sea.

International Memberships

- ASEAN, UN, APEC.

Geopolitical & Strategic Significance

- Controls crucial maritime routes in the South China Sea.
- A key U.S. ally in Asia.

MAURITIUS

Current Context

- Mauritius has an ongoing territorial dispute with the UK over the Chagos Islands.

Location & Borders

- An island nation in the Indian Ocean, east of Madagascar.

International Memberships

- African Union, Commonwealth, United Nations.

Geopolitical & Strategic Significance

- Key player in Indian Ocean maritime security.
- Important for India's naval strategy.

CHAGOS ISLANDS

Current Context

- The UK administers the Chagos Islands, but Mauritius claims sovereignty.

Location & Borders

- Located in the Indian Ocean, south of the Maldives.

International Memberships

- The UK is a NATO and Commonwealth member.

Geopolitical & Strategic Significance

- Hosts the U.S. military base at Diego Garcia.
- Affects Indo-Pacific military dynamics.

RWANDA

Current Context

- Rwanda has seen rapid economic growth but faces political repression under President Paul Kagame. Recent tensions with the Democratic Republic of Congo (DRC) over rebel groups have escalated.

Location & Borders

- Landlocked country in East Africa; borders Uganda, Tanzania, Burundi, and DRC.
- It is landlocked.

International Memberships

- African Union, Commonwealth, East African Community (EAC).

Geopolitical & Strategic Significance

- Strategic location in the Great Lakes region.
- A key player in regional peacekeeping and trade.

TOGO

Current Context

- Togo has seen political stability but faces economic challenges and periodic protests over governance issues.

Location & Borders

- West Africa; borders Ghana, Burkina Faso, and Benin.

International Memberships

- ECOWAS, African Union, United Nations.

Geopolitical & Strategic Significance

- Key port access to landlocked West African countries.

- Developing as a regional logistics and trade hub.

DEMOCRATIC REPUBLIC OF THE CONGO (DRC)

Current Context

- DRC continues to struggle with armed insurgencies, particularly in its eastern provinces. It is rich in minerals but plagued by conflict.

Location & Borders

- Central Africa; borders Angola, Zambia, Tanzania, Burundi, Rwanda, Uganda, South Sudan, Central African Republic, and Republic of Congo.
- Small coastline along the Atlantic Ocean.

International Memberships

- African Union, SADC, United Nations.

Geopolitical & Strategic Significance

- Major supplier of cobalt, crucial for global electronics and EV batteries.
- Instability affects regional and global security.

GHANA

Current Context

- Ghana remains one of Africa's most stable democracies, with a growing economy based on gold, cocoa, and oil exports.

Location & Borders

- West Africa; borders Ivory Coast, Burkina Faso, and Togo.

International Memberships

- ECOWAS, African Union, Commonwealth.

Geopolitical & Strategic Significance

- Emerging as a regional economic and political leader.
- Key player in West African security and trade.

MALI

Current Context

- Mali has been facing a prolonged jihadist insurgency and military rule following multiple coups.

Location & Borders

- West Africa; borders Algeria, Niger, Burkina Faso, Ivory Coast, Guinea, Senegal, and Mauritania.
- it is landlocked.

International Memberships

- African Union, ECOWAS (suspended).

Geopolitical & Strategic Significance

- Hotspot for Islamist extremism in the Sahel.

- Gold-rich country with growing Russian influence.

ZAMBIA

Current Context
- Zambia is focusing on economic recovery and restructuring its debt amid financial challenges.

Location & Borders
- Southern Africa; borders Angola, DRC, Tanzania, Malawi, Mozambique, Zimbabwe, Botswana, and Namibia.
- It is landlocked.

International Memberships
- African Union, SADC, United Nations.

Geopolitical & Strategic Significance
- Major copper producer, crucial for global supply chains.
- Key player in regional transport corridors.
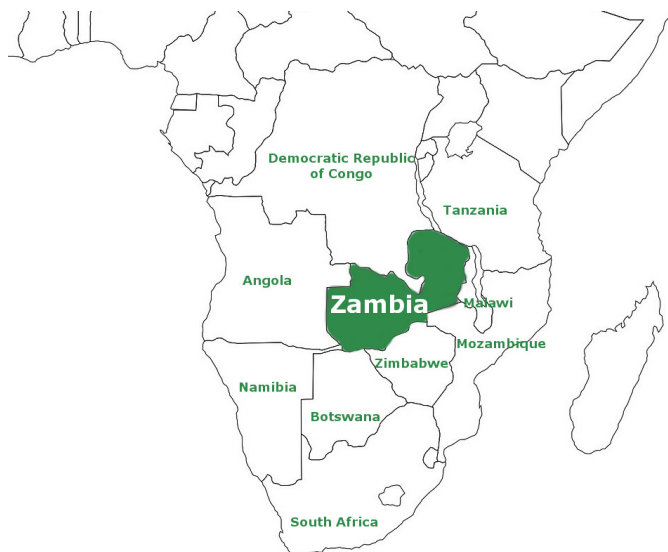
MEXICO

Current Context
- Mexico faces drug cartel violence, economic reforms, and immigration issues with the U.S.

Location & Borders
- North America; borders the U.S., Guatemala, and Belize.
- **Sea Borders:** Pacific Ocean, Gulf of Mexico, Caribbean Sea.

International Memberships
- USMCA, OECD, United Nations.

Geopolitical & Strategic Significance
- A critical trade partner of the U.S.
- Important oil producer and manufacturing hub.

BOLIVIA

Current Context
- Bolivia has seen political unrest and disputes over lithium mining policies.

Location & Borders
- South America; borders Brazil, Paraguay, Argentina, Chile, and Peru.
- It is landlocked.

International Memberships
- United Nations, Andean Community.

Geopolitical & Strategic Significance
- Has one of the world's largest lithium reserves.
- Balances relations between China, Russia, and the West.

PANAMA

Current Context

- Panama remains a key global trade hub due to the Panama Canal.

Location & Borders

- Central America; borders Costa Rica and Colombia.
- **Sea Borders:** Caribbean Sea, Pacific Ocean.

International Memberships

- United Nations, OAS.

Geopolitical & Strategic Significance

- Controls the Panama Canal, vital for global shipping.
- Increasing Chinese and U.S. competition in its infrastructure sector.

TRINIDAD AND TOBAGO

Current Context

- The country is diversifying its economy beyond oil and gas.

Location & Borders

- Caribbean; near Venezuela.
- **Sea Borders:** Caribbean Sea, Atlantic Ocean.

International Memberships

- CARICOM, United Nations.

Geopolitical & Strategic Significance

- Major oil and gas producer in the Caribbean.
- A key financial hub in the region.

NEW ZEALAND

Current Context

- Strengthening Indo-Pacific alliances, balancing China ties.

Location & Borders

- Oceania; nearest countries are Australia and Pacific island nations.
- **Sea Borders:** Pacific Ocean, Tasman Sea.

International Memberships

- Five Eyes, CPTPP, AUKUS (not a military partner).

Geopolitical & Strategic Significance

- Key player in the Pacific security framework.
- A major agricultural and tourism economy.

CROATIA

Current Context

- Joined the Schengen Zone in 2023 and the Eurozone.

Location & Borders

- Southeast Europe; borders Slovenia, Hungary, Serbia, Bosnia, and Montenegro.

International Memberships

- EU, NATO, United Nations.

Geopolitical & Strategic Significance

- Key tourism destination.
- Important for EU's Balkan stability

REPUBLIC OF IRELAND

Current Context

- Ireland maintains a strong economy, but Brexit has complicated its trade and border relations with the UK.

Location & Borders

- Western Europe; shares a land border with Northern Ireland (UK).
- **Sea Borders:** Atlantic Ocean, Irish Sea.

International Memberships

- EU, United Nations.

Geopolitical & Strategic Significance

- Key EU economy with strong tech and financial sectors.
- Sensitive border issues with the UK due to Brexit.

GREECE

Current Context

- Greece is strengthening its regional alliances amid tensions with Turkey over maritime boundaries.

Location & Borders

- Southeastern Europe; borders Albania, North Macedonia, Bulgaria, and Turkey.
- **Sea Borders:** Aegean Sea, Ionian Sea, Mediterranean Sea.

International Memberships

- EU, NATO, United Nations.

Geopolitical & Strategic Significance

- Controls key maritime routes in the Eastern Mediterranean.
- Critical NATO ally near Middle Eastern conflicts.

NETHERLANDS

Current Context

- The Netherlands is a major global trading hub, playing a key role in EU energy security and climate policies.

Location & Borders

- Western Europe; borders Germany and Belgium.
- **Sea Borders:** North Sea.

International Memberships

- EU, NATO, United Nations.

Geopolitical & Strategic Significance

- Hosts key EU institutions and international courts in The Hague.
- Major logistics hub with the Port of Rotterdam.

LATVIA

Current Context

- Latvia is enhancing its defense capabilities amid rising security threats from Russia.

Location & Borders

- Eastern Europe; borders Estonia, Russia, Belarus, and Lithuania.

International Memberships

- EU, NATO, United Nations.

Geopolitical & Strategic Significance

- Critical NATO frontline state against Russian aggression.
- Part of the Baltic security framework.

SITTWE (MYANMAR)

Current Context

- Sittwe is a key location in India's Kaladan Multi-Modal Transit Transport Project, improving connectivity with Myanmar's Rakhine State.

Location & Borders

- Western Myanmar, near the Bay of Bengal.

International Memberships

- Myanmar is part of ASEAN, United Nations.

Geopolitical & Strategic Significance

- Crucial for India's Act East Policy and trade with Southeast Asia.
- Strategic importance in China's influence in Myanmar.

SAINT MARTIN ISLAND (BANGLADESH)

Current Context

- A **disputed island between Bangladesh and Myanmar,** with growing environmental and security concerns.

Location & Borders

- Off the southeastern coast of Bangladesh, near Myanmar's Rakhine State.
- **Sea Borders:** Bay of Bengal.

International Memberships

- Bangladesh is a UN, SAARC, and BIMSTEC member.

Geopolitical & Strategic Significance

- Strategically located near the Myanmar-Bangladesh maritime boundary.
- Increasing tourism and security concerns due to Rohingya refugee movements.

GUAM ISLAND (USA)

Current Context

- A key U.S. military base in the Pacific, crucial for countering China's influence.

Location & Borders

- Western Pacific, part of the Mariana Islands.

International Memberships

- U.S. territory under United Nations recognition.

Geopolitical & Strategic Significance

- Hosts major U.S. military bases, crucial for Indo-Pacific security.
- Strategic for monitoring China's activities in the South China Sea.

LAKE TURKANA (KENYA-ETHIOPIA)

Current Context

- **Lake Turkana is under environmental stress** due to Ethiopia's dam projects on the Omo River.

Location & Borders

- Eastern Africa; primarily in Kenya, with part extending into Ethiopia.
- It is a freshwater lake.

International Memberships

- Kenya and Ethiopia are African Union and United Nations members.

Geopolitical & Strategic Significance

- Vital for local communities and biodiversity.

SYRIA(DAMASCUS)

Current Context:

- Syria's Alawites(minority) terrorised by revenge killings.

Location

- Country in Middle East Located in Eastern Mediterranean.
- **Bodering countries : Iraq,Israel,Lebanon,Jordan,Turkey.**

Geopolitical Significance

- Syria is a key player in Middle Eastern politics due to its location and alliances with Iran and Russia.
- Damascus, the capital of Syria, is considered one of the oldest continuously inhabited cities in the world.

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GUATEMALA

Current Context

- Guatemala's Fuego volcano erupts , authorities call for evacuation of 30,000 people.

Location

- Country in Central America.

Geopolitical Significance

- Guatemala is a key player in the Central American migration crisis and a significant transit point for drug trafficking.
- Guatemala is home to the ancient Maya city of Tikal, a UNESCO World Heritage Site.

VANUATU

Current Context

- Vanuatu has been in the spotlight due to its Prime Minister's decision to cancel a passport issued to an Indian fugitive, following an Interpol alert.

Location

- Island nation in the South Pacific Ocean.

Geopolitical Significance

- Its strategic location makes it significant in Pacific maritime trade routes and a focus of China's growing influence.

BARBADOS

Current Context

- Indian PM receives top Barbados award for 'strategic leadership' in Covid crisis. **Location:** Island nation in the Caribbean region.

Geopolitical Significance

- It is a key financial hub in the Caribbean, known for offshore banking and international business services.

Bordering Water Bodies

- Caribbean Sea, Atlantic Ocean.

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FALKLAND ISLANDS

Current Context

- The sovereignty of the Falkland Islands is disputed between the UK and Argentina, with ongoing diplomatic tensions.

Location

- Archipelago in the South Atlantic Ocean.

Geopolitical Significance

- The islands are rich in fisheries and hold potential oil and gas reserves, making them strategically and economically significant.

CASPIAN SEA

Current Context

- NASA satellites capture mysterious 'ghost island' in Caspian Sea before it vanishes

Location

- Large inland sea located between Europe and Asia.
- **Bordering Countries:** Russia, Kazakhstan, Turkmenistan, Iran, Azerbaijan.
- Landlocked (no external water body).

Geopolitical Significance

- It is rich in oil and natural gas, making it strategically important for energy production and transportation.
- The Caspian Sea is the largest enclosed inland water body in the world by area.

SOUTH KOREA

Current Context

- South Korea faces rising tensions with North Korea over missile tests and military drills.
- South Korea is facing its worst-ever wildfires.

Location

- Country in East Asia, on the southern half of the Korean Peninsula.
- **Bordering Water Bodies:** Yellow Sea, Sea of Japan (East Sea), Korea Strait.

Geopolitical Significance

- It is a key US ally in containing North Korea and countering China's influence in the region.

BERLIN

Current Context

- Friedrich Merz, of the Christian Democratic Union of Germany, set to become Germany's new chancellor.

Location

- Capital city of Germany, located in northeastern Germany.

Geopolitical Significance

- Berlin is a major political and economic hub in the European Union (EU), influencing EU policy making.

HONDURAS

Current Context

- India has sent humanitarian assistance to Honduras in the aftermath of Tropical storm SARA.

Location

- Country in Central America.

Geopolitical Significance

- It is a key transit point for drug trafficking routes from South America to the US.

CANBERRA

Current Context

- The External Affairs Minister discussed issues related to the Indo-Pacific region with his Australian counterparts.

Location

- Capital city of Australia, located in the southeastern part of the country.

Geopolitical Significance

- As the administrative center of Australia, it hosts the Parliament, government agencies, and foreign embassies.

REPUBLIC OF COSTA RICA

Current Context

- Costa Rica agrees to be transit hub for Indian immigrants deported from US

Location

- Country in Central America.

Geopolitical Significance

- It is known for political stability, eco-tourism, and being a regional model for democracy.

TURKEY

Current Context

- Protesters erupted in Turkey over the arrest of President Erdogan's political rival.

Location

- Transcontinental country located at the intersection of Europe and Asia.
- **Bordering Countries:** Greece, Bulgaria, Georgia, Armenia, Iran, Iraq, Syria.Bordering
- **Water Bodies:** Black Sea, Aegean Sea, Mediterranean Sea, Sea of Marmara.

Geopolitical Significance

- A NATO member and a strategic bridge between Europe, the Middle East and Central Asia.

SURINAME

Current Context

- India sends **$1 million** worth of machinery to Suriname to boost the passion fruit industry.

Location

- A small country on the northeastern coast of South America.

Geopolitical Significance

- Rich in natural resources, including gold, oil, and bauxite, with growing ties to India.

PERU

Current Context

- Peru has declared a state of emergency and deployed the army in the capital, Lima, following a surge in violence.

Location

- Country on the western coast of South America.

Geopolitical Significance

- Home to major mineral reserves, including copper, gold, and silver, and a key player in Latin American politics.
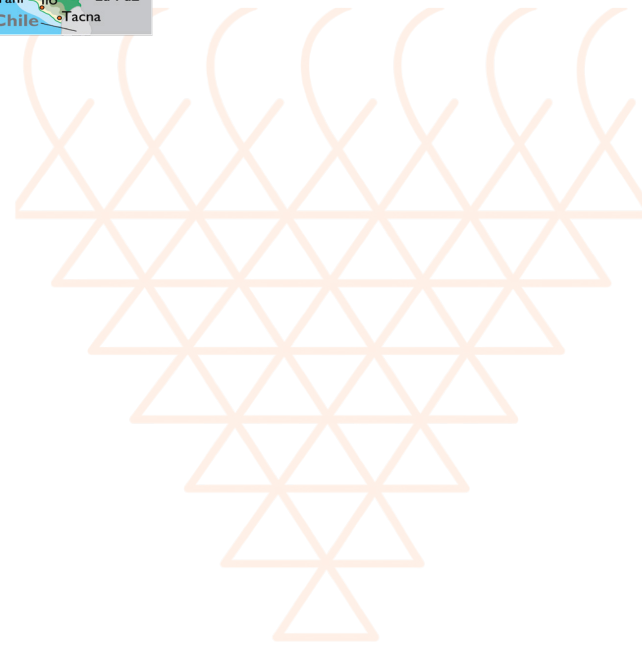
SCIENCE & TECHNOLOGY

Science and Technology

INDIRECT PROMPT INJECTION ATTACKS

Current Context

- Indirect prompt injection attacks have emerged as a major cybersecurity threat targeting AI chatbots powered by **large language models (LLMs).**

About

- Indirect prompt injection is a **technique used to manipulate AI chatbots** into executing hidden malicious commands embedded in emails, documents, or web pages.

Relevance

- Growing cybersecurity threats in the digital age.
- Impact on AI governance and regulation.
- Ethical concerns related to AI security.

Regulations

- Need for AI regulation and cybersecurity policies.
- Development of AI risk assessment frameworks.

Government Schemes & Policies

- **National Cyber Security Policy 2023 (proposed)**.
- AI and cybersecurity initiatives under Digital India.

Key International Collaborations

- Global AI regulatory frameworks **(EU AI Act, US AI Bill of Rights).**
- **Indo-US cybersecurity partnership.**

EXTENDED REALITY (XR)

Current Context

- The **XR Creator Hackathon Delhi** chapter was held on **8th February 2025** as part of the WAVE Summit initiative.

About

- **Extended Reality (XR)** is an umbrella term for Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR), transforming digital interactions.

Relevance

- Increasing adoption in **education, healthcare, and defense.**
- Role in smart governance and immersive technologies.

Regulations

- Integration of XR in smart cities and digital transformation.
- Ethical concerns in privacy and data security.

Government Schemes & Policies

- **National Strategy on Extended Reality (proposed).**
- XR applications under Digital India and BharatNet.

Key International Collaborations

- India's participation in global XR research initiatives.
- Collaboration with tech giants for XR development.

EINSTEIN RING DISCOVERY

Current Context

- The European Space Agency's Euclid space telescope discovered an Einstein ring around **NGC 6505, 590 million light-years away.**

About

- Einstein rings are **rare cosmic phenomena** caused by gravitational lensing, aiding astronomical research.

Relevance

- Contribution to astrophysics and space research.
- Understanding dark matter and cosmic expansion.

Regulations

- Need for global collaboration in space research.
- Regulatory policies for space missions and discoveries.

Government Schemes & Policies

- **Indian Space Research Organisation (ISRO) initiatives**.
- **National Space Policy 2023.**

Key International Collaborations

- India's participation in global space research.
- Collaborations with **NASA, ESA,** and private space firms.

BOMBAY BLOOD GROUP & KIDNEY TRANSPLANT

Current Context

- Doctors in **Chennai** performed a successful kidney transplant on a patient with the rare Bombay blood group using a novel **Japanese technique.**

About

- The Bombay blood group is **scarce, complicating blood transfusions and organ transplants.**

Relevance

- Advances in **medical technology and organ transplantation.**

- Genetic factors influencing rare blood types.

Regulations
- Need for improved organ donation frameworks.
- Ethical considerations in organ transplantation.

Government Schemes & Policies
- **National Organ Transplant Program**.
- Initiatives for rare blood type awareness.

Key International Collaborations
- Medical collaborations with Japan and global healthcare institutions.
- Research partnerships on rare blood types and organ compatibility.

BRUCELLOSIS OUTBREAK

Current Context
- A young girl from **Kerala** succumbed to **brucellosis** after battling the infection for **two months.**

About
- Brucellosis is a **bacterial infection primarily affecting livestock and transmitted to humans through** direct contact or consumption of contaminated dairy products.

Relevance
- **Zoonotic disease** transmission and public health.
- Advances in diagnostic and preventive measures.

Regulations:
- Strengthening disease surveillance systems.
- Role of veterinary and public health departments.

Government Schemes & Policies
- **National Animal Disease Control Program (NADCP).**
- Initiatives promoting safe dairy consumption.

Key International Collaborations
- WHO and FAO guidelines on brucellosis control.
- Global efforts in zoonotic disease research.

INDIA'S NUCLEAR MISSION

Current Context
- The **Union Budget 2025-26** announced the launch of the **"Nuclear Mission"** to enhance India's nuclear energy capacity.

About
- India's Nuclear Mission aims to expand nuclear power capacity and promote clean energy as part of **Viksit Bharat's vision for 2047.**

Relevance
- Role of nuclear energy in sustainable development.
- Importance of technological advancements in the energy sector.

Regulations
- Regulatory frameworks for nuclear energy.
- Expansion of domestic nuclear infrastructure.

Government Schemes & Policies
- **India's Civil Nuclear Policy.**
- Expansion plans under the Department of Atomic Energy.

Key International Collaborations
- India-US nuclear cooperation.
- Collaboration with Russia and France on nuclear projects.

GAIA BH3 – LARGEST STELLAR BLACK HOLE IN MILKY WAY

Current Context
- The discovery of **Gaia BH3**, the largest known stellar-mass black hole in the Milky Way, has gained global attention.

About:
- **Gaia BH3, with a mass of 33 solar masses,** surpasses previous records and provides insights into early universe black hole formation.

Relevance
- Expanding knowledge of **black hole** physics.
- Contributions to astrophysics and space exploration.

Regulations
- Policy considerations in space research funding.
- Ethical concerns regarding deep-space exploration.

Government Schemes & Policies
- **ISRO's future space missions.**
- India's contributions to space science and research.

Key International Collaborations
- India's role in global astrophysics research.
- Collaborations with ESA, NASA, and observatories worldwide.

GARBH-INI-DRISHTI & FERRET RESEARCH FACILITY

Current Context

- India launched its first **Ferret Research Facility and GARBH-INi-DRISHTI platform,** enhancing biomedical research.

About

GARBH-INi-DRISHTI is a digital platform storing maternal and neonatal health data, while the Ferret Research Facility supports disease research and vaccine development.

Relevance

- Advances in biomedical research and healthcare innovation.
- Role in pandemic preparedness and disease control.

Regulations

- Strengthening research infrastructure.
- Ethical and policy considerations in medical research.

Government Schemes & Policies

- **National Biopharma Mission.**
- Support for maternal and neonatal health initiatives.

Key International Collaborations

- Partnerships with WHO and global health institutions.
- Collaborative biomedical research initiatives.

AMPLIFIERS

Current Context

- Amplifiers play a crucial role in various fields such as e**ntertainment, communication, medicine, and astronomy.**

About

- An **amplifier** is an electronic device that strengthens a **weak electrical signal** for enhanced processing or auditory perception.

Relevance

- Amplifiers are used in critical sectors like d**efense communication, biomedical devices (hearing aids), and space exploration.**

Regulations

- The government promotes indigenous research and development in electronics through initiatives like **Make in India.**

Government Schemes & Policies

- **National Policy on Electronics (NPE 2019) aims to boost domestic manufacturing of electronic components.**
- **The Production-Linked Incentive (PLI)** Scheme encourages investment in semiconductor and electronic components, including amplifiers.

Key International Collaborations

- India collaborates with global firms for semiconductor and electronic component manufacturing.
- ISRO uses high-powered amplifiers for space communication in collaboration with NASA and ESA.

WHO'S GUIDELINES ON SALT CONSUMPTION

Current Context

- The WHO has recommended **low-sodium salt substitutes (LSSS)** to improve cardiovascular health.

About

- The new WHO guidelines suggest replacing **sodium chloride (NaCl)** in table salt with **potassium chloride (KCl)** to reduce high blood pressure and cardiovascular diseases.

Relevance

- The use of **LSSS** relates to public health, dietary guidelines, and lifestyle diseases.

Regulations

- Government campaigns promote reduced salt intake through awareness programs.
- FSSAI regulations encourage food labeling and healthier salt options.

Government Schemes & Policies

- **Eat Right India Movement by FSSAI focuses on healthier eating habits.**
- **Ayushman Bharat** promotes preventive healthcare, including dietary modifications.

Key International Collaborations

- India collaborates with WHO for non-communicable disease prevention.
- Research partnerships with global institutions for public health nutrition.

NATIONAL STRATEGIC PLAN (NSP) & ROADMAP FOR LEPROSY (2023-27)

Current Context

- India has adopted a targeted approach to eliminate leprosy transmission in **five states with high prevalence.**

About

- The **National Strategic Plan (NSP)** was launched to achieve zero leprosy transmission by **2027.**

Relevance

- Leprosy is a **neglected tropical disease (NTD)** requiring scientific intervention through diagnostics and multi-drug therapy.

Regulations:

- The National Leprosy Eradication Programme (NLEP) ensures treatment access and awareness campaigns.

Government Schemes & Policies

- **Nikusth 2.0 is a web-based portal for case reporting.**
- Free Multi-Drug Therapy (MDT) distribution for leprosy patients.

Key International Collaborations

- WHO provides technical support and MDT for free worldwide.
- India collaborates with global research organizations for leprosy vaccine development.

NVS-02 NAVIGATION SATELLITE

Current Context

- **ISRO reported a technical glitch in the NVS-02 n**avigation satellite launched as part of the **NavIC system.**

About

- **NVS-02 is an advanced navigation satellite** designed to enhance India's independent regional navigation capabilities.

Relevance

- Satellite navigation is critical for defense, agriculture, disaster management, and transportation.

Regulations

- ISRO's role in strengthening India's satellite-based navigation systems.
- Policy initiatives for enhancing domestic space technology.

Government Schemes & Policies

- **NavIC (Navigation with Indian Constellation) aims at self-reliant navigation services.**
- The **Space Activities Bill** proposes regulating private sector participation in space research.

Key International Collaborations

- ISRO collaborates with NASA and Roscosmos for satellite technology exchange.
- India participates in global positioning partnerships with Europe and the US.

SUZETRIGINE – A NEW NON-OPIOID PAINKILLER

Current Context

- The **US FDA** has approved **Suzetrigine, a non-opioid painkiller, as a safer alternative to opioids.**

About

- **Suzetrigine blocks** pain signals before they reach the brain, reducing the risk of addiction associated with opioid use.

Relevance

- Advancements in non-opioid pain management are crucial for addressing global drug dependency issues.

Regulations

- **India's National Drug Policy regulates pain management drugs to prevent addiction.**
- Bureau of Pharma PSUs of India (BPPI) promotes affordable medicines.

Government Schemes & Policies

- **Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) ensures availability of affordable painkillers.**
- **Narcotic Drugs and Psychotropic Substances Act (NDPS)** regulates controlled substances.

Key International Collaborations

- India collaborates with WHO on drug control measures.
- Joint research projects with global pharmaceutical firms on non-addictive analgesics.

NASA'S OSIRIS-REX MISSION & ASTEROID BENNU

Current Context

- Asteroid Bennu is in the news due to **NASA's OSIRIS-REx mission**, which aims to return asteroid samples to Earth.

About

- **Bennu is a near-Earth asteroid** that may contain primordial organic material, providing insights into the early solar system.

Relevance

- Understanding asteroids is crucial for planetary defense and space exploration.

Governance

- ISRO's role in planetary science research and deep-space exploration.
- The Indian government's focus on space diplomacy and asteroid impact preparedness.

Government Schemes & Policies

- **ISRO's Aditya-L1 mission aims at studying space weather and solar phenomena.**
- **Planetary Defense initiatives** to monitor near-Earth objects.

Key International Collaborations

- NASA-ISRO collaborations for space exploration.
- India's participation in international asteroid monitoring programs.

CHINA'S 'ARTIFICIAL SUN' – EAST REACTOR

Current Context

- China's **Experimental Advanced Superconducting Tokamak (EAST)** reactor sustained plasma for 1,000 seconds.

About

- **EAST** aims to replicate the nuclear fusion process of the Sun, advancing clean energy research.

Relevance:

- Fusion Energy has the potential to provide limitless clean energy in the future.

Regulations

- India's role in nuclear fusion research through national and global collaborations.

Government Schemes & Policies

- **India's participation in the International Thermonuclear Experimental Reactor (ITER).**
- **Department of Atomic Energy (DAE)** initiatives for clean energy research.

Key International Collaborations

- ITER, involving India, EU, US, China, Japan, Russia, and South Korea.
- Indo-French collaboration on advanced nuclear research.

ORGANOPHOSPHATE POISONING

Current Context

- **Organophosphate poisoning** is suspected behind 17 deaths in J&K's Baddal village.

About

- Organophosphates are widely used in **agriculture** as pesticides but pose significant health risks.

Relevance

- Chemical safety and environmental hazards are key concerns in agricultural policies.

Regulations

- Regulations on pesticide usage to prevent toxicity-related deaths.

Government Schemes & Policies

- **Integrated Pest Management (IPM) promotes safer alternatives to hazardous pesticides.**
- The Insecticides Act regulates pesticide approval and usage.

Key International Collaborations

- India partners with WHO and FAO for global pesticide regulation policies.
- International agreements like the Stockholm Convention aim to control hazardous chemicals.

CE20 CRYOGENIC ENGINE

Current Context

- **Indian Space Research Organisation's (ISRO) CE20 cryogenic engine** successfully passed a critical sea-level test, a significant milestone in its propulsion technology.

About

- The **CE20 is India's first cryogenic engine** developed for space missions, primarily used in the upper stage of launch vehicles.
- The sea-level test at the **ISRO Propulsion Complex, Tamil Nadu**, implemented a **'Nozzle Protection System'** to address technical challenges like flow separation, vibrations, and thermal issues.

Relevance

- Cryogenic engine technology is crucial for India's space missions, enhancing self-reliance in satellite launches and interplanetary explorations.
- Technological advancements in propulsion systems like the **CE20** strengthen India's capabilities in strategic defense and scientific exploration.

Government Schemes & Policies

- **ISRO's Gaganyaan Mission** aims to send India's first human spaceflight using indigenous cryogenic engine technology.
- **Make in India initiative** supports the domestic development of critical space technologies like the **CE20 engine.**

Key International Collaborations

- Collaboration with **HAL led** to the establishment of the Integrated Cryogenic Engine Manufacturing Facility in Bengaluru.
- India has cooperated with Russia in earlier cryogenic technology developments and continues knowledge exchange in advanced propulsion systems.

GOOGLE WILLOW QUANTUM CHIP

Current Context

- **Google unveiled Willow,** a next-generation quantum chip that demonstrates state-of-the-art performance in quantum computing.

About

- **Willow** has showcased significant advancements, including exponential error reduction and enhanced computation speeds, making quantum computing more reliable and scalable.

Relevance

- **Quantum computing** has applications in cybersecurity, defense, artificial intelligence, and big data analytics.
- Government initiatives like the **National Mission on Quantum Technologies and Applications (NM-QTA)** aim to strengthen India's research in this domain.

Government Schemes & Policies

- The Indian government allocated ₹8,000 crores for NM-QTA to develop quantum technology and computing infrastructure.
- **Public-Private Partnership models** are being encouraged to accelerate quantum computing research.

Key International Collaborations

- India is working with countries like the USA, UK, and Australia under the Quad Critical and Emerging Technology Working Group.
- Collaboration with global institutions like IBM and Google for research in quantum computing.

HYPERLOOP TECHNOLOGY

Current Context

- The **Avishkar Hyperloop team from IIT Madras**, in collaboration with TuTr, completed **India's first 410-meter Hyperloop test track.**

About

- Hyperloop is a proposed **ultra-high-speed rail system** using low-pressure tubes and magnetic levitation.
- **Elon Musk popularized the concept in 2013**, aiming for speeds up to **1,200 km/h**.

Relevance

- **Hyperloop** can revolutionize transportation, reducing travel time and improving connectivity.
- Sustainable and energy-efficient alternative to conventional railways and air travel.

Government Schemes & Policies

- **The National Infrastructure Pipeline (NIP) includes provisions for futuristic transport solutions like Hyperloop.**
- **Maharashtra and Karnataka governments** have explored feasibility studies for Hyperloop projects.

Key International Collaborations

- India has engaged with global Hyperloop companies like **Virgin Hyperloop One** for research and development.
- Collaborative agreements with universities in the USA and Europe for technology transfer and feasibility studies.

10 YEARS OF MINISTRY OF AYUSH

Current Context

- The **Ministry of AYUSH marked its 10th anniversary,** highlighting key achievements in promoting **traditional Indian medicine.**

About

- **Established in 2014, the Ministry of AYUSH focuses on integrating Ayurveda, Yoga, Unani, Siddha, and Homeopathy** into mainstream healthcare.
- It supports global recognition and adoption of traditional medicine practices.

Relevance

- Traditional medicine plays a crucial role in public health, especially for preventive and holistic healthcare.
- **AYUSH** contributes to India's soft power diplomacy and medical tourism sector.

Government Schemes & Policies

- The **National AYUSH Mission (NAM)** was launched to promote traditional medicine practices and education.
- Ayush Grid, e-Sanjeevani, and Ayush Telemedicine initiatives improve accessibility to healthcare services.

Key International Collaborations

- WHO **Global Centre for Traditional Medicine (GCTM)** was established in Jamnagar, Gujarat.
- India has signed **24 MoUs** with various countries to promote AYUSH practices globally.

RARE DISEASES

Current Context

- The **Central Drugs Standard Control Organisation (CDSCO)** approved India's first anti-complement therapy for rare diseases.

About

- Rare diseases affect a small percentage of the population but require high-cost treatments and long-term care.
- The Delhi High Court has emphasized the **Right to Health under Article 21** for rare disease patients.

Relevance

- Managing rare diseases involves policy-level interventions, research, and equitable healthcare access.
- It aligns with **Sustainable Development Goals (SDGs)** on universal healthcare.

Government Schemes & Policies

- **National Policy for Rare Diseases (NPRD), 2021,** provides financial assistance of up to ₹50 lakhs per patient.
- **Rashtriya Arogya Nidhi (RAN)** supports treatment costs for economically weaker sections.

Key International Collaborations

- WHO's Fair Pricing Forum aims to reduce costs of orphan drugs.
- India collaborates with global pharmaceutical companies for research on rare disease treatments.

WORLD MALARIA REPORT 2024

Current Context

- WHO released the **World Malaria Report 2024** highlighting global and national malaria trends.

About

- The report shows an increase in **global malaria cases** while India has significantly reduced its malaria burden.

Relevance

- **Malaria** control measures involve advancements in vaccines, genetic engineering, and epidemiology.

Regulations

- Government-led initiatives like the **National Strategic Plan for Malaria Elimination 2023-27** focus on disease eradication.

Government Schemes & Policies

- India exited the High Burden to High Impact (HBHI) group due to successful malaria reduction efforts.

Key International Collaborations

- WHO's Global Technical Strategy for Malaria 2016–2030 aligns with India's elimination goals.

NANOPLASTICS AND ANTIBIOTIC RESISTANCE

Current Context

- A study revealed that **nanoplastics** contribute to the spread of antibiotic resistance.

About

- **Nanoplastics from single-use plastic** bottles facilitate horizontal gene transfer, aiding bacterial resistance.

Relevance

- Raises concerns over **environmental pollution's** role in public health issues.

Regulations

- Strengthening waste management policies to reduce nanoplastic pollution.

Government Schemes & Policies

- Supports **Swachh Bharat Mission and Plastic Waste Management Rules.**

Key International Collaborations

- India collaborates with global researchers to study the impact of microplastics on ecosystems.

EXTRACHROMOSOMAL DNA (ECDNA) IN CANCER

Current Context

- Research shows how **ecDNA** contributes to cancer progression and drug resistance.

About

- **ecDNA** fragments in tumor cells enhance **oncogene activity, fueling cancer growth.**

Relevance

- Advances in cancer genomics aid in better treatment and early diagnosis.

Regulations

- Strengthening cancer research policies and genetic testing regulations.

Government Schemes & Policies

- **National Cancer Control Programme promotes research on cancer treatment strategies.**

Key International Collaborations

- Collaboration with global cancer research institutions for advanced therapies.

MARBURG VIRUS DISEASE (MVD)

Current Context

- **Rwanda** reported an outbreak of **Marburg Virus Disease**, causing multiple fatalities.

About

- **MVD** is a highly fatal hemorrhagic fever caused by the **Marburg virus, related to Ebola.**

Relevance

- Enhances understanding of zoonotic diseases and vaccine development.

Regulations

- Strengthening India's epidemic preparedness and biosecurity measures.

Government Schemes & Policies

- Aligns with the Integrated **Disease Surveillance Programme (IDSP)** for tracking infectious diseases.

Key International Collaborations

- WHO and India collaborate on research and response strategies for viral outbreaks.

DIAMOND BATTERY TECHNOLOGY

Current Context

- Scientists developed a **carbon-14 diamond battery** that can last thousands of years.

About

- The battery harnesses radiation to generate continuous power, offering potential for long-term energy solutions.

Relevance

- Pioneers the future of sustainable energy and nuclear waste management.

Regulation

- Strengthening research funding for alternative energy sources.

Government Schemes & Policies

- **Supports Make in India and National Energy Policy for innovation in clean energy.**

Key International Collaborations

- Joint research initiatives with global energy and nuclear technology institutions.

MILKWEED FIBER RESEARCH

Current Context

- The **Ministry of Textiles** is promoting research into new natural fibers, including milkweed fiber.

About

- Milkweed fiber, found in **Rajasthan, Karnataka, and Tamil Nadu,** has unique hydrophilic and hydrophobic properties.

Relevance

- Encourages sustainable textile innovation and eco-friendly materials.

Regulation

- Boosting domestic textile industry through research and development incentives.

Government Schemes & Policies

- Aligns with the **National Textile Policy** for promoting biodegradable fiber sources.

Key International Collaborations

- Collaboration with global textile research bodies for sustainable fiber development.

BIO-BITUMEN FOR ROAD CONSTRUCTION

Current Context

- India inaugurated its **first National Highway** using **bio-bitumen in Nagpur.**

About

- **Bio-bitumen**, derived from organic materials like stubble and lignin, offers a sustainable alternative to conventional bitumen.

Relevance

- Supports eco-friendly road construction and waste management.

Regulation

- Reducing reliance on petroleum-based road materials through policy changes.

Government Schemes & Policies

- Encourages circular economy initiatives and supports **National Bio-Energy Mission.**

Key International Collaborations

- India explores global best practices in sustainable infrastructure development.

ISRO LAUNCHES PROBA-3 SATELLITES

Current Context

- **ISRO** successfully launched the **PSLV-C59** rocket carrying the European Space **Agency's Proba-3 satellites.**

About

- **PSLV-C59** is a dedicated commercial mission launched from Satish Dhawan Space Centre, Sriharikota. It marks ESA's first launch from India since **2001**. The mission aims to observe the Sun's corona through precision formation flying.

Relevance

- This mission highlights India's growing role in commercial space launches and international collaborations, boosting the **country's space economy.**

Regulation

- **NewSpace India Limited (NSIL)** was established in **2019 to** commercialize ISRO's space activities and enhance India's high-tech industry participation.

Government Schemes & Policies

- Government initiatives like **'Make in India' and 'Atmanirbhar Bharat'** promote space technology advancements and self-reliance in satellite manufacturing.

Key International Collaborations

- The launch strengthens India's space ties with **ESA**, enhancing India's position in global space diplomacy.

AXIOM MISSION 4 (AX-4)

Current Context

- Indian astronauts completed initial training for **Axiom-4**, a private mission to the **International Space Station (ISS).**

About

- **Ax-4,** launched aboard a SpaceX Falcon 9, is the fourth private astronaut mission coordinated by **NASA and Axiom Space.**

Relevance

- Demonstrates India's participation in international human **spaceflight missions** and **private-sector involvement** in space exploration.

Regulation

- The government's space policies encourage private partnerships in **astronaut training and commercial space missions.**

Government Schemes & Policies

- **Gaganyaan mission** aims to develop indigenous capabilities for human spaceflight, enhancing India's expertise in the field.

Key International Collaborations

- **NASA-Axiom partnership** showcases India's expanding role in global human spaceflight programs.

DARK COMETS

Current Context

- **NASA** discovered more dark comets, which resemble asteroids but behave like comets.

About

- These celestial objects deviate from expected orbits due to unknown forces beyond the **Yarkovsky effect a**nd have unique gas and dust dispersion patterns.

Relevance

- Understanding dark comets enhances knowledge of **space debris, asteroid impact risks, and planetary defense.**

Regulation

- India's asteroid tracking initiatives align with global efforts to monitor and mitigate space threats.

Government Schemes & Policies

- **ISRO's planetary** defense programs contribute to global space safety mechanisms.

Key International Collaborations

- Cooperation with NASA and ESA in planetary defense programs strengthens India's role in space security.

FSSAI ADVISORY FOR E-COMMERCE FOOD BUSINESS OPERATORS

Current Context

- **FSSAI** issued guidelines for e-commerce platforms to ensure food safety, hygiene, and compliance.

About

- The advisory mandates regulatory compliance, training for **delivery personnel, and transparency in food labeling.**

Relevance

- Highlights the **role of technology** in food safety and regulation of online food delivery platforms.

Regulation

- Strengthens food safety laws and consumer rights protection through **digital enforcement mechanisms.**

Government Schemes & Policies

- Aligns with the **Eat Right India movement,** ensuring safer food consumption.

Key International Collaborations

- India collaborates with global food safety organizations like WHO to establish food quality standards.

HIGH-RISK FOOD CLASSIFICATION BY FSSAI

Current Context

- **FSSAI** classified packaged drinking water as a high-risk food category.

About

- **High-risk foods** support bacterial multiplication, necessitating stringent inspections and compliance measures.

Relevance

- Ensures public health safety and enhances regulatory mechanisms for **food quality.**

Regulation

- Mandates risk-based inspections and annual safety audits for high-risk food manufacturers.

Government Schemes & Policies

- Supports the National **Food Security Ac**t by enforcing stricter food safety norms.

Key International Collaborations

- Aligns with global food safety standards under **WHO guidelines.**

NOTIFIABLE DISEASE - SNAKEBITE CASES

Current Context

- The **Ministry of Health** declared snakebite cases a notifiable disease.

About

- This enables better tracking, prevention, and treatment of **snakebite incidents.**

Relevance

- Helps in early disease surveillance and improves healthcare responses.

Regulation

- Strengthens **disease monitoring systems** and facilitates timely interventions.

Government Schemes & Policies

- The **National Action Plan for Snakebite Prevention** aims to reduce deaths by **2030.**

Key International Collaborations

- WHO recognizes snakebites as a neglected tropical disease, ensuring global cooperation in its management.

ONE DAY ONE GENOME

Current Context

- The **Department of Biotechnology (DBT) and Biotechnology Research and Innovation Council (BRIC) launched the 'One Day One Genome'** initiative on the 1st foundation day of BRIC.

About

- The initiative aims to publicly release an annotated microbial genome daily, enhancing accessibility to microbial genomics data for researchers. It emphasizes India's microbial diversity and its applications in health, environment, and agriculture.

Relevance

- Understanding microbial genomics and its role in healthcare, agriculture, and environmental sustainability.
- Technological advancements in genome sequencing and their implications.

Regulation

- Implemented by **BRIC under DBT** to unify governance across biotechnology research institutions.
- Enhances India's position in biotechnology research and policy implementation.

Government Schemes & Policies

- Aligned with the **BioE3 policy (Biotechnology for Economy, Environment, and Employment)** to foster innovation in microbial genomics.
- Supports Startup India by creating opportunities in the biotech sector.

Key International Collaborations

- Collaborations with global genomic research initiatives to share microbial sequencing data.
- Partnerships with international biotech firms for technology transfer and research in microbial genomics.

DEEPSEEK AI

Current Context

- **DeepSeek AI, a Chinese startup, has launched AI models** that rival top US counterparts at a fraction of the cost. Its DeepSeek-V3 model was trained for under $6 million, significantly less than OpenAI's GPT-4. DeepSeek's AI Assistant has also overtaken ChatGPT as the top-rated free app on Apple's US App Store, intensifying competition in the AI sector.

About

- DeepSeek is an AI-powered chatbot similar to ChatGPT, offering advanced reasoning and efficiency. Its DeepSeek-R1 model competes with OpenAI's o1, particularly excelling in mathematics and coding. The company optimizes **memory use, reducing operational costs.** However, like other Chinese AI models, it is subject to government censorship on politically sensitive topics.

Relevance

- **DeepSeek's lower training costs** challenge the necessity of billion-dollar AI investments.
- The launch has escalated the technological race, likened to the Sputnik moment of the AI era.

- DeepSeek has faced large-scale cyberattacks and temporary registration limits due to its sudden popularity.

Regulations

- The rise of DeepSeek highlights **t**he need for **comprehensive AI regulations** to ensure ethical use and prevent biases.
- US-imposed bans on high-end **Nvidia chips for China** may impact AI development and technological self-sufficiency strategies.

Government Schemes & Policies

- PM Modi's upcoming participation in the **Paris AI Summit** underscores India's focus on AI innovation and regulatory policies.
- AI and cybersecurity efforts under **Digital India** are crucial for maintaining global competitiveness.

Key International Collaborations

- The **EU AI Act and US AI Bill of Rights** shape global AI governance.
- **Strengthening AI partnerships** while addressing US concerns over technology transfers to adversarial nations.

GUT-FRIENDLY BACTERIA & VITILIGO TREATMENT

Current Context

- Research from **Northwestern University** suggests that a natural compound derived from gut-friendly bacteria slows **vitiligo** progression by **74% in pre-clinical trials.**

About

- Vitiligo is an **autoimmune disorder** where melanocytes, the **skin's pigment-producing cells, are attacked by the immune system,** causing white patches. It affects around **0.5% to 2%** of the global population.

Relevance

- This research could revolutionize vitiligo treatment and potentially apply to other autoimmune disorders.

Regulations

- Clinical trials and regulatory approvals for human application are needed before commercialization.

Government Schemes & Policies

- India's **Ministry of Health & Family Welfare** supports dermatological research, and initiatives like **Ayushman Bharat** provide treatment coverage.

Key International Collaborations

- Research institutions in the **U.S. and India** are exploring microbiome-based therapies.

QUANTUM COMPUTING & NATIONAL SECURITY

Current Context

- **NITI Aayog launched the NITI Frontier Tech Hub** to advance quantum computing research in India.

About

- Quantum computing uses **qubits, leveraging superposition and entanglement** for superior computational capabilities.

Relevance

- It can impact national security through cryptography, intelligence gathering, and military applications.

Regulations

- Post-quantum cryptography frameworks are being developed globally to counter quantum threats.

Government Schemes & Policies

- The **National Quantum Mission (₹6,003.65 crore)** promotes research in quantum computing, sensing, and materials.

Key International Collaborations

- India collaborates with the **U.S., U.K., and EU** on quantum technology advancements.

INDIA AI MISSION & AI INNOVATIONS

Current Context

- **IndiaAI Mission** marked its first anniversary with the launch of the IndiaAI **Compute Portal and AIKosha dataset platform.**

About

- The initiative enhances access to AI resources with **18,000 GPUs** and a comprehensive dataset repository.

Relevance

- It boosts AI research, model training, and innovation in **governance, healthcare, and industry.**

Regulations

- AI governance policies are being framed under the **Digital India Corporation.**

Government Schemes & Policies

- IndiaAI Mission **(₹10,371.92 crore)** supports AI development and upskilling initiatives.

Key International Collaborations

- India partners with **global tech firms and AI research institutions** for advancements.

LOX-METHANE ENGINES FOR ISRO'S NGLV

Current Context

- **ISRO i**s developing a LOX-methane engine for its **Next Generation Launch Vehicle (NGLV).**

About

- **Methane** is a sustainable space fuel with better efficiency and safety than **hydrazine.**

Relevance

- Multiple restarts enhance **mission flexibility** for satellite deployment and interplanetary missions.

Regulations

- **Safety and environmental** standards are key considerations.

Government Schemes & Policies

- **ISRO's space** research initiatives align with **India's Space Policy 2023.**

Key International Collaborations

- **China and SpaceX** are also developing methane-powered rocket engines.

MEASLES OUTBREAK IN THE U.S.

Current Context

- The **U.S. reported 164 measles c**ases and two fatalities by **February 2025,** highlighting declining vaccination rates.

About

- **Measles** is a highly contagious viral disease spread through **respiratory droplets.**

Relevance

- The outbreak underscores the need for **high vaccination** coverage to prevent resurgence.

Regulations

- **WHO recommends a 95% vaccination rate** to ensure herd immunity.

Government Schemes & Policies

- Immunization programs like India's Universal **Immunization Programme (UIP)** aim to prevent measles outbreaks.

Key International Collaborations

- **WHO and CDC** work with global partners to enhance vaccine coverage.

CAMP HILL VIRUS – EMERGING HENIPAVIRUS THREAT

Current Context

- The **Camp Hill virus,** a new **henipavirus, was discovered in Alabama,** raising global health concerns.

About

- Henipaviruses, like **Nipah and Hendra**, have fatality rates of **40%-75%** and no known cure.

Relevance

- The **virus's aerosol transmission** potential makes it a serious pandemic threat.

Regulations

- **Surveillance and biosafety** protocols are essential to prevent outbreaks.

Government Schemes & Policies

- India's One Health Initiative focuses on emerging **zoonotic diseases.**

Key International Collaborations

- **WHO and global research** institutions are monitoring and studying henipaviruses.

DISCOVERY OF CRASSOLABIUM DHRITIAE – A NEW NEMATODE SPECIES

Current Context

- Indian scientists discovered a new **soil nematode species in Odisha.**

About

- **Crassolabium dhritiae** plays a role in soil health and ecosystem balance.

Relevance

- **Nematodes** are vital for agriculture, nutrient cycling, and soil biodiversity.

Regulations

- **Conservation and research** funding are required for further study.

Government Schemes & Policies

- The **National Biodiversity Action Plan** supports such discoveries.

Key International Collaborations

- Indian researchers collaborate with global taxonomy and soil science institutes.

NASA'S VOYAGER MISSIONS – EXTENDING LIFESPAN

Current Context

- **NASA** is reducing power usage on **Voyager 1 and 2** to extend their operational life.

About

- Launched in **1977,** the **Voyagers** provide data from interstellar space.

Relevance

- They help understand **cosmic phenomena** and the **interstellar medium.**

Regulation

- **NASA** adheres to international deep-space mission protocols.

Government Schemes & Policies

- India's **ISRO focuses on deep-space exploration** under its space policy.

Key International Collaborations

- NASA works with global agencies like **ESA and ISRO** on space research.

HYDROGEN FUEL CELLS FOR TELECOM TOWERS

Current Context

- India is testing **PEM fuel cells** as an alternative power source for telecom towers.

About

- **PEM fuel** cells generate electricity using hydrogen, producing only water as a by-product.

Relevance

- They reduce **telecom sector** dependence on diesel generators and lower carbon emissions.

Regulations

- **Hydrogen fuel safety** standards must be met.

Government Schemes & Policies

- The **National Green Hydrogen Mission** promotes clean hydrogen adoption.

Key International Collaborations

- India collaborates with **global hydrogen technology** leaders for implementation.

SWINE FLU (H1N1) OUTBREAK IN INDIA

Current Context

- India reported over **20,000 H1N1 infections and 347 deaths** by December 2024.

About

- **H1N1** is a **respiratory virus** that spreads through droplets and contaminated surfaces.

Relevance

- The outbreak highlights the need for improved vaccination and disease monitoring.

Regulations

- Surveillance under India's Integrated **Disease Surveillance Programme (IDSP).**

Government Schemes & Policies

- **UIP** covers flu vaccination in vulnerable groups.

Key International Collaborations

- **WHO and CDC** monitor influenza trends and vaccine efficacy.

FIREFLY AEROSPACE'S BLUE GHOST LUNAR MISSION

Current Context

- **Firefly Aerospace's Blue Ghost Mission 1** achieved a successful lunar **landing on March 2, 2025.**

About

- The **lander carries scientific instruments** for lunar analysis, marking private sector advancements.

Relevance

- **Commercial space missions** expand opportunities for lunar exploration.

Regulations

- Missions must comply with international space treaties and safety regulations.

Government Schemes & Policies

- **NASA's Commercial Lunar Payload Services (CLPS)** supports private lunar missions.

Key International Collaborations

- Companies like **SpaceX and Intuitive Machine**s are leading private space exploration.

GENETIC FACTORS IN OBESITY (LABRADOR RETRIEVERS)

Current Context

- Recent research has identified the **DENND1B** gene as a major factor in obesity in **Labrador retrievers**. This study, conducted by the **University of Cambridge** and published in *Science*, also has implications for human obesity.

About

- The study analyzed **DNA from 241 Labrador retrievers** and found a **mutation in the DENND1B gene** linked to increased body fat.
- This gene is also present in humans and influences **appetite regulation** through brain signaling pathways.

Relevance

- It highlights the **genetic basis of obesity**, challenging the idea that obesity is solely a lifestyle issue.
- Can aid in **better weight management** strategies for dogs and humans.

Regulations & Policies

- No specific regulations exist for **genetic-based obesity treatments** in pets.
- In humans, obesity-related health concerns fall under **public health policies**, with initiatives like **Ayushman Bharat**.

Government Schemes & Policies

- **National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases & Stroke (NPCDCS)** aims at tackling obesity in India.

Key International Collaborations

- Research was conducted in the **UK**, but similar **genetic obesity studies** are underway in **global health research institutions**.

SUPERSOLID LIGHT

Current Context

- Italian researchers have discovered a new state of matter where **light behaves like a supersolid**, blending the properties of **solids and superfluids**.

About

- **Supersolids** have rigidity but can flow without friction.
- Previously observed in **Bose-Einstein Condensates**, now demonstrated with **light using semiconductor platforms**.

Relevance

- Potential breakthroughs in **quantum computing** and **photonic circuits**.
- May **enhance quantum bits (qubits)** stability.

Regulations & Policies

- Quantum materials research falls under **national research policies** but lacks specific guidelines for supersolid light.

Government Schemes & Policies

- **National Quantum Mission (NQM)** promotes **quantum technology advancements**.

Key International Collaborations

- Research led by **Italian quantum physicists** with possible applications in **global quantum research projects**.

NATIONAL QUANTUM MISSION (NQM)

Current Context

- The **Government of India** has launched the **National Quantum Mission (NQM)** with a **₹6,003.65 crore budget** to advance **quantum computing and communication**.

About

- The mission focuses on **developing quantum computers**, **secure communication systems**, and **advanced sensing technologies**.
- It includes **four thematic hubs** at **IISc Bengaluru, IIT Mumbai, IIT Delhi, and IIT Chennai**.

Relevance

- **Quantum computers** offer **exponentially faster** computing power.

- **Secure quantum communication** will help protect **data privacy**.

Regulations & Policies

- Quantum computing falls under the **Science, Technology, and Innovation Policy (STIP) 2020**.

Government Schemes & Policies

- **National Quantum Mission (NQM)** aims at developing **quantum-secured networks** and **atomic clocks**.

Key International Collaborations

- India collaborates with **USA, UK, and EU countries** on quantum research.

ISRO'S DOCKING & DE-DOCKING MILESTONE

Current Context

- On **January 16, 2025**, ISRO **successfully docked two satellites (SDX01 & SDX02)**, followed by a **de-docking process on January 30, 2025**.

About

- **Docking** requires **precise speed and orientation alignment** in space.
- **De-docking** is equally complex, ensuring controlled separation without collision.

Relevance

- Essential for **future space missions**, including **in-space refueling**.
- Prepares India for **long-duration space missions**.

Regulations & Policies

- Space operations are governed by **India's Draft Space Policy 2023**.

Government Schemes & Policies

- **Gaganyaan Mission** (India's human spaceflight program) will benefit from this advancement.

Key International Collaborations

- India collaborates with **NASA, Roscosmos, and ESA** for space technology.

SCRUB TYPHUS: A RURAL HEALTH CONCERN

Current Context

- A study by **Christian Medical College, Vellore**, and the **London School of Hygiene and Tropical Medicine** found **scrub typhus** as a leading cause of fever-related hospitalizations.

About

- Caused by the bacterium Orientia tsutsugamushi.
- Transmitted by infected larval mites (chiggers).
- Symptoms: Fever, rash, headache.

Relevance

- **Underdiagnosed** and often mistaken for **malaria or dengue**.
- Can lead to **severe complications like meningitis and kidney failure**.

Regulations & Policies

- Falls under **Vector-Borne Disease Control Programs**.

Government Schemes & Policies

- **National Vector-Borne Disease Control Programme (NVBDCP)** includes awareness programs.

Key International Collaborations

- Conducted with **London School of Hygiene and Tropical Medicine**.

DISCOVERY OF PLASTIC ICE VII

Current Context

- Scientists have confirmed the existence of **Plastic Ice VII**, an exotic **fourth form of water**.

About

- Allows **water molecules to rotate freely** within a **rigid crystalline structure**.
- Forms under **high pressure (>3 GPa) and high temperature (>450K)**.

Relevance

- Helps understand **water behavior on icy moons** like **Ganymede & Titan**.
- Could impact **future space missions and material sciences**.

Regulations & Policies

- No direct policies, but **planetary research** is governed by **space exploration policies**.

Government Schemes & Policies

- Research supported by **ISRO's planetary science missions**.

Key International Collaborations

- Led by **Sorbonne University**, with implications for **NASA and ESA** missions.Fram2 Mission (SpaceX)

FRAM2 MISSION (SPACEX)

Current Context

- **SpaceX** is set to launch the **Fram2 mission**, taking astronauts directly over **Earth's polar regions**. The mission includes scientific experiments such as the **first X-ray** imaging in space and mushroom cultivation in microgravity.

About

- Named after a historic **Norwegian expedition ship.**
- Will launch via a **Falcon 9 rocket** from **Kennedy Space Center.**
- Aims to achieve a **90-degree circular orbit,** steeper than past human missions.

Relevance

- Pioneering research for future Mars missions.
- Studies space phenomena like **STEVE (atmospheric light phenomena).**
- Engages the public through the **Fram2Ham Competition** for amateur radio operators.

Regulations & Policies

- Subject to **U.S. space** regulatory frameworks **(NASA, FAA, FCC).**
- Compliance with international space treaties like the **Outer Space Treaty.**

Government Schemes & Policies

- **NASA** collaboration and commercial spaceflight policies.
- Supports the **Artemis program's broader space** exploration goals.
- Key International Collaborations
- **SpaceX's** continued partnership with **NASA.**
- Potential scientific data sharing with **ESA** and other space agencies.

ISRO'S SEMICRYOGENIC ENGINE BREAKTHROUGH

Current Context

- **ISRO** successfully tested its **Semicryogenic Engine (SE2000)**, designed for the **LVM3 rocket**, enhancing India's space propulsion capabilities.

About

- Uses **Liquid Oxygen and Kerosene**, making it non-toxic and high-performance.
- Increases **LVM3's** payload capacity from **4 to 5 tonnes in GTO.**

- Successfully tested on **March 28, 2025**, validating ignition and subsystem performance.

Relevance

- Positions India among elite nations with **semicryogenic engine technology.**
- Supports **heavier satellite** launches and deep space exploration.
- Strengthens India's standing in **commercial satellite launches.**

Regulations & Policies

- Governed by **ISRO's space mission** guidelines and international space laws.
- Follows **India's Space Activities Bill** (when enacted).

Government Schemes & Policies

- Aligns with **Gaganyaan** human spaceflight program.
- Supports **"Atmanirbhar Bharat" (self-reliant India)** initiative in space technology.

Key International Collaborations

- Collaboration with **Indian industries for technology** development.
- Potential cooperation with global space agencies for future launch contracts.

INTERNAL SECURITY

Internal Security

RESTORING CONSTITUTIONAL ORDER IN MANIPUR

Current Context

- **Manipur** has recently witnessed significant disruptions to its constitutional order, leading to the imposition of President's Rule in **February 2025**. The resignation of **Chief Minister N. Biren Singh** amid ongoing ethnic violence between the **Meitei and Kuki communities** has further intensified the crisis. This marks the **11th instance of President's Rule** in the state, the highest for any Indian state.

Background

- **Political and Constitutional Developments: Manipur**, a princely state, merged with India in **1949** and attained full statehood in **1972**. Since then, it has experienced periods of political instability and ethnic tensions.

Key Constitutional Provisions

- **Article 371C:** Introduced by the **27th Amendment Act of 1971**, it provides for the constitution of a committee within the Manipur Legislative Assembly consisting of members elected from the Hill Areas. The Governor has a special responsibility to ensure the proper functioning of this committee and must **annually report to the President on the administration of these areas.**
- **Governor's Role:** Under **Article 371C**, the Governor holds a special responsibility to oversee the administration of the Hill Areas and report to the **President**.

CONCERNS OVER SOCIAL MEDIA'S ROLE IN DEMOCRACY

Current Context

- **Social media** is a double-edged sword in democratic societies, enhancing participation while also **fostering misinformation and polarization.**

Background

- Social media platforms shape political discourse globally.
- Instances like the **US elections, Palestine conflict, and farmer protests in India** showcase its influence.

Key Issues & Challenges

- **Fake news** spreads quickly, affecting public perception.
- **Algorithm-driven echo** chambers reinforce biases.

- Insufficient content moderation leads to harmful discourse.
- **Governmental control** over platforms can stifle dissent.

Government's Response & Measures Taken

- Strengthening **IT laws** to regulate content.
- Promoting **digital literacy** campaigns.
- Increasing oversight over monopolistic platform owners.

PRE-IMPOSITION OF AFSPA IN MANIPUR

Current Context

- The **Armed Forces (Special Powers) Act (AFSPA)** has been extended in **Manipur**, excluding certain police station jurisdictions.

Background

- **AFSPA** grants special powers to armed forces in disturbed areas.
- The law was first applied in **Manipur in 1981.**
- **Periodic revocations** have taken place, but fresh violence led to reimposition.

Key Issues & Challenges

- **Human Rights Concerns:** Allegations of misuse by security forces.
- **Security vs. Civil Liberties:** Balancing counter-insurgency measures with human rights.
- **Lack of Accountability:** AFSPA provides immunity to armed forces personnel.

Government's Response & Measures Taken

- Gradual withdrawal of **AFSPA** from select areas.
- Deployment of additional security personnel in **violence-prone zones**.

- Periodic reviews to assess the necessity of the act's continuation.

JOINT COMMANDERS CONFERENCE

Current Context

- Held in **Lucknow,** focusing on integrated defense strategies.

Background

- Military leadership discussed modernization and security challenges under the theme *"Sashakt aur Surakshit Bharat."*

Strategic Importance

- Need for **joint command structures.**
- Push for **indigenous defense** capabilities.
- Addressing regional and global challenges.
- **Government Initiatives:**
  - Promotion of integrated theater commands.
  - Indigenous defense production.
  - E-museum and digital libraries for military personnel.

RISING SECURITY THREATS IN 2024 – AI AND CYBER ATTACKS

Current Context

- **AI-driven cyber threats** are increasingly sophisticated, impacting security and operations.

Background

- With growing **digitalization, robust cybersecurity strategies** are essential. Experts emphasize AI-driven threat detection.

Strategic Importance

- **AI-Driven Cyber Threats:** More advanced attacks.
- **Lack of AI Transparency:** Black-box security models.
- **Self-Healing Security**: Need for automated recovery.
- **Regulatory Compliance:** Ensuring policy adherence. **Human Oversight:** Balancing automation with manual control.

Government Initiatives

- National Cyber Security Strategy 2024 for resilience.
- Zero Trust Security Models for risk assessment.
- Cybersecurity Audits for organizations.
- Explainable AI (XAI) for transparency.

FAO REPORT ON FOOD SECURITY IN INDIA

Current Context

- A recent **FAO report highlights India's progress in food security** but points out persistent challenges, including food insecurity, malnutrition, and rising diet costs.

Background

- **Food security** is critical for India's socioeconomic development. Government initiatives like the **Public Distribution System (PDS) and nutrition programs** aim to tackle hunger and malnutrition. However, the double burden of undernutrition and obesity remains a challenge.

Key Issues & Challenges

- A large segment of the population still lacks access to affordable nutrition.
- Wasting, anemia, and stunting remain prevalent.
- Over 55% of India's population cannot afford a nutritious diet.
- Lifestyle changes contribute to a rise in overweight individuals.

Government's Response & Measures Taken

- **Free Food Grain Distribution** – Under the National Food Security Act (NFSA).
- **POSHAN 2.0 & Saksham Anganwadi** – Government schemes targeting child nutrition.
- **Budget Allocations for Nutrition Programs** – Though slightly increased, funding remains a concern.
- **Strengthening Agricultural Productivity** – Efforts to boost food production and distribution efficiency.

25TH ANNIVERSARY OF KARGIL WAR (KARGIL VIJAY DIWAS RAJAT JAYANTI)

Current Context

- **Indian Army commemorates the 25th anniversary of the Kargil War,** honoring the bravery of soldiers who secured **victory against Pakistan in 1999.**

Background

- The **Kargil War** was a pivotal moment in India's military history. It reaffirmed India's commitment to defending its sovereignty and highlighted the importance of strategic defense preparedness.

Key Issues & Challenges

- **Border Security & Threats** – Continued tensions with neighboring countries.
- **Modernization of Armed Forces** – Need for advanced weaponry and technology. **Veteran Welfare & Rehabilitation** – Ensuring adequate support for war veterans.
- **Geopolitical Implications** – Strengthening defense ties with global allies.

Government's Response & Measures Taken

- **Kargil Vijay Diwas Celebrations** – Commemorative events, veteran interactions, and tributes.
- **Defense Modernization** – Procurement of advanced weaponry and strategic assets.
- **Border Infrastructure Development** – Strengthening roads and communication in border regions.

- **Policy Measures for Veterans** – Enhanced pension schemes and welfare programs.

GLOBAL IT OUTAGES & CYBER RESILIENCE

Current Context

- A **Global IT** outage disrupted **businesses, banks, airlines, and healthcare systems** due to a software malfunction in CrowdStrike's cloud security solution.

Background

- The increasing reliance on **cloud-based security solutions** has led to systemic risks. A single-point failure in security software can cause cascading effects on global infrastructures.

Key Issues & Challenges

- **Concentration of security** services creates vulnerabilities.
- Organizations struggle to recover quickly from **cyber incidents.**
- A single software failure can impact multiple industries worldwide.
- Many businesses lack **robust cyber resilience** frameworks.

Government's Response & Measures Taken

- **Cyber Resilience Blueprint Initiative** – Collaboration with global cybersecurity leaders.
- **Strengthening National Cybersecurity Policies** – Enhancing India's response to cyber threats.
- **Encouraging Decentralized Security Systems** – Reducing reliance on single security providers.
- **Real-Time Monitoring & Risk Assessments** – Implementing stronger cybersecurity frameworks.

CHINA'S PLA REFORMS

Current Context

- **People's Liberation Army (PLA) of China** is undergoing rapid modernization, driven by President Xi Jinping's vision to create a **"world-class" military by 2049.**

Background

- China's military modernization began in the **1980s under Deng Xiaoping** but has accelerated under **Xi Jinping.** Major milestones include:
- **2015**: Organizational and command-control reforms.
- **2017**: Standardization of force structures and doctrinal updates.
- **2027 Goal**: Achieve advanced mechanization and integration of AI in warfare.

- **2035 Goal**: Near-complete modernization of defense forces.
- **2049 Goal**: Establish China as a global military superpower.

Strategic Importance

- The **PLA's** enhanced capabilities pose a challenge along the **LAC, necessitating stronger defense preparedness.**
- Increased tensions in **Taiwan, the South China Sea, and beyond, affecting global security dynamics.**

VERTICAL LAUNCH SHORT-RANGE SURFACE -TO-AIR MISSILES (VLSRSAM)

Current Context

- India successfully tested its **first indigenously developed shipborne SAM system**, the **VLSRSAM**, on **March 26, 2025.** The missile destroyed a high-speed aerial target, proving its capability at **near-boundary low altitude.**

Background

- Developed by **DRDO** for the Indian Navy.
- A variant of the **Astra air-to-air missile**, adapted for vertical launch.
- Offers a **range of up to 80 km**, exceeding the 70 km range of Barak-8 (current naval SAM).
- Features include an **indigenous RF seeker, Multi-Function Radar (MFR), and Weapon Control System**.

Strategic Importance

- Strengthens naval defense capabilities against **aerial threats, crucial for maritime security in the Indian Ocean.**

INS ARIGHAAT

Current Context

- India commissioned **its second nuclear-powered ballistic missile submarine, INS Arighaat**, on **August 29, 2024**, marking a crucial step in strengthening the country's **nuclear triad**.

Background

- Follow-up to **INS Arihant** (commissioned in 2016).
- **Powered by an 83 MW pressurized light-water reactor**.
- Incorporates **technological advancements** over Arihant.
- Developed indigenously under **India's Advanced Technology Project**.

Strategic Importance

- Enhances **nuclear deterrence and strengthens strategic** balance in the region.

- Contributes to **regional stability amid rising geopolitical tensions.**

PROJECT SEABIRD

Current Context

- **In 2024, Vice Admiral Rajesh Dhankhar assumed charge as Director General of Project Seabird,** overseeing the ongoing infrastructure development at the **Karwar Naval Base.**

Key Points:

- **Approval & Purpose:** Approved in **1999 post-Pokhran-II, Project Seabird aims to establish a major naval base at Karwar, Karnataka**, to enhance India's naval capabilities.
- **Location & Significance:** Located between the **Western Ghats and Arabian Sea, INS Kadamba (commissioned in 2005)** provides strategic advantages, including proximity to the **Persian Gulf-East Asia** shipping route.

Infrastructure

- **Phase I:** Completed in 2011, it includes a 10-ship pier, ship lift, dry berth, Naval Ship Repair Yard, and a Naval Hospital.
- **Phase IIA:** Expands capacity to 32 ships/submarines, with a 75-meter-tall Covered Dry Berth, housing for **10,000** personnel, and a dual-use Naval Air Station.

Employment & Economic Impact

- The project generates around **7,000** direct and **20,000** indirect jobs. It aligns with the **Aatmanirbhar Bharat initiative**, sourcing over 90% of materials locally. It is expected to boost the **economy and tourism in the Uttara Kannada region.**

OPERATION DHANUSH

Current Context

- On July 14, three unidentified militants were killed in an ongoing anti-militancy operation near the **Line of Control (LoC) in Kupwara, North Kashmir.** The operation is part of efforts to counter infiltration and militant activity in the region.

About the Operation Dhanush

- **Objective:** The **operation is designed to prevent infiltration attempts along the LoC,** focusing on militants trying to cross from Pakistan-administered Kashmir into Jammu and Kashmir.
- **Tactics:** It utilizes advanced surveillance and ambush strategies, with the Indian Army conducting preemptive

strikes in coordination with other security forces to neutralize threats.

T-90S BHISHMA

Current Context

- **The T-90S Bhishma, displayed during the 2025 Republic Day parade,** is a crucial component of India's armored warfare strength. It reflects the **close defense ties between India and Russia.**

About the T-90S Bhishma

- **Origin:** A variant of the **Russian T-90**, this modern **Main Battle Tank (MBT)** is integral to India's armored formations alongside the Arjun and older T-72 models.
- **Armament:** Equipped with a **125mm** smoothbore gun, the T-90S is capable of engaging targets at extended ranges with powerful firepower.

Key Features

- **Protection Systems:** The T-90S Bhishma includes advanced composite armor, explosive reactive armor (ERA), and a locally developed active protection system to defend against anti-tank guided missiles (ATGMs) and RPGs.
- **Mobility:** Designed for operation in varied terrains—from desert landscapes to mountainous regions—the T-90S ensures superior mobility.
- **Fire Control:** The tank integrates an upgraded fire control system, designed for enhanced accuracy and improved target tracking in different operational environments.

Significance of the Name "Bhishma"

- The name symbolizes strength and resilience, inspired by the legendary warrior **Bhishma from the Mahabharata**, reflecting the tank's combat capabilities.

OPERATION MEGHDOOT

Current Context

- In 2024, India commemorated the 40th anniversary of Operation Meghdoot, highlighting the significant role it has played in maintaining control over the Siachen glacier.

Background

- **Launched on April 13, 1984, to secure the Siachen Glacier, Operation Meghdoot is a key military operation by the Indian Army and Indian Air Force (IAF).** It was a response to Pakistan's efforts to claim the Siachen region, which were seen as a threat to India's strategic interests.

- **IAF's Chetak helicopters**, operating since 1978, played a vital role in airlifting troops to the glacier's high-altitude peaks.

Strategic Importance

- The operation remains ongoing, with Indian forces maintaining control over vital peaks in the Siachen Glacier. This control is crucial for **regional stability, particularly in the face of changing dynamics with Pakistan.**

COASTAL SECURITY SCHEME

Current Context

- A recent **review** by **Ministry of Home Affairs (MHA)** flagged **critical shortages** in **13 coastal states under the Coastal Security Scheme (CSS),** emphasizing the need for enhanced coastal security
- **Launched:** 2005-06.

Objective

- Strengthen coastal security by equipping states/UTs for effective marine patrolling, supporting the **Indian Navy** and **Coast Guard** to secure India's **7,516.6 km** coastline.

Phases of the Scheme

- **Phase-I (2005-2011):** Focused on strengthening infrastructure like coastal police stations, radar systems, and patrolling.
- **Phase-II (2011-2020):** Enhanced coastal surveillance systems and patrolling, based on a vulnerability analysis.
- **Phase-III (Ongoing):** Currently under formulation to address emerging security challenges and improve overall coastal protection.

REGIONALISM

Current Context

- On February 7, 2025, **Vice President Shri Jagdeep Dhankhar** expressed serious concerns over growing **divisive forces** within the country. Speaking at the **Karnataka Vaibhava Literature and Cultural Festival**, he warned that these forces were more dangerous than challenges like **climate change**

Nationalism vs. Regionalism

- The **Vice President criticized debates that pit regionalism against nationalism,** calling them baseless and rooted in anti-national activities.

How Extreme Regionalism Undermines India's Security

- **Weakens National Unity**: Divisive regionalism erodes the sense of Indian identity, compromising national cohesion vital for security.
- **Fuels Separatism**: Heightened regionalism can spur separatist movements, destabilizing regions and diverting resources.
- **Exploits Divisions**: Internal conflicts arising from regional divisions can be exploited by adversaries, weakening national defense.
- **Diverts Resources**: Calls for regional security forces can dilute national defense efforts, affecting overall security.
- **Breeds Insurgency**: Regional unrest may provide fertile ground for insurgencies, destabilizing the country.

HYBRID WARFARE

Current Context

- **Defence Minister Rajnath Singh** highlighted the rising threat of **hybrid warfare** in India's security landscape at the Delhi Defence Dialogue.

Definition

- **Hybrid warfare is a blend of conventional military operations** with irregular tactics such as **cyberattacks, disinformation, economic pressure, and proxy warfare.**

Example

- **Russia-Ukraine Conflict**—Russia has utilized **cyberattacks, disinformation campaigns, and propaganda** to destabilize Ukraine, disrupt its economy, and manipulate public perception both domestically and internationally.

Implications for India

- This **form of warfare blurs the line between war and peace, making it harder to counter with traditional military strategies.** It requires India to adapt its defense systems to manage both visible and covert threats effectively

INDIA'S RISE IN THE 2024 ASIA POWER INDEX

Current Context

- **India has become the third-largest power in the 2024 Asia Power Index,** reflecting its growing geopolitical influence. This shift highlights India's economic growth, youthful population, and expanding diplomatic reach.

Key Factors

- **Economic Growth: India's** strong recovery post-pandemic has led to a 4.2-point rise in its economic capability, supported by its **large population and robust GDP.**
- **Future Potential:** India's future resources score increased by 8.2 points, **driven by a youthful demographic,** which will continue driving economic growth.
- **Diplomatic Influence:** India's diplomatic outreach, led by PM Modi, has strengthened its global standing, **ranking 6th in diplomatic dialogues in 2023.**

Asia Power Index Overview

- **Launched by the Lowy Institute in 2018, the Asia Power Index** assesses the power dynamics of **27 countries** in the Asia-Pacific region. The 2024 edition provides a comprehensive evaluation of power distribution, including the **first-time inclusion of Timor-Leste,** reflecting its growing importance. The index measures both material capabilities and global influence.

INDIA'S PERFORMANCE IN FATF MUTUAL EVALUATION 2023-24

Current Context

- The **FATF Plenary (June 2024, Singapore)** adopted India's **Mutual Evaluation Report**, placing it in the **'regular follow-up' category**—among only five G20 nations.

Key FATF Recognitions for India

- **Mitigating Money Laundering (ML) and Terrorist Financing (TF) Risks**—Actions against ML, TF, corruption, and organized crime.
- **Digital Economy Push**—Reducing ML/TF risks through cashless transactions and financial traceability.

Government Measures (Since 2014)

- Multi-agency collaboration led by the **Department of Revenue (DoR)**.
- Effective use of **intelligence and technology** in financial crime investigations.

Strategic Impact

- **Strengthened India's role in FATF** (India is part of the FATF Steering Group).**About FATF:**
- **Established:** 1989 (intergovernmental body).

Objective

- Combat **Money Laundering (ML), Terrorist Financing (TF), and financial crimes**.

Members

- 9 (incl. India, USA, UK, China, EU, etc.).
- **India's Membership:** Since 2010.
- **Current FATF President (2024-25):** *T. Raja Kumar (Singapore)*.

33RD SESSION OF CCPCJ (2024)

Current Context

- The **33rd session of the Commission on Crime Prevention and Criminal Justice (CCPCJ)** took place in **Vienna, Austria.** Discussions focused on **transnational organized crime (TOC), environmental crimes, and digital security**.

Key Outcomes

- Strengthening legal frameworks against **money laundering, corruption, and human trafficking**.
- Addressing **cybercrime and digital security** concerns.
- Enhancing **law enforcement cooperation** between nations.
- Discussing **criminal justice responses** to environmental crimes.
- Promoting strategies for **juvenile crime prevention and rehabilitation**.

Global Mechanisms to Combat TOC

- **UN Convention Against Transnational Organized Crime (UNTOC), 2000**—India is a signatory.
- **United Nations Office on Drugs and Crime (UNODC)**—**Implements** crime prevention initiatives.
- **Regional Efforts**—SAWEEN (South Asia Wildlife Enforcement Network), SAARC Convention on Trafficking (2002).

ART AND CULTURE

Art & Culture

RENAMING OF FORT WILLIAM TO VIJAY DURG

Current Context

- **The Government of India has proposed renaming Fort William in Kolkata as "Vijay Durg"** as part of its ongoing decolonization efforts. This follows a broader trend of renaming colonial-era places to reflect India's indigenous history and heritage.

Historical Significance of Fort William

- **Established in 1696** by the British East India Company.
- Served as a key administrative and military center during British rule in Bengal.
- Played a crucial role in **major historical events:**
  - **Battle of Plassey (1757):** Helped the British gain control over Bengal.
  - **Revolt of 1857:** Used as a strategic British military base.
  - Continued as a **British military stronghold** until Indian independence in 1947.
  - Currently serves as the **Headquarters of the Eastern Command** of the Indian Army.

Fort William's Role in India's Wars

- **1962 India-China War**
  - Served as the **headquarters of the Eastern Command** during the war.
  - Oversaw military operations in **North-East India** against China.
  - Post-war, led to **defense strategy reviews** to strengthen military preparedness.
- **1971 India-Pakistan War**
  - Played a **pivotal role in India's victory** and the creation of Bangladesh.
  - Headquarters of the **Eastern Command** during military operations in East Pakistan (now Bangladesh).
  - Served as the **strategic center** for planning the liberation of Bangladesh.

Significance of the Name "Vijay Durg"

- **Meaning: "Fort of Victory,"** symbolizing India's military strength and resilience.
- Inspired by **Vijaydurg Fort (Maharashtra),** associated with Chhatrapati Shivaji Maharaj.
- Represents **victory over oppression** and India's move away from colonial influences.

Decolonization & Renaming Trends in India

- Part of a larger movement to **reclaim India's historical and cultural identity.**
- **Previous Renaming Initiatives:**
  - **Aurangzeb Road → Dr. APJ Abdul Kalam Road (2015).**
  - **Allahabad → Prayagraj (2018).**
  - **Rajpath → Kartavya Path (2022).**
- Aims to **honor India's history and remove colonial remnants** in public spaces.

IRON AGE ORIGINS IN TAMIL NADU

Current Context

- Recent archaeological findings in **Tamil Nadu suggest that the Iron Age may have commenced in this region as early as 3,345 BCE,** significantly predating previous estimates and challenging established global timelines.

Key Findings

- **Sivagalai Excavations:** Charcoal samples associated with iron artifacts from burial urns in Sivagalai, Tuticorin district, have been radiocarbon-dated to **3,345 BCE and 3,259 BCE**.
- **Mayiladumparai Discoveries:** Excavations in Mayiladumparai, Krishnagiri district, have dated iron artifacts to **2,172 BCE**, indicating early iron usage in the region.

Implications

- **Global Metallurgical History:** These dates suggest that iron smelting in Tamil Nadu predates the Hittite Empire's iron usage (previously believed to be the earliest at **1,380 BCE)**, potentially positioning Tamil Nadu as one of the earliest centers of iron metallurgy.
- **Contemporary Civilizations:** The findings imply that while the Indus Valley Civilization in northern India was in its Chalcolithic (Copper) Age, regions in southern India, particularly Tamil Nadu, had already transitioned into the Iron Age.

Cultural Connections

- **Graffiti and Symbols:** Studies reveal that over **90%** of ancient graffiti marks at **140 sites** in Tamil Nadu bear similarities to Indus Valley symbols, suggesting cultural exchanges or shared symbolisms between these civilizations.

HORNBILL FESTIVAL: THE CULTURAL EXTRAVAGANZA OF NAGALAND

Current Context

- The **Hornbill Festival 2024**, themed **"Cultural Connect,"** is scheduled from **December 1 to 10** at the **Heritage Village of Kisama, Nagaland**. This annual festival, often called the **"Festival of Festivals,"** showcases the diverse traditions, arts, and customs of Nagaland's **17 major tribes**, promoting inter-tribal unity and tourism.

Key Highlights of the Hornbill Festival

- **Historical & Cultural Significance:**
  - Launched in **2000** to **preserve and promote Naga heritage**.
  - Named after the **hornbill**, a bird revered in **Naga folklore** for its grandeur and boldness.
  - Celebrates **Nagaland's cultural diversity** by bringing together all tribes in one grand event.
- **Venue: Kisama Heritage Village**
  - A **cultural nucleus** that represents the architecture and traditions of Naga tribes.
  - **Morungs (Youth Dormitories):** The village features **17 indigenously designed houses**, each showcasing the unique culture of a specific tribe.
  - Aims to **protect, preserve, and promote** Naga culture and **boost tourism**.
- **Events & Activities in Hornbill Festival 2024**
  - **Daily Cultural Performances**: Folk dances, songs, indigenous games, and traditional rituals.
  - **Artists' Corner**: Art workshops, **art battles, and installations** blending modern and traditional creativity.
  - **Artisans' Corner**: Showcasing **indigenous Naga craftsmanship**.
  - **Sports & Games**: Naga wrestling, **traditional archery**, indigenous martial arts.
  - **Food & Craft Stalls**: Featuring **traditional Naga cuisine, herbal medicine stalls**, and handicrafts.
  - **Fashion Shows & Beauty Contests**: Blending traditional and contemporary styles.
  - **Musical Concerts**: Performances by local and international artists.
  - **Special Exhibition (2024 Edition)**: "Naga-Land & People in Archival Mirror," organized in collaboration with the **National Archives of India** to showcase **Naga history and cultural evolution**.
- **Hornbill Festival & India's "Unity in Diversity"**
  - The **festival reflects the larger ethos of India**, where **varied cultures coexist in harmony**.

- Similar to **other major Indian cultural festivals**, the Hornbill Festival showcases the **strength of inclusivity and diversity** in India.
- Reinforces the **national identity of India** by celebrating its **rich assortment of traditions, festivals, and art forms**.

GÖBEKLI TEPE: THE WORLD'S OLDEST KNOWN LUNISOLAR CALENDAR

Current Context

- **Recent research suggests that a 13,000-year-old stone pillar at GöbekliTepe in Turkey represents the world's oldest lunisolar calendar, predating all known systems.** The discovery offers new insights into early human astronomical knowledge and the impact of a catastrophic comet strike.

Key Points

- **Discovery and Significance**
  - Göbekli Tepe, **located in present-day Turkey,** is considered the **world's first temple complex.**
  - New research suggests that a stone pillar at the site contains the **oldest known lunisolar calendar.**
  - The carvings consist of 12 lunar months and 11 extra days, tracking solar and lunar cycles.
  - This system predates previously known calendars by thousands of years.
- **Astronomical Observations and a Cataclysmic Event**
  - The V-shaped carvings on the stone are believed to record celestial events.
  - Researchers believe the calendar was created to commemorate a comet strike around **10,850 BCE.**
  - This comet impact triggered a **1,200-year** mini Ice Age, affecting early human societies.
- **Link to Early Civilization**
  - The comet strike possibly led to mass extinctions and environmental changes.
  - These changes may have **forced humans to shift from a hunter-gatherer lifestyle to agriculture in the Fertile Crescent.**
  - The site also contains depictions of the Taurid meteor stream, suggesting ancient people tracked Earth's axial precession.
- **Impact on Religion and Writing**
  - The cataclysm may have influenced the formation of early religious beliefs and cults.
  - Observing celestial events may have contributed to the early development of writing systems.

- The discovery challenges the traditional timeline of astronomical knowledge, pushing back the known history of scientific observations.

PM MODI UNVEILS COMPENDIUM ON SUBRAMANIA BHARATI

Current Context

- **On the occasion of Subramania Bharati's 143rd birth anniversary, Prime Minister Narendra Modi released Kaala Varisayil Bharathi Padaippugal,** a chronological compilation of the poet's works, curated by Seeni Viswanathan.

Key Points

- **Tribute to a Visionary Poet**
  - PM Modi described Bharati as a "profound thinker" dedicated to India's progress.
  - Recognized his advocacy for **women's empowerment, youth development, and scientific advancement.**
  - Highlighted Bharati's visionary ideas, including his anticipation of technological innovations.
- **Cultural and Literary Legacy**
  - Subramania Bharati, known as Mahakavi Bharathiyar, revolutionized modern Tamil literature.
  - His works focus on themes of **nationalism, social justice, and self-determination.**
- **Some of his significant works include:**
  - **Kannan Pattu** (Poems on Lord Krishna)
  - **Panchali Sapatham** (A retelling of Draupadi's humiliation)
  - **Kuyil Pattu** (The Song of the Cuckoo)
  - **Pudiya Russia** (Inspired by the Russian Revolution)
  - **Gnanaratham** (The Chariot of Knowledge)
- **Importance of the Compendium**
  - The collection presents Bharati's writings in chronological order for better understanding.
  - Aims to preserve and promote his literary and nationalist contributions.
  - PM Modi emphasized the **power of words** in Indian tradition and their role in shaping thought and action.

ETIKOPPAKA TOYS: ANDHRA PRADESH'S TABLEAU AT REPUBLIC DAY PARADE

Current Context

- The Andhra Pradesh tableau featuring Etikoppaka Bommalu (Etikoppaka toys) received praise during the **76th Republic Day Parade** on **Kartavya Path**, showcasing the region's rich tradition of eco-friendly wooden toys.

Key Points

- **Historical and Cultural Significance**
  - Etikoppaka toys originate from **Etikoppaka village, Andhra Pradesh** and have a **400-year-old tradition.**
  - They often depict **mythological figures, animals, and shapes inspired by ancient civilizations** like Mohenjo-Daro and Harappa.
- **Craftsmanship and Materials**
  - Made from the **Ankudu tree**, whose **softwood** is ideal for carving.
  - Uses **natural dyes** sourced from plants and minerals.
  - Created using a traditional **"lacquer turning" technique**, which involves **lac resin** to achieve vibrant, non-toxic colors.
- **Recognition and Global Appeal**
  - **Received Geographical Indication (GI) tag in 2017**, ensuring authenticity and cultural significance.
  - Popular designs include **spinning tops, musical instruments, Raja Rani figurines, number toys, and household decorations.**
  - Admired worldwide for their **sustainability, artistry, and safety for children.**
- **Symbol of Sustainability & Innovation**
  - Promotes **eco-friendly craftsmanship**, blending **tradition with modernity**.
  - Represents the **rich artistic heritage of Andhra Pradesh** and continues to **inspire a new generation of artists.**

BELAGAVI CENTENARY CELEBRATION OF 1924 CONGRESS SESSION

Current Contest

- The centenary celebration of **Mahatma Gandhi's 1924 Congress session** was held on **December 26-27, 2024**, in Belagavi. The event aimed to **promote Gandhian values** of **non-violence, communal harmony, and self-rule**.
- **Major Highlights**
  - **Congress Working Committee (CWC) meeting** near the historic **Gandhi Well**.
  - Release of a **reprinted report of the 1924 session**.
  - **Unveiling of Mahatma Gandhi statues** at **Veera Soudha and Suvarna Soudha**.
  - **Khadi Mela** and a **photo gallery** dedicated to **Gangadhar Rao Deshpande**, an organiser of the 1924 session.
  - Public meeting titled **"Jai Bapu-Jai Bhim-Jai Samvidhan,"** emphasizing **Gandhian and Ambedkarite ideals**.
- **Political and Social Impact**

- **Karnataka CM Siddaramaiah** emphasized that the event was part of year-long efforts to **promote Gandhian thought**.
- **Deputy CM DK Shivakumar** highlighted that the event was **inclusive**, not just for the Congress party but for everyone.
- The event reflected on **India's political evolution since 1924** and its relevance today.

GYAN BHARATAM MISSION – UNION BUDGET 2025'S FOCUS ON MANUSCRIPT CONSERVATION

Current Context

- The **Union Budget 2025** has introduced the **Gyan Bharatam Mission**, a landmark initiative to **preserve and digitize India's vast manuscript heritage**. With over **one crore manuscripts** at risk due to neglect and poor storage, this mission aims to **expand documentation, accessibility, and research opportunities**. .

Overview of the Mission

- Aims to **survey, document, and conserve** India's rich manuscript heritage.
- Targets over **one crore manuscripts** across **academic institutions, museums, libraries, and private collections**.
- Ensures **preservation and accessibility** of ancient knowledge spanning disciplines like **philosophy, science, medicine, and art**.

Strengthening Manuscript Conservation

- Aims to **enhance and expand** the **National Manuscripts Mission (NMM)**, currently under **IGNCA**.
- **Budgetary boost from ₹3.5 crore to ₹60 crore**, signaling **potential restructuring** into an **autonomous body** for efficiency.

Importance of Manuscript Preservation

- Manuscripts are **not just historical artifacts** but **repositories of knowledge** on India's **cultural and scientific advancements**.
- The mission focuses on:
  - **Protecting rare and endangered texts** from deterioration.
  - **Digitizing manuscripts** to increase accessibility.
  - **Encouraging research and knowledge dissemination** based on ancient texts.

Budget Allocation for Culture and Heritage

- **Ministry of Culture total budget: ₹3,360.96 crore (₹100 crore increase).**
- **Key allocations:**

- **Archaeological Survey of India {ASI} : ₹1,278.49 crore.**
- **National Libraries & Archives: ₹156.55 crore.**
- **Museums (National Museum, NGMA): ₹126.63 crore.**
- **Reduced funding** for **centenaries, anniversaries, and international collaborations**, indicating **heritage conservation as a priority** over commemorative events.

PM MODI'S GIFT DIPLOMACY AT AI ACTION SUMMIT

Current Context

- During the **AI Action Summit in Paris**, Prime Minister Narendra Modi met French President **Emmanuel Macron** and **US Vice President J.D. Vance**, presenting them and their families with meticulously chosen gifts. These gifts reflect India's **cultural heritage, traditional craftsmanship, and sustainability efforts**, reinforcing diplomatic ties through soft power.

Gifts Presented by PM Modi

- **Gift to French President Emmanuel Macron – Dokra Artwork**
  - **Origin:** Chhattisgarh
  - **Significance:** Crafted using the ancient **lost-wax metal casting technique**, this artwork depicts traditional musicians, celebrating India's tribal heritage.
  - **Material:** Brass and copper.
- **Gift to the First Lady of France – Silver Hand-Engraved Table Mirror**
  - **Origin:** Rajasthan
  - **Significance:** Featuring **intricate floral and peacock motifs**, this mirror represents Rajasthan's metal engraving tradition, known for its elegance and craftsmanship.
- **Gift to Vivek Vance (Son of US Vice President) – Wooden Railway Toy Set**
  - **Origin:** Traditional Indian toy-making
  - **Significance:** Made from **natural wood and eco-friendly vegetable dyes**, this handcrafted toy promotes sustainability and traditional artistry.
  - **Dyes Used:** Turmeric (yellow), beetroot (red), indigo (blue), and neem/spinach (green).
- **Gift to Ewan Blaine Vance (Son of US Vice President) – Jigsaw Puzzle Featuring Indian Folk Paintings**
  - **Significance:** Showcases India's vibrant folk art through a **puzzle-based learning tool**.
- **Featured Styles:**
  - **Kalighat Pat (West Bengal):** Bold outlines, vibrant colors, mythological themes.
  - **Santhal Painting:** Tribal art using earthy tones and natural pigments.

- **Madhubani Painting (Bihar):** Intricate patterns inspired by mythology and nature.
- **Gift to Mirabel Rose Vance (Daughter of US Vice President) – Wooden Alphabet Set**
  - **Significance:** An **eco-friendly, interactive learning tool** enhancing cognitive development while **avoiding plastic-based alternatives**.

ABATHSAHAYESWARAR TEMPLE RECEIVES UNESCO AWARD FOR HERITAGE CONSERVATION

Current Context
- The **Abathsahayeswarar Temple** in **Thukkachi village**, near Kumbakonam in Tamil Nadu's Thanjavur district, has been honored with the **UNESCO Asia-Pacific Award for Cultural Heritage Conservation**. This recognition celebrates the meticulous restoration efforts that preserved the temple's historical integrity.

Historical Significance
- **Age:** Approximately **1,300 years old**.
- **Origins:** Constructed by the ancestors of **Raja Raja Chola**; maintained by rulers **Kulothunga Chola** and **Vikrama Chola**.
- **Architecture:** Features aesthetic structures and idols showcasing the artistic talents of ancient artisans.
- **Restoration Highlights:**
- **Approach:** Combined modern conservation science with traditional construction practices.
- **Execution:** Local **sthapathis** (traditional temple builders) played a pivotal role, ensuring the original beauty remained intact.
- **Completion:** Consecration ceremony held on **September 3, 2023**.

Government Support
- **Funding:** The **Hindu Religious and Charitable Endowments (HR&CE) Department** allocated **₹5 crore** for the renovation.
- **Initiatives:** Over the past three years, the Tamil Nadu government has earmarked **₹300 crore** for renovating ancient temples exceeding 1,000 years in age.

BATHOUISM RECOGNIZED IN BODOLAND TERRITORIAL REGION (BTR), ASSAM

Current Context
- Officially acknowledging **Bathouism in the religion column, the Government of Bodoland Territorial Region (BTR) in** Assam marks a major turning point for the **Bodo community. Acknowledging indigenous tribal beliefs that have long existed outside of mainstream religious classification in India requires first respect of these faiths.**

About Bathouism
- **Centered on worship of Bathoubwrai (Sibwrai), the supreme god, traditional folk religion of the Bodo people.**
- The Bodo language is the source of the term **"Bathou," from which o Ba = Five o Thou = Deep philosophical thought;** the five basic elements of Bathouism are thus:
- o Bar (Air), o San (Sun), o Ha (Earth), o Or (Fire); o Okhrang (Sky).
- **Linguistically** belong to the **Tibeto-Burman group** within the **Assam-Burma language family.**

About the Bodo Tribe
- They are the **largest indigenous plains tribe in Assam.**
- They mostly live along the **north bank of the Brahmaputra River, extending to the foothills of Bhutan.**

JHUMOIR BINANDINI 2025: HONOURING 200 YEARS OF ASSAMESE TEA INDUSTRY

Current Context
- The **Prime Minister Shri Narendra Modi** attended the **Mega Jhumoir Festival (Jhumoir Binandini 2025)** in Guwahati. This event is being held to commemorate **200 years of Assam's tea industry**, which began in **1823** with the discovery of Assam's tea plants by British explorers. **Assam's tea industry is one of the largest in the world,** and this festival highlights its cultural and economic significance

What is Jhumoir, or Jhumur, Dance
- Mostly performed during the **harvest season, folk dance from Assam Tea Tribe** and Adivasi Communities reflects **unity, inclusivity, and cultural pride.**
- **Men perform** traditional instruments **including o Madal, Dhol, Dhak (Drums) o Cymbals, Flutes, Shehnai; women are the main dancers and vocalists**.
- **Dress:** Differs depending on the community; although red and white sarees are common among female artists.

SOLIGA TRIBE'S HELP FOR TIGER PROTECTION IN BRT TIGER RESERVE

Current Context

- Recently, the **Prime Minister of India gave the Soliga Tribe compliments for their efforts in raising the tiger count in the Biligiri Ranganatha Swamy Temple (BRT) Tiger Reserve, Karnataka.** Through their traditional knowledge and sustainable practices, **the Soligas—who have spent generations in the forest—have been instrumental in preserving tigers and their habitat.**

About the Soliga Tribe

- **Nomadic tribal community** residing in:
  - **Biligiri Ranganatha Hills (BRT) Tiger Reserve, Karnataka**
  - Some parts of **Tamil Nadu**
- **First tribal community in India** to receive **legal rights** to forests inside a **tiger reserve (2011)**.
- **Livelihood:** Depend on **forest produce** such as **honey, berries, and timber**, along with **subsistence agriculture**.
- **Language:** Speak **Soliga**, a **Dravidian language** closely related to Kannada.
- **Cultural Belief:** Worship **tigers as sacred beings**, referring to them as **"Dodda Nayi" (Big Dog)**.

TANTRIC BUDDHISM: ARCHAEOLOGICAL FINDING AT RATNAGIRI, ODISHA

Current Context

- **In Ratnagiri, Odisha, archaeologists have unearthed a 1.4-meter Buddha head and stupas (1,500+ years old),** verifying their historical relevance as a main center of Tantric Buddhism. This **discovery clarifies Odisha's part in the dissemination of Tantric Buddhism, Vajrayāna, across India and beyond, especially in Tibet and Southeast Asia.**

Buddhism's Three Main Schools

- **Theravāda** – Oldest, conservative form; focuses on monastic discipline.
- **Mahāyāna** – Includes Zen and Pure Land Buddhism; emphasizes compassion.
- **Vajrayāna (Tantric Buddhism)** – Tibetan Buddhism, known for mantras and rituals.

Evolution of Tantric Buddhism

- Shift from **philosophical teachings** to **practical spiritual methods (Sadhana)** for enlightenment.
- **Mahayana Buddhism** introduced **mantras & rituals**, giving rise to two branches:
  - **Mantrayana** – Early stage of Tantric Buddhism.

- **Paramita-yana** – Evolved form integrating **yogic practices** into Buddhism.

BANJARA COMMUNITY: GUARDIANS OF TRADITION AND TRADE

Current Context

- Recent recognition of the major contribution made by the **Banjara people to protect India's natural and cultural legacy came from the Lok Sabha Speaker Emphasizing their ongoing relevance in India's socioeconomic fabric,** this awareness emphasizes their **historical contribution to trade, mobility, and traditional knowledge.**

About Banjara (Bepari, Mukeai, Laban) Community

- Have **roots in the Mewar region of Rajasthan, this multireligious and multilingual nomadic trading caste.**

Role as Trader Nomads

- Engaged in **trade between villages, towns, and across regions.**
- Major commodities included **grains, pulses, sugar, salt, wood, and timber.**
- Traveled in **large groups known as *Tandas*, led by a chief called *Nayaka*.**

Historical Accounts

- **Sultan Alauddin Khalji** depended on Banjaras to carry grain to city markets.
- Emperor **Jahangir reported in Tuzuk-i-Jahangiri that Banjaras carried grain from villages to towns on bullocks.**
- They were quite important in providing **the Mughal army with food grains during military operations.**

SOMNATH TEMPLE: A TESTAMENT TO FAITH AND ENDURANCE

Current Context

- **Prime Minister Narendra Modi's** recent visit to **Somnath Temple** highlights its deep **spiritual and cultural significance in India.** The temple has been **a center of devotion for centuries, enduring multiple invasions and reconstructions,** yet standing tall as a symbol of resilience and unwavering faith.

Key Facts About Somnath Temple

- **Location:** In **Prabhas Patan**, near Veraval in Gujarat's Saurashtra region.
- **Historical Significance:**

- Among the oldest and most revered Hindu temples, it has been **destroyed and rebuilt multiple times**.
- The first major destruction was carried out by **Mahmud of Ghazni in 1026 CE**, with later attacks from other invaders.
- The present structure was **reconstructed in 1951**, with Sardar Vallabhbhai Patel playing a key role in its revival.

- **Architectural Features:**
  - Built in the **Chalukya style**, showcasing intricate carvings and traditional temple design.

- **Religious Importance:**
  - It is recognized as the **first among the twelve Jyotirlingas dedicated to Lord Shiva**.
  - Located at the **Triveni Sangam**, where the **Kapila, Hiran, and Sarasvati rivers** meet, making it a spiritually significant site.

INDIA NOMINATES SIX SITES FOR UNESCO WORLD HERITAGE STATUS

Current Context

- **India has nominated six sites—including both individual and serial properties—for UNESCO World Heritage status.** These sites underline India's varied cultural and natural legacy, so enhancing its worldwide reputation for **preservation of heritage.**

Key Nominated Sites

- Megalithic Site of Hire Benakal (Karnataka)
  - This site is **one of India's largest megalithic burial sites**, dating from the **Iron Age (1200 BCE - 600 BCE).**
  - The site **comprises 400+ dolmens and stone buildings,** reflecting early **societal and funerary rituals.**

- Mughal Gardens (Rashtrapati Bhavan, Delhi)
  - This is a **fusion of Persian, Indian, and British landscaping traditions.**
  - The building **reflects the fusion of Mughal and colonial-era architecture.**

- Rakhigarhi Harappan Site (Haryana)
  - The **location is a large Indus Valley Civilization site,** showcasing a**dvanced urban planning and drainage systems.**
  - It was **one of the five largest Harappan settlements.**

- Kanchipuram Temples (Tamil Nadu) – Serial Nomination
  - It covers **important Pallava and Chola-period temples.**
  - He initiated **Dravidian architecture, sculptures, and inscriptions.**

- Neolithic Site of Burzahom (Jammu & Kashmir)

- **Boasts pit dwellings and remnants** of early human settlement in the **Kashmir Valley (3000 BCE - 1000 BCE).**
- Sheds light on prehistoric life and rituals.

- Maratha Military Landscapes (Maharashtra) – Serial Nomination
  - Forts and defensive buildings connected with the Maratha Empire.
  - Features distinctive military architecture and strategy.

Significance of the Nominations

- Enhances **global recognition of India's cultural and historical legacy.**
- Strengthens **tourism and heritage conservation efforts.**
- Reflects **India's commitment to preserving diverse architectural and archaeological sites.**

EDUCATION INITIATIVE FOR CHOLANAIKKAN TRIBE

Current Context

- A special initiative by **Samagra Shiksha Kerala (SSK)** to provide **education to a bedridden girl belonging to the Cholanaikkan tribe in Malappuram, Kerala.** This move highlights the significance of inclusive learning for **far-flung tribal communities, particularly those classified as Particularly Vulnerable Tribal Groups (PVTGs).**

Understanding the Cholanaikkan Tribe

- **One of the Last Hunter-Gatherer Tribes** –The Cholanaikkans, native to Kerala's Nilambur forests, have traditionally lived in isolation, relying on forest resources.
- **Rock Shelter Dwellers** –Their homes, called *Kallu Arais*, are naturally occurring caves and rock shelters.
- **Sustenance from the Wild** – Their livelihood depends on collecting honey, wild fruits, and tubers, along with limited hunting.
- **Unique Language and Culture** –They speak a distinct Dravidian dialect, preserving an indigenous identity with minimal outside interaction.

Significance of This Initiative

- **Bridging Educational Gaps** – The effort demonstrates how targeted interventions can support PVTGs in accessing education.
- **Setting a Precedent** – This case highlights the need for tailored learning solutions for isolated communities.
- **Promoting Inclusive Policies** – The initiative reinforces the role of government programs in ensuring that education reaches even the most inaccessible regions.

IMPLEMENTATION OF THE 2020 BODO ACCORD

Current Context

- Union Home Minister **Amit Shah** announced that **82%** of the **2020 Bodo Accord** has been implemented, with full implementation expected in **two years**.

Key Aspects	Details
Implementation Status	82% completed; full implementation in 2 years.
Accord Significance	Strengthened autonomy of the **Bodoland Territorial Council (BTC)**, ending decades of insurgency.
Rehabilitation Measures	**₹287 crore** spent on rehabilitating **4,881 NDFB ex-militants** (90% funded by Centre).
Key Announcement	A **Delhi road** to be named after **Bodofa Upendra Nath Brahma**; his **bust** to be unveiled in **April 2025**.

About the Bodo Tribe

- **Bodos** are one of the largest **plains tribes of Assam**, belonging to the **Tibeto-Burman ethnic group**.
- They have historically sought greater autonomy, leading to accords in **1993, 2003, and 2020**.
- The **Bodoland Territorial Region (BTR)** was created under these accords, granting them **political and economic rights**.

PRESERVING KAMBA RAMAYANA: A CULTURAL INITIATIVE

Current Context

- The **Ministry of Culture** has launched an initiative to **preserve and promote** the *Kamba Ramayana*, **a significant Tamil literary work.** A week-long festival at **KambarMedu, Theraazhundur** (Kamban's birthplace) will feature **recitals, dance dramas, and scholarly discussions** to revive its oral tradition. The event will be inaugurated by **Union Culture Minister Gajendra Singh Shekhawat** and held in collaboration with the **Tamil Nadu Government**.

About Kamba Ramayana (The Ramavataram)

- The *Kamba Ramayana* was composed by the **Tamil poet Kamban** in the **12th-13th century CE**. It is a **Tamil** adaptation of **Valmiki's Ramayana**, incorporating local traditions and Bhakti influences.

About Kamban

- Kamban was born in **Thanjavur**, in the **Chola Kingdom**. He was a prominent figure in the **third great wave of Tamil literature**, following the **Sangam period** and the **Bhakti literature of the Alwars and Nayanmars**.

Key Features of the Initiative

- The initiative is being organized by the **South Zone Cultural Centre (SZCC), Ministry of Culture**. The main events will be held at **Sreerangam Temple in Trichy**, with additional performances in **Kumbakonam, Chengalpattu, Ramanathapuram, Chennai, and Thanjavur**. Activities will include **traditional recitals, performances, workshops, symposia, and educational competitions** to ensure the legacy of *Kamba Ramayana* is preserved for future generations.

FINANCIAL ASSISTANCE FOR PROMOTION OF ART AND CULTURE

Current Context

- The **Ministry of Culture** provides financial aid to cultural organizations under a **Central Sector Scheme** with **eight sub-components**. In **2023-24**, **₹78.30 crore** was granted to **2,760 organizations**. The scheme is monitored through audits, vouchers, and inspections.

Eligibility

- **Registered** as a **Society, Trust, or Not-for-Profit Company** (min. 3 years).
- **NGO Darpan Portal** registration (NITI Aayog).
- **Cultural focus**, with audited accounts & tax returns for **3 years.**

Key Sub-Components

- **Grants to Cultural Organizations** – Up to **₹1-5 crore** for national-level organizations.
- **Cultural Events & Productions** – Up to **₹20 lakh** for festivals, exhibitions, and performances.
- **Himalayan Cultural Heritage** – Up to **₹30 lakh** for preservation efforts.
- **Buddhist/Tibetan Culture** – Up to **₹1 crore** for monasteries & research.
- **Cultural Infrastructure** – Up to **₹50 lakh (metros), ₹25 lakh (non-metros)** for theatres & auditoriums.
- **Allied Cultural Activities** – Up to **₹1.5 crore** for audio-visual setups.

- **Intangible Cultural Heritage** – Support for traditional art preservation.
- **Festivals & Fairs** – Funds for **Rashtriya Sanskriti Mahotsavs** (**₹38.67 crore spent in 3 years**).

VINOD KUMAR SHUKLA WINS 59TH JNANPITH AWARD

Current Context

- Eminent Hindi writer **Vinod Kumar Shukla** has been awarded the **59th Jnanpith Award**, India's highest literary honor. He is the **first writer from Chhattisgarh** to receive this prestigious award.

About the Jnanpith Award

- **Established:** 1961
- **First Recipient:** G. Sankara Kurup (Malayalam, 1965)
- **Recognition:** Given to Indian authors for outstanding literary contributions
- **Award Includes: ₹11 lakh,** a bronze Saraswati statue, and a citation

About Vinod Kumar Shukla

- **Contributions:** Noted poet, short-story writer, and essayist in Hindi literature
- **Writing Style:** Known for linguistic creativity and emotional depth

SARHUL FESTIVAL: A CELEBRATION OF NATURE AND ADIVASI IDENTITY

Current Context

- Adivasis in Jharkhand and the Chhotanagpur region celebrates **Sarhul**, a major festival marking the **new year and the arrival of spring**. The three-day festival, rooted in **nature worship**, honors **Sal trees** (*Shorea robusta*), which are seen as the abode of **Sarna Maa**, the village-protecting deity.

Key Aspects of Sarhul

- **Symbolic Union:** The **pahan (priest)** represents the **Sun**, and his wife, the **pahen**, symbolizes the **Earth**. Their union signifies the cycle of life.
- **Sacred Groves:** The main rituals occur at **Sarna Sthals**, protected forest groves in villages across **Jharkhand, Chhattisgarh, Odisha, and Bihar**.
- **Rituals:** Includes **sacrificing a rooster**, offering **Sal flowers**, and performing traditional **Jadur, Gena, and Por Jadur dances**. A grand feast with **handia (rice beer)** marks the final day.

Evolution of Sarhul

- **Historical Significance:** Anthropologist **Sarat Chandra Roy (1928)** noted that Sarhul evolved from a hunting-centered tradition to an **agricultural** one, reflecting changes in Adivasi life.
- **Spread:** During the colonial era, Sarhul traveled with **indentured Adivasi laborers** to **Assam, Andaman, Nepal, Bangladesh, and Bhutan**.
- **Political Assertion:** Since the **1960s**, Sarhul processions in Ranchi, started by **Adivasi leader Baba Karthik Oraon**, have become a key event, reinforcing **Adivasi identity**.

SOCIAL ISSUES

Social Issues

DIGITAL CONTENT CREATORS (DCC)

Current Context

- UNESCO's **"Behind the Screens"** survey raised concerns about the credibility and influence of Digital Content Creators (DCCs).

What is the Issue?

- DCCs create and share digital content on platforms like YouTube, Instagram, and TikTok.
- They contribute to the Creator Economy, valued at **$2 trillion globally**, employing **50 million** people worldwide.

Key Challenges

- **62% of DCCs** do not fact-check before sharing content which creates misinformation & fake news.
- Data leaks, as seen in the **Cambridge Analytica scandal (2018).**
- Social media platforms prioritize engagement over accuracy.
- No unified legal framework for DCCs in India.
- Traditional media faces revenue loss due to digital dominance.

Government & Global Responses

- **India**: IT Rules, 2021 regulate digital content and ensure transparency.
- **Global:**
  - **GDPR (EU)** enforces strict data protection rules.
  - Australia's **News Media Bargaining Code** ensures fair pay for media content.

Future Prospects

- Google News Initiative for fact-checking.
- Ensuring compliance with India's **Digital Personal Data Protection Act, 2023.**
- Protecting free speech while controlling harmful content.

SOCIAL MEDIA ADDICTION IN CHILDREN

Current Context

- **Australia became the first country** to pass a law banning social media use for children under **16 years.**

What is the Issue?

- Children increasingly depend on social media due to peer pressure, dopamine-driven instant gratification, and lack of parental supervision.

Key Challenges

- Increased cases of depression, anxiety, and self-harm.
- Reduces physical activity and sleep quality.
- **Algorithm platforms** create addictive content loops.
- Difficulty in verifying children's real age online.

Government & Global Responses

- **India:**
  - **IT Act, 2000 (Section 67B):** Punishes child sexual abuse material online.
  - **Digital Personal Data Protection Act, 2023:** Requires parental consent for children's data.
- **Global:**
  - **COPPA (USA):** Mandates parental consent for data collection.
  - **Online Safety Act (UK):** Sets stricter age restrictions on social media.

Future Prospects

- AI tools to detect harmful content.
- Educating parents on digital risks and screen-time management.
- Development of a **"Children's Internet"** with child-friendly content.

MANUAL SCAVENGING IN INDIA

Current Context

- Supreme Court sought an action report on its directives in **Dr. Balram Singh vs. Union of India (2023)** regarding the eradication of manual scavenging.

What is the Issue?

- Despite legal bans, manual scavenging continues in several parts of India due to lack of mechanization and alternative employment opportunities.

Key Challenges

- Frequent deaths due to exposure to toxic gases in sewers.
- Despite the **PEMSR Act, 2013**, the practice persists in many regions.
- Families of victims struggle to receive rightful compensation.

Government & Global Responses

- **India:**
  - **PEMSR Act, 2013:** Bans manual scavenging and mandates rehabilitation.
  - **NAMASTE Scheme (2023):** Promotes mechanization of sewer cleaning.
  - **Swachh Bharat Mission 2.0:** Allocates funds for advanced sanitation equipment.
- **Global:**
  - **Kerala's Bandicoot Robot:** A successful robotic sewer cleaner.

Future Prospects

- Investing in **robotic solutions** to replace manual cleaning.
- Strict penalties for non-compliance with mechanization laws.
- Ensuring **education, skill training, and alternate employment** for affected workers.

FEMALE LABOR FORCE PARTICIPATION IN INDIA

Current Context

- **Economic Advisory Council to the PM (EAC-PM)** highlighted a sharp rise in female labor participation, especially in rural areas.

What is the Issue?

- Rural Female LFPR rose from **24.6% (2017-18) to 47.6% (2023-24).**
- Urban Female LFPR increased modestly from **20.4% to 25.4%.**
- **Bihar, Punjab, and Haryana show lower participation** compared to Rajasthan and Jharkhand.

Key Challenges

- Cases of sexual harassment increased from **402 (2018) to 422 (2022)**.
- Women earn significantly less than men in similar roles.
- Only **33% of Indian women** have used the internet.
- Women's unpaid work contributes **3.1% to GDP**, while men's share is only **0.4%.**

Government & Global Responses

- **India:**
  - **Beti Bachao Beti Padhao:** Focuses on education and empowerment.
  - **Maternity Benefits:** 26 weeks of paid leave under labor codes.

- **Working Women Hostel Scheme:** Provides safe accommodation for female workers.
- **Global:**
  - **Girls Who Code (International NGO):** Trains young women in computer science.
  - **Mobile Creches (Burkina Faso):** Enables working mothers to balance childcare and jobs.

Future Prospects

- Strict enforcement of **POSH Act, 2013.**
- Expanding internet access and **digital literacy programs for women.**
- Promoting hybrid work models and equal pay initiatives.
- Encouraging legal protections for women in unorganized employment.

ONLINE CHILD ABUSE

Current Context

- A study published in **The Lancet** highlights the growing concern of online sexual abuse faced by children worldwide.

What is the Issue?

- Online platforms have become a breeding ground for child exploitation, **with increasing cases of solicitation, non-consensual image sharing, and online sexual extortion.**
- The **lack of digital literacy** and robust law enforcement further exacerbates the problem.

Key Challenges

- One in **12 children** globally has experienced online sexual abuse.
- Online **solicitation, non-consensual image sharing, exploitation, and sexual extortion**.
- AI tools aid in the spread of **Child sexual abuse material (CSAM).**
- Limited digital literacy and ineffective law enforcement responses.

Government & Global Responses

- **India: POCSO Act, IT Act, National Cyber Crime** Reporting Portal.
- **Global: INTERPOL, FBI collaborations, AI-based** monitoring tools.

Future Prospects

- Stronger legislation with enhanced penalties.
- Public awareness campaigns for digital safety.
- Ethical AI moderation to prevent **CSAM distribution.**

WORKPLACE MENTAL HEALTH & PRODUCTIVITY

Current Context

- The **Economic Survey 2025** emphasized workplace culture and lifestyle impact on mental health and economic growth.

What is the Issue?

- **Workplace stress, long hours, and lack of mental health support** are negatively impacting employee productivity and well-being, leading to absenteeism and reduced economic growth.

Key Challenges

- Poor mental health lowers **productivity and job retention.**
- High workloads and excessive screen time **increase stress.**
- Remote work **decreases mental well-being.**

Government & Global Responses

- **India:** National Tele Mental Health Program, Kiran Helpline.
- **Global:** Mental health programs, **WHO** guidelines on workplace well-being.

Future Prospects

- Work-life balance policies.
- Stronger employee well-being programs.
- Awareness campaigns on stress management.

TEENAGE PREGNANCY IN INDIA

Current Context

- A study on **adolescent pregnancies h**ighlights persistent challenges despite **declining child marriage rates.**

What is the Issue?

- Despite efforts to curb **child marriage, teenage pregnancies remain prevalent,** particularly in rural areas, leading to health risks and limited educational opportunities for young girls.

Key Challenges

- Teenage pregnancy linked to **child marriage and gender inequality.**
- High rates in **West Bengal, Bihar, Rajasthan.**
- Societal norms and lack of reproductive education.

Government & Global Responses

- **India: PMMVY, JSY, RKSK, Beti Bachao Beti Padhao.**
- **Global: WHO** adolescent health programs.

Future Prospects

- **Strengthen** enforcement of **child marriage laws.**
- Comprehensive **sexual education i**n schools.
- Community involvement for prevention.

IMPACT OF EARLY SMARTPHONE USE ON ADOLESCENTS

Current Context

- A study by **Sapien Labs highlights** rising aggression and declining mental well-being due to early smartphone access.

What is the Issue?

- Excessive smartphone use at an early age is linked to declining **mental health, increased aggression, and social detachment among adolescents**, with females being particularly vulnerable.

Key Challenges

- Early exposure increases **anxiety, aggression, and hallucinations.**
- **Girls r**eport **higher distress l**evels than boys.
- **Digital addiction** disrupts sleep and reduces face-to-face interaction.

Government Responses

- **India**
  - **Digital literacy** in school curricula.
  - **Age verificatio**n and **parental control policies.**

Future Prospects

- **Delaying smartphone access** for young children.
- **AI-based** safe content moderation.
- **Awareness programs** on digital detox.

MIGRATION TRENDS IN INDIA

Current Context

- The **Economic Advisory Council's report "400 Million Dreams"** analyzes domestic migration trends.

What is the Issue?

- Migration patterns are shifting due to improved rural economic conditions, but **seasonal migration** still places a burden on urban infrastructure and social security systems.

Key Challenges

- Migration rates **declined by 11.78% since 2011.**
- **Seasonal migration** strains urban infrastructure.

- **Gender disparities** in workforce participation.

Government Responses

- **India**
  - **Rural employment schemes** to reduce distress migration.
  - Expansion of **urban infrastructure and social security networks.**

Future Prospects

- Portable **social welfare** for migrants.
- Data-driven **migration tracking** for policy-making.
- Development of **Tier-2 and Tier-3 cities.**

DRUG ABUSE IN INDIA

Current Context

- Supreme Court of India has raised concerns over the **increasing drug abuse** among **youth,** calling it a generational threat. This concern was highlighted during a verdict supporting the **National Investigation Agency's (NIA)** probe into a heroin smuggling case linked to Pakistan.

What is the Issue?

- Drug abuse has emerged as a **serious social and health crisis**, affecting millions, especially the youth.
- The country faces challenges due to **high addiction rates, cross-border drug trafficking, weak enforcement mechanisms, and limited rehabilitation facilities**.
- **Golden Crescent (Afghanistan, Pakistan, Iran)** and **Golden Triangle (Myanmar, Thailand, Laos)** serve as major sources of illicit drugs entering India.

Key Challenges

- Approximately **100 million Indians a**re affected by narcotic abuse, with states like **Punjab, Maharashtra, and Uttar Pradesh** recording the highest number of drug-related FIRs.
- Peer pressure, academic stress, and media influence contribute significantly to drug abuse among young people.
- The **Golden Crescent (Afghanistan, Pakistan, Iran) and Golden Triangle (Myanmar, Thailand, Laos)** remain major sources of illicit drugs entering India.

Government Responses

- **India**
  - **Narcotic Drugs and Psychotropic Substances (NDPS) Act, 1985** regulates the production, manufacture, and trafficking of drugs.
  - **Drugs and Cosmetics Act, 1940 & PITNDPS Act, 1988** has legal frameworks to prevent illicit drug traffic.

- **National Narcotics Control Bureau (NCB)** coordinates drug law enforcement with global agencies.

Future Prospects

- Amend the **NDPS Act** to integrate rehabilitation with strict enforcement.
- Incorporate **drug education** in school curricula and community programs.
- Strengthen partnerships with **UNODC and Interpol** for information-sharing and counter-trafficking.

GENDER GAP IN INDIA

Current Context

- The Economic Survey reported that there are **63 million missing women** in the country due to factors such as **foeticide, infanticide, and neglect**.

What is the Issue?

- The disparity is evident in various forms, including **son preference, lack of education for girls, wage disparity, and underrepresentation in decision-making roles**.

Key Challenges

- **Female foeticide and infanticide** have led to an adverse sex ratio in many states.
- **Societal norms and lack of safety** hinder women's employment opportunities.
- Crimes such as **domestic violence, harassment, and honor killings persist.**
- Girls often face barriers in accessing **quality education.**

Government & Global Responses

- **India:**
  - **Beti Bachao, Beti Padhao (BBBP)** – A flagship scheme to improve sex ratio and promote girl child education.
  - **Sukanya Samriddhi Yojana** – A savings scheme to ensure financial security for girls.
  - **Maternity Benefit Program (PMMVY)** – Provides financial support to pregnant and lactating mothers.
  - **Ujjwala Yojana** – Ensures access to clean cooking fuel, improving women's health.
  - **Women's Reservation Bill** – Aims to enhance women's political representation.
- **Global:**
  - **Sustainable Development Goal 5 (SDG-5)** – UN's goal for gender equality and women empowerment.
  - **UN Women Initiatives** – Various programs to support gender parity.

Future Prospects

- **Stricter laws** and enforcement to protect women's rights.
- **Policies encouraging women's workforce** participation and entrepreneurship.
- Continued efforts to challenge deep-rooted gender biases.
- Leveraging **digital platforms for awareness** and women's safety.

CASTE-RELATED ISSUES IN INDIA

Current Context

- **Caste-based discrimination and violence** remain significant social challenges in India. Recent developments include legal reforms addressing mob lynching, government advisories on caste terminology, and debates around caste census and reservations.

What is the Issue?

- **Lynchings in** Caste-based mob violence has been a persistent issue.
- Debate over **caste enumeration in the census raises** concerns about its impact on policy-making, social justice, and caste-based political mobilization.

Key Challenges

- Despite new legal provisions, **caste-based violence** continues due to weak enforcement and deep-rooted biases.
- **Caste census and reservation debates** fuel political divides, shifting focus from developmental policies to identity-based politics.
- Disparities in **education, employment, and social mobility** persist despite affirmative action policies.

Government & Global Responses

- **India:**
  - Strengthened **legal provisions** against mob lynching under **BNS.**
  - Directive to **standardize caste-related terminology** to ensure constitutional adherence.
  - Ongoing discussions on the impact of a caste census on **policy planning and social justice**.
- **Global:**
  - **International Human Rights** bodies emphasize anti-discrimination policies.
  - **UN recommendations** advocate for stronger legal protection for marginalized communities.

Future Prospects

- **Effective enforcement** of anti-discrimination laws and social justice policies.
- **Caste census data** should be utilized for evidence-based policy decisions rather than political maneuvering.
- **Focusing on economic upliftment, skill development, and education** to reduce caste-based disparities.

PUBLIC HEALTH

Current Context

- **Air pollution, substance abuse, and the rising burden of non-communicable diseases** are key concerns affecting public health.

What is the Issue?

- India accounts for **26% of the world's premature deaths and disease burden due to air** pollution (India State-Level Disease Burden Initiative).
- **1 in 8 deaths in India is** attributed to air pollution, making it a leading risk factor for mortality.
- **Poor air quality** increases the risk of heart disease, respiratory ailments, and other chronic illnesses.

Key Challenges

- Many health issues stem from a **lack of public awareness** about the impact of air pollution and substance abuse.
- **Industrial emissions, vehicular pollution, and crop burning** continue to deteriorate air quality despite government interventions.
- **Limited access to rehabilitation centers and high treatment costs** make it difficult for addicts to receive proper care.

Government Responses

- **India: National Clean Air Programme (NCAP):** Aims to reduce PM2.5 and PM10 levels by **20-30%** in major cities.

Future Prospects

- **Stricter implementation of air pollution control** measures and drug prevention policies.
- **Use of AI and satellite monitoring** for pollution tracking and enforcement.
- **Nationwide campaigns to educate citizens** about pollution risks and drug abuse prevention.

UNEMPLOYMENT

Current Context

- India's unemployment rate stood at **8.10% in February 2022**, with youth and women facing severe job market challenges.

What is the Issue?

- **High youth unemployment** despite increasing educational qualifications.
- Women face additional barriers to employment.
- Many educated youths lack industry-relevant skills.

Key Challenges

- **Limited job creation** in formal sectors.
- **Dependence on informal jobs**, offering low wages and job insecurity.
- **Skill gap** between academic training and industry requirements.

Government & Global Responses

- **India:**
  - **Skill India Mission** – Trains youth in vocational skills.
  - **PM Kaushal Vikas Yojana (PMKVY)** – Financial aid for skill development.
  - **MGNREGA** – Ensures 100 days of rural employment.
  - **Startup India & Digital India** – Promotes entrepreneurship & IT jobs.
- **Global : ILO's Global Initiative on Decent Jobs for Youth** aims to improve employment opportunities worldwide.

Future Prospects

- Strengthening **vocational education** in schools.
- Expanding **digital and gig economy opportunities**.
- More **private sector involvement** in job creation.

POVERTY & ECONOMIC DISPARITIES

Current Context:

- Rural India faces higher poverty rates than urban areas due to fewer job opportunities and resources. **COVID-19 worsened economic disparities**, pushing **75 million people into poverty (Pew Research, 2021).**

What is the Issue?

- **Rising gap** between rich and poor.
- Lack of access to **education, healthcare, and employment.**
- Even in cities, low-income groups struggle with basic needs.

Key Challenges

- **Inefficient implementation** of poverty alleviation schemes.
- **Regional disparities** in income and development.
- **High dependence on agriculture**, vulnerable to climate change.

Government & Global Responses

- **India:**
  - **MGNREGA** – Rural employment guarantee scheme.
  - **Public Distribution System (PDS)** – Subsidized food distribution.
  - **Indira Awaas Yojana (IAY)** – Rural housing assistance.
- **Global**
  - **UN Sustainable Development Goal 1**: Eradicate poverty by 2030.
  - **World Bank's Poverty Reduction Strategies** support developing nations.

Future Prospects

- Strengthening **direct benefit transfer (DBT)** mechanisms.
- **Inclusive growth policies** focusing on employment & skill development.
- Encouraging **microfinance & self-employment** initiatives.

IMPACT OF TECHNOLOGY ON SOCIETY

Current Context

- **Rapid digital transformation** post-COVID-19 and **government initiatives like Digital India** aim to enhance technology access.

What is the Issue?

- **Rural areas lack** access to internet & technology.
- Rise in **cybercrimes & misinformation.**
- **AI and automation** reducing manual jobs.

Key Challenges

- **Limited digital literacy** among low-income groups.
- **Data privacy issues** due to weak cybersecurity policies.
- **Unequal opportunities** for rural vs. urban populations.

Government & Global Responses

- **India**
  - **Digital India Mission** – Expanding digital access.
  - **E-Governance Initiatives** – Improving transparency.
  - **Cybersecurity Laws** – Strengthening digital safety.
- **Global**
  - **UNESCO's Global Education Coalition** promotes digital literacy.

- **World Economic Forum's Future of Jobs Initiative** addresses automation challenges.

Future Prospects

- Expanding **internet infrastructure in rural areas**.
- Strengthening **data protection laws**.
- Encouraging **AI & automation skill training**.

CRIME & PUBLIC SAFETY

Current Context

- Violence against women remains a significant issue **and crime rate in 2024 was 445.9 incidents per 100,000 people.**

What is the Issue?

- **Gender-based violence** despite strict laws.
- **Cyber threats** like fraud, hacking, and cyberbullying.
- **Police inefficiency** due to corruption & lack of training.

Key Challenges

- **Slow legal proceedings** discourage victims from reporting.
- **Insufficient law enforcement resources**.
- **Lack of awareness** about cyber laws.

Government & Global Responses

- **India:**
  - **Nirbhaya Fund** – Special funding for women's safety.
  - **Cyber Crime Prevention Scheme** – Tackles online threats.
  - **Fast-track courts** for gender-based violence cases.
- **Global**
  - **UN Women's Safe Cities Programme** fights violence against women.
  - **Interpol's Cybercrime Initiatives** enhance global cooperation.

Future Prospects

- Strengthening **police reforms** for better enforcement.
- **Community policing models** for crime prevention.
- Expanding **digital forensics capabilities** for cybercrime control.

SCHOOL DROPOUT RATES

Current Context

Dropout rates increased in states like **Bihar, Assam, and Karnataka.**

What is the Issue?

- **High dropout rates in rural areas** due to economic hardship.

- **Gender gap** in education completion.
- **State disparities**: Some states improving, others deteriorating.

Key Challenges

- **Financial constraints** force children to leave school early.
- **Child marriage & gender bias** reduce female education rates.
- **Lack of school infrastructure** in remote areas.

Government & Global Responses

- **India:**
  - **Right to Education (RTE) Act** ensures free & compulsory schooling.
  - **Mid-Day Meal Scheme** improves attendance.
  - **Beti Bachao, Beti Padhao** promotes girls' education.
- **Global**
  - **UNESCO's Education for All Program** supports school completion.
  - **World Bank's Learning Poverty Initiative** addresses dropout challenges.

Future Prospects

- Strengthening **scholarship programs** for underprivileged students.
- Improving **rural school infrastructure**.
- **Technology-based learning solutions** to enhance accessibility.

OBESITY

Current Context

- **Prime Minister** has **expressed** concern over the **rising obesity,** especially among children, and urged people to adopt a healthier lifestyle.

What is the Issue?

- Obesity, defined by the **WHO** as abnormal or excessive fat accumulation with a **BMI of 25 or above (overweight) and 30 or above (obese)**, has been rising in India and globally.
- It increases the risk of various non-communicable diseases **(NCDs) like diabetes, heart disease, and cancer.**

Key Challenges

- **NFHS-5 reports that 24% of Indian women and 22.9% of men** are overweight or obese, with childhood obesity rising.
- Increased risk of cardiovascular diseases, diabetes, cancer, and joint disorders.

- India's obesity-related costs amounted to **USD 28.95 billion in 2019** and may reach **1.57% of GDP by 2030.**
- Poor diet (High Fat, Salt, Sugar foods), low physical activity, urban infrastructure discouraging exercise, air pollution, and socioeconomic barriers.

Government and Global Responses

- **India:**
  - National Programme for Prevention and Control of NCDs (NP-NCD)
  - Mission Poshan 2.0
  - Fit India Movement
  - Eat Right Mela
- **Global**
  - WHO recommendations for reducing sugar intake, promoting physical activity
  - Public health campaigns and taxation on unhealthy foods in countries like the UK and Mexico

Future Prospects

- Promote **'Suposhan Abhiyan'** to encourage mindful eating and proper micronutrient intake.
- Recognize obesity as a public health challenge, not a personal issue.
- Higher taxes on unhealthy foods, subsidies for healthier options.
- **Mandatory BMI and waist measurements** in health check-ups.
- Include obesity prevention in school curricula, regulate school canteens.

HIDDEN HUNGER IN RURAL INDIA

Current Context

- A study by the **International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)** highlights that rural Indians suffer from 'hidden hunger' despite protein-rich food being available.

What is the Issue?

- Hidden hunger refers to malnutrition where people consume sufficient calories but lack essential nutrients like **proteins and micronutrients,** leading to health risks.

Key Challenges

- Rural populations depend on rice and wheat, which lack essential **amino acids.**
- Due to financial constraints, cultural habits, and lack of awareness.

- **PDS** provides mostly cereals without sufficient protein-rich options.
- Some wealthier families still fail to consume adequate protein due to lack of awareness.

Government and Global Responses

- **India:**
  - Diversification of PDS to include protein-rich foods
  - Nutrition education in schools and public health initiatives
  - Empowering women to improve household nutrition
- **Global:**
  - WHO and FAO nutrition programs for balanced diets
  - Sustainable agriculture promotion for protein-rich crops

Future Prospects

- Include **pulses, millets, and fortified foods.**
- Promote awareness about balanced diets and protein consumption.
- Strengthen **self-help groups** for better access to nutritious food.
- Incentives for growing protein-rich crops.
- Tailored interventions based on **state-specific dietary needs.**

SLUM REHABILITATION AND HOUSING CRISIS

Current Context

- Following a **Supreme Court directive, the Bombay High Court** has initiated a review of the **Maharashtra Slum Areas Act, 1971**, to address delays in slum redevelopment.

What is the Issue?

- Slum dwellers face inadequate housing, lack of basic amenities, and violations of their right to shelter **(Article 21)**. The inefficiencies in redevelopment projects have left many in poor living conditions.

Key Challenges

- Bureaucratic hurdles delay land acquisition for redevelopment.
- Private developers hesitate due to low returns.
- Fear of losing community ties **discourages relocation.**
- Lack of waste management and green spaces in slum areas.
- Developers delay projects for **financial gain,** leading to slow execution.

Government and Global Responses

- **India**:
    - Maharashtra Slum Rehabilitation Scheme (1995) offers incentives to private developers for slum redevelopment.
    - Establishment of the Slum Rehabilitation Authority (SRA) for project oversight.
- **Global**:
    - UN-Habitat's Participatory Slum Upgrading Program (PSUP) focuses on community-driven redevelopment.
    - Brazil's "Favela Bairro" program successfully transformed slums into sustainable urban spaces.

Future Prospects

- Invest in resilience projects to yield fourfold social benefits.
- Streamline land acquisition policies, ensuring fair compensation.
- Utilize Public-Private Partnerships (PPPs) to attract investment.
- Involve residents in planning to address social and cultural concerns.
- Incorporate sustainable practices like waste management and green spaces.
- Strengthen execution and accountability in redevelopment projects.

SCHEMES IN NEWS

Schemes in News

PRADHAN MANTRI SHRAM YOGI MAANDHAN (PM-SYM)

Current Context
- Provides social security to **unorganised sector workers.**
- **Launched By & Year**: Government of India, Interim Budget **2019.**

Key Features
- **₹3,000 per month** after the age of **60**.
- Matches the worker's contribution on a **1:1 basis.**
- Spouse receives **50%** of the pension after the beneficiary's death.
- Registration through **Common Service Centres (CSCs) or Maandhan portal.**
- Managed by the **Life Insurance Corporation of India (LIC)**.

Key Components
- Voluntary participation based on financial capacity.
- Exit provisions under specific conditions.

Eligibility Criteria
- Age: **18-40 years**.
- Monthly Income must not exceeding **₹15,000**.
- Employment must be in the unorganised sector.
- Excluded - Individuals covered under **EPF, ESIC, or NPS and income taxpayers.**

Implementation and Monitoring
- Administered by the **Ministry of Labour & Employment.**
- Pension management by **LIC.**
- Enrolment through **CSCs.**

SPECIAL ASSISTANCE SCHEME

Current Context
- Interest-free loans to states for **50 years** to promote capital investment and reforms.
- **Launched By & Year**: Government of India, FY 2021.

Key Features
- Initial allocation of **₹12,000 crore in FY21**, increased to **₹1.3 trillion in FY24.**
- Supports post-pandemic recovery and infrastructure development.
- **₹30,000** crore allocated for outcome-based funding.

Key Components
- **₹1.25 trillion, with 97%** approved for distribution.
- **₹55,000 crore** allocated based on states' shares of central taxes.
- **₹95,000 crore** contingent on states meeting reform criteria.

Eligibility Criteria
States must implement reforms in specific sectors:
- Development of **tourist centers.**
- Implementation of **vehicle scrappage policy.**
- Industrial growth promotion.

Implementation and Monitoring
- Central government administers the scheme.
- Leading beneficiaries are **Uttar Pradesh (₹13,042 crore), Bihar (₹12,907 crore), Madhya Pradesh (₹10,635 crore).**

REVAMPED COACHING SCHEME FOR DISADVANTAGED STUDENTS

Current Context
- Expanded to include **PM CARES beneficiaries** along with **Scheduled Castes (SCs) and Other Backward Classes (OBCs).**
- **Launched By & Year: Government of India, during the Sixth Five-Year Plan.**

Key Features
- Free coaching for **UPSC, State PSCs, banking, insurance, PSUs, IITs, AIIMS, IIMs, and law exams.**
- Financial support covering **₹20,000-₹75,000** for coaching fees.
- **Monthly stipend of ₹4,000 for 12 months.**
- **Additional ₹15,000** for interview preparation for Civil Services and State Services mains qualifiers.

Key Components
- Central universities to oversee the selection process.
- **3,500** students selected annually, with **70% reserved for SCs and 30% for OBCs.**
- **30% of seats** in each category reserved for **female candidates.**

Eligibility Criteria
- **SC/OBC** students with a family income of **₹8 lakh or less.**
- **Minimum 50% marks** in the last board examination.

- PM CARES beneficiaries exempt from income and selection criteria.

Implementation and Monitoring

- Administered by the **Dr. Ambedkar Foundation (DAF)** in collaboration with Central Universities.
- Coaching centers operate under the **Dr. Ambedkar Centre of Excellence (DACE).**
- Biometric attendance tracking and monthly progress reports required.
- Online Learning Management System established for monitoring and faculty verification.

CREDIT GUARANTEE SCHEME FOR E-NWRS (ELECTRONIC-NEGOTIABLE WAREHOUSE RECEIPTS)

Current Context

- **₹1,000 crore** allocated to improve agricultural financing under the **Digital India Mission.**
- **Launched By & Year**: **Government of India, 2024.**

Key Features

- **Farmers** can pledge stored goods in warehouses to secure low-interest loans.
- **e-NWRs facilitate paperless transactions** and easy access to credit.
- **NeRL (National e-Repository Limited**) holds an **88%** market share in issuing e-NWRs.
- **RBI** raised the Priority Sector Lending limits for e-NWR-based financing.

Key Components

- Loans up to **₹75 lakh f**or individual farmers.
- Loans up to **₹2** crore for **Farmer Producer Organisations (FPOs).**
- Minimal guarantee fee to increase accessibility.
- Post-harvest lending expected to reach **₹1 lakh crore** in the next decade.

Eligibility Criteria

- **Farmers and FPOs** with stored goods in registered warehouses.
- Warehouses must be registered with the **Warehouse Development and Regulatory Authority (WDRA).**

Implementation and Monitoring

- Administered by the **Ministry of Agriculture & Farmers' Welfare.**
- **NeRL** oversees e-NWR issuance and loan disbursement.

AYUSHMAN BHARAT PM JAN YOJANA (PM-JAY) SCHEME FOR GIG WORKERS

Current Context

- Union **Budget 2025-26** - an expansion of **PM-JAY to cover 1 crore Gig workers** and ensures the streamlined registration and identification of gig workers.

State Initiatives

- **Rajasthan's Platform-Based Gig Workers (Registration and Welfare) Act, 2023.**
- **Karnataka's Platform-Based Gig Workers (Social Security and Welfare) Bill, 2024.**
- **Launched By & Year**:**Ministry of Health and Family Welfare in 2018.**

Objective

- To provide health insurance coverage of **₹5 lakh per beneficiary** family per year for secondary and tertiary hospitalization, now extended to cover gig workers.

Key Features

- Target Beneficiaries are **Gig workers** across India.
- Financial Assistance of **₹5 lakhs/year** for medical expenses in enrolled hospitals.
- **Centrally Sponsored Scheme.**

Key Components

- Health insurance under **PM-JAY**.
- Issuance of identity cards to gig workers.
- Integration with **e-Shram registration** for social security.

Eligibility Criteria

- Gig workers as defined under the **Code on Social Security, 2020.**
- Registered under the **e-Shram portal.**

Implementation & Monitoring

- **The National Health Authority (NHA)** under the Ministry of Health and Family Welfare is responsible for implementation.
- **PM-JAY website & e-Shram portal** for application & tracking.

REVISED OPEN MARKET SALE SCHEME (DOMESTIC) POLICY FOR SALE OF EXCESS STOCK OF WHEAT AND RICE IN THE OPEN MARKET

Current Context

- The reserve price of rice for ethanol distilleries was reduced by **₹550 per quintal**, which directly sold rice to states, corporations, and community kitchens without an e-auction requirement.
- **Launched By & Year: Ministry of Consumer Affairs, Food & Public Distribution in 2024**

Objective

- **To enhance food security and support ethanol production** by regulating the sale of surplus food grains in the open market.

Key Features

- Target Beneficiaries are **State Governments, Corporations, Community Kitchens, Ethanol Distilleries, Flour Millers.**
- Financial Assistance/Incentives to reduced rice reserve price **(₹2,250 per quintal)** to ethanol distilleries **(₹550 reduction).**
- Mode of Implementation is a **Central Government initiative** through the **Food Corporation of India (FCI)**

Key Components

- Sale of surplus food grains (wheat & rice) via e-auction at pre-determined prices.
- Direct sale of rice to state governments and community kitchens without e-auction.

Eligibility Criteria

- **Processors, Atta Chakki operators, and flour millers** for wheat products.
- **State governments** can procure food grains without participating in **e-auctions.**
- Traders and bulk buyers are not eligible for e-auction purchases.

Implementation & Monitoring

- Agencies Responsible are **Food Corporation of India (FCI),** under the **Ministry of Consumer Affairs, Food & Public Distribution.**
- Portal/Website are Managed by **FCI for e-auction** tracking and application.

SAMARTH SCHEME FOR CAPACITY BUILDING IN TEXTILES SECTOR

Current Context

- **3.27 lakh** people were **trained** and **2.6 lakh (79.5%)** were **employed** while **women** beneficiaries were **2.89 lakh (88.3%)**.
- **Launched By & Year** : **Ministry of Textiles in 2017 (Extended till March 2026)**

Objective

- To Skill development in **textiles** (except spinning & weaving) and **promote skilling, upskilling, and reskilling in handlooms, handicrafts, sericulture, and jute** by ensuring sustainable livelihoods through employment with a budget **₹495 crore.**

Key Features

- Beneficiaries are **Women, SC/ST, differently-abled, BPL category, and Aspirational Districts.**
- Implementation of **Central scheme** by training **textile industry, NGOs, govt institutions.**
- Financial Aid covers training costs under **MSDE norms**.
- Monitoring by **Aadhaar-based attendance, web-based MIS and third-party certification.**
- Placement of **70% for entry-level, 90% for upskilling.**

Eligibility

- **Marginalized communities, unemployed youth, startups & organizations** in textiles.

Implementation & Monitoring

- Nodal Agency: **Ministry of Textiles.**
- Tracking by **MIS portal, grievance redressal via call center, app, website.**

PRADHAN MANTRI MUDRA YOJANA (PMMY) SCHEME FOR COMMERCIAL BANKS / REGIONAL RURAL BANKS (RRBS) / SMALL FINANCE BANKS / NON-BANKING FINANCIAL COMPANIES (NBFCS)

Current Context

- The Loan limit increased from **₹10 lakh to ₹20 lakh** and Interest Subvention of **2%** on prompt repayment of **'Shishu' loans for 12 months.**
- **Launched By & Year: Ministry of Finance in 2015**

Objective

- To provide **collateral-free access** to credit for micro-enterprises, **integrate MSMEs** into the formal financial

system, provide affordable credit, and **promote financial inclusion** for marginalized sections.

Key Features

- Target Beneficiaries - **MSMEs** in manufacturing, trading, services, and allied agricultural activities.
- Financial Assistance is loans **up to ₹20 lakh (recently increased from ₹10 lakh).**
- Mode of Implementation is **Centrally implemented via banks, NBFCs, and MFIs.**

Key Components

- Term Loan, Overdraft Limit, Working Capital, Composite Loan.
- Credit Guarantee Fund for Micro Units **(CGFMU**) ensures collateral-free loans.
- In **Mudra Card** overdraft facility for working capital.
- **Mudra Mitra** is a mobile app guiding loan seekers.

Eligibility Criteria

- Non-corporate, non-farming small & micro-enterprises.
- Women entrepreneurs get a **25 bps reduction** in interest rates.

Implementation & Monitoring

- Nodal Agency is **Micro Units Development and Refinance Agency Ltd (MUDRA).**
- Application Portal is **Udyamimitra portal, Banks, NBFCs, MFIs.**

ATAL INNOVATION MISSION (AIM 2.0) SCHEME FOR INNOVATION AND ENTREPRENEURSHIP

Current Context

- **30 Vernacular Innovation Centers** planned under **LIPI with 2500 new Atal Tinkering Labs (ATLs)** to be created and **10 Industry Accelerators** to be educated in Public-Private Partnership (PPP) mode.
- **Launched By & Year**: NITI Aayog in 2016 (AIM 1.0); Extended till 2028 as AIM 2.0

Objective

- **To promote innovation and entrepreneurship in India and to enhance India's global competitiveness.**

Key Features

- Target Beneficiaries are **Students, entrepreneurs, startups, and research institutions.**
- Financial Assistance through budget allocation of **₹2,750 crore.**

- Mode of Implementation is **Centrally implemented by NITI Aayog.**

Key Components

- **Atal Tinkering Labs, Atal Incubation Centres, Atal New India Challenges.**
- **Atal Sectoral Innovation Launch Pads (ASIL)** in ministries for startup integration.
- Language Inclusive Program of Innovation (LIPI) for promoting innovation in regional languages.
- **Deep Tech Reactor** to support research-based startups.
- **State Innovation Mission (SIM)** to build state-wise entrepreneurship ecosystems.
- **International Innovation Collaborations Program** for global partnerships.

Eligibility Criteria

- **Open to schools, universities, startups, and entrepreneurs.**

Implementation & Monitoring

- Nodal agency - **NITI Aayog &** Application Portal - **Atal Innovation Mission website.**

PRADHAN MANTRI VANBANDHU KALYAN YOJANA (PMVKY) SCHEME FOR TRIBAL COMMUNITIES

Current Context

- The scheme **extended till 2025-26** with a total budget of **₹26,135.46 crore** and expansion of **Pradhan Mantri Adi Adarsh Gram Yojana** to improve tribal infrastructure.
- **Launched By & Year: Ministry of Tribal Affairs in 2014**

Objective

- To **improve** the quality of life in tribal areas, **promote** education, employment, and infrastructure development, and **protect** tribal culture and heritage.

Key Features

- Target Beneficiaries are **Scheduled Tribes (STs) and tribal communities.**
- Financial Assistance is a total budget of **₹26,135.46 crore (till 2025-26).**
- Mode of Implementation is a **Centrally sponsored umbrella scheme.**

Key Components

- **Pradhan Mantri Adi Adarsh Gram Yojana** – holistic village development in **36,428** tribal-dominated villages.
- **Development of Particularly Vulnerable Tribal Groups (PVTGs)** – financial aid for housing, health, and education.

- **Support to Tribal Research Institutes (TRI)** – knowledge base for tribal issues.
- **Pre-Matric & Post-Matric Scholarships** – for **ST students (income limit: ₹2.5 lakh/year).**
- **Administrative Assistance for Project Management Units** – for better implementation of **ST welfare programs.**

Eligibility Criteria

- All **tribal** people and **tribal-dominated areas** are eligible.
- Pre & post-matric scholarships for ST students with parental income **below ₹2.5 lakh.**

Implementation & Monitoring

- Nodal Agency - **Ministry of Tribal Affairs.**
- Application Portal is **National Scholarship Portal for scholarships, state portals for development schemes.**

PM RASHTRIYA KRISHI VIKAS YOJNA (PM-RKVY) SCHEME FOR SUSTAINABLE AGRICULTURE

Current Context

- In **2022-23** it is restructured as the **RKVY Cafeteria Scheme**, rationalizing multiple schemes under the **Department of Agriculture & Farmers Welfare** by emphasizing integrating agri-startups and modern agribusiness models.
- **Launched By & Year**: **Ministry of Agriculture & Farmers Welfare in 2007-08 (Revised as RKVY-RAFTAAR in 2017-18, further restructured as RKVY Cafeteria Scheme in 2022-23)**

Objective

- To incentivize states to increase public investment in **agriculture and allied sectors,** provide autonomy and flexibility to states to plan and execute schemes as per local and farmers' needs, and promote value **chain addition, agribusiness models, and skill development** in the agriculture sector.

Key Features

- Target Beneficiaries are **Small & marginal farmers, Scheduled Castes, Scheduled Tribes, women, and other weaker sections.**
- Financial Assistance through funding pattern: **90:10 (Northeastern & hilly states), 60:40 (other states), 100% (UTs).**
- Mode of Implementation is **Centrally Sponsored Scheme with State-level execution.**

Key Components

- Soil Health Management

- Rainfed Area Development
- Agro-Forestry
- Paramparagat Krishi Vikas Yojana
- Agricultural Mechanization (including Crop Residue Management)
- Per Drop More Crop (PDMC)
- Crop Diversification Programme
- Accelerator Fund for Agri Startups

Eligibility Criteria

- Farmers involved in agriculture and allied activities.
- States and UTs that propose and implement projects under this scheme.

Implementation & Monitoring

- The Nodal Agency is the **Ministry of Agriculture & Farmers Welfare.**
- **State-Level Sanctioning Committee (SLSC)** is headed by the **Chief Secretary** of the respective state, responsible for fund allocation and project approval.
- Fund Disbursement is based on project approval under **SLSC.**

KRISHONNATI YOJANA (KY) SCHEME FOR AGRICULTURE

Current Context

- For consolidated multiple agricultural development schemes **under one umbrella** and to greater focus on organic **farming, sustainable agriculture, and mechanization**.
- **Launched By & Year**: **Ministry of Agriculture & Farmers Welfare in 2016-17**

Objective

- To **develop agriculture and allied sectors** holistically and scientifically and to enhance productivity, improve returns, and increase farmers' income.

Key Features

- Target Beneficiaries are **farmers engaged in various agricultural and horticultural activities.**
- Financial Assistance is under different sub-missions to promote sustainable agricultural practices.
- **Centrally Sponsored Umbrella Scheme** integrating multiple schemes.

Key Components (Major Sub-Schemes)

- Mission for Integrated Development of Horticulture **(MIDH)**
- National Mission on Oil Seeds and Oil Palm **(NMOOP)**
- National Food Security Mission **(NFSM)**

- National Mission for Sustainable Agriculture **(NMSA)**
- Sub-Mission on Agriculture Extension **(SMAE)**
- Sub-Mission on Seeds & Planting Material **(SMSP)**
- Sub-Mission on Agricultural Mechanisation **(SMAM)**
- Sub-Mission on Plant Protection & Plant Quarantine **(SMPPQ)**
- Integrated Scheme on Agricultural Census, Economics & Statistics
- Integrated Scheme on Agricultural Cooperation
- Integrated Scheme on Agricultural Marketing **(ISAM)**
- National e-Governance Plan in Agriculture **(NeGP-A)**
- Mission Organic Value Chain Development for North Eastern Region **(MOVCDNER)**

Eligibility Criteria

- Farmers involved in the cultivation of **food grains, oilseeds, horticulture, and organic farming.**
- Agricultural enterprises involved in **mechanization, extension services, and seed production.**

Implementation & Monitoring

- Nodal Agency -**Ministry of Agriculture & Farmers Welfare**
- **State Governments** are responsible for executing specific submissions.

PRADHAN MANTRI ANNADATA AAY SANRAKSHAN ABHIYAN (PM-AASHA) SCHEME FOR FARMERS AND CONSUMERS

Current Context

- Convergence of **PSS & PSF schemes under PM-AASHA** for better efficiency in which enhanced procurement limits are **PSS coverage increased to 25% of national production** for notified crops from **2024-25** and **no ceiling on procurement of Tur, Urad, and Masur in 2024-25**.
- **Launched By & Year**: **Ministry of Agriculture & Farmers Welfare in 2018**

Objective

- To provide **remunerative prices to farmers** and control price volatility of essential commodities for consumers.

Key Features

- Target Beneficiaries -**Farmers (especially those producing pulses, oilseeds, and perishable crops).**
- **Financial Assistance - ₹35,000** crore allocated during the **15th Finance Commission Cycle (up to 2025-26).**
- **Central Sector Scheme.**

Key Components

- **Price Support Scheme (PSS)** – Procurement of pulses, oilseeds, and copra at Minimum Support Price (MSP) from pre-registered farmers.
- **Price Stabilization Fund (PSF)** – Provides working capital for procurement, storage, and distribution of identified agri-horticultural commodities.
- **Price Deficit Payment Scheme (PDPS)** – Direct payment of the difference between MSP and selling price to farmers selling oilseeds.
- **Market Intervention Scheme (MIS)** – Procurement of perishable commodities (non-MSP) to prevent distress sales.

Eligibility Criteria

- Pre-registered farmers **selling pulses, oilseeds, and copra under PSS.**
- Farmers selling oilseeds under **PDPS.**
- Farmers growing perishable crops covered under **MIS.**
- **Fair Average Quality (FAQ)** norms must be met for crops.
- **States/UTs can opt for either PSS or PDPS for oilseeds procurement.**

Implementation & Monitoring

- Nodal Agencies are **Central Nodal Agencies (CNA) for National Agricultural Co-operative Marketing Federation of India Ltd. (NAFED), National Cooperative Consumer's Federation of India Ltd. (NCCF). The Department of Consumer Affairs (DoCA)** to implement PSF interventions for pulses and other crops.
- Application & Tracking by **e-Samridhi Portal (Managed by NAFED)** which is used for MSP procurement and farmer registrations and **e-Samyukti Portal (Managed by NCCF)** which is used for procurement at market price when prices exceed MSP.

PRADHAN MANTRI AWAS YOJANA-URBAN 2.0 (PMAY-U 2.0) SCHEME FOR URBAN FAMILIES

Current Context

- Convergence with other schemes like **AMRUT 2.0, Smart Cities Mission, Swachh Bharat Mission-Urban (SBM-U) 2.0, Aspirational Districts Program.**
- **Launched By & Year**: **Ministry of Housing and Urban Affairs in 2024.** (Expansion of PMAY-U, initially launched in 2015)

Objective

- To provide **affordable housing for all urban households** by constructing, purchasing, or renting houses, with a target of **1 crore additional** urban houses.

Key Features

- Target Beneficiaries-**Economically Weaker Section (EWS), Low Income Group (LIG), & Middle Income Group (MIG).**
- Financial Assistance by **EWS (Income ≤ ₹3 Lakh)** which is eligible for all scheme components, **LIG (Income ₹3-6 Lakh)** which is eligible for **Affordable Rental Housing (ARH)** and Interest **Subsidy Scheme (ISS)** and **MIG (Income ₹6-9 Lakh)** which is eligible **only for ISS**.
- Mode of Implementation is **Centrally Sponsored Scheme (except ISS, which is a Central Sector scheme).**

Key Components

- Houses must comply with the **National Building Code (NBC)** and **Bureau of Indian Standards (BIS).**
- Basic civic amenities **(water, sanitation, electricity, roads, etc.).**
- Adoption of climate-resilient and disaster-resistant housing technologies.
- **40% public expenditure and 60% private investment** (including beneficiary contributions).

Eligibility Criteria

- Urban poor and middle-class families **without** a pucca house anywhere in India.
- Beneficiaries of other government housing schemes in the **last 20 years** are ineligible.
- Exclusion for families already owning a pucca house.

Implementation & Monitoring

- Nodal Ministry is the Ministry **of Housing and Urban Affairs (MoHUA).**
- Implementing Agencies are **Urban Local Bodies (ULBs), Development Authorities, Housing Boards, Private Developers, and other state-level agencies.**
- Monitoring mechanisms are **Online tracking of city-wise housing plans, Geo-tagging at different construction stages,** and **Third-Party Quality Monitoring Agencies (TPQMA) for quality assurance.**

PRADHAN MANTRI SHRAM YOGI MAANDHAN (PM-SYM)

Current Context

- Provides social security to **unorganised sector workers.**
- **Launched By & Year**: Government of India, Interim Budget **2019.**

Key Features

- **₹3,000 per month** after the age of **60**.
- Matches the worker's contribution on a **1:1 basis.**

- Spouse receives **50%** of the pension after the beneficiary's death.
- Registration through **Common Service Centres (CSCs) or Maandhan portal.**
- Managed by the Life Insurance Corporation of India (LIC).

Key Components

- Voluntary participation based on **financial capacity.**
- **Exit provisions** under specific conditions.

Eligibility Criteria

- **Age: 18-40 years.**
- Monthly Income must **not exceeding ₹15,000**.
- Employment must be in the unorganised sector.
- Excluded - Individuals covered under **EPF, ESIC, or NPS and income taxpayers.**

Implementation and Monitoring

- Administered by the **Ministry of Labour & Employment.**
- Pension management by **LIC.**
- Enrolment through **CSCs.**

SPECIAL ASSISTANCE SCHEME

Current Context

- **Interest-free loans** to states for **50 years** to promote capital investment and reforms.
- **Launched By & Year**: **Government of India, FY 2021.**

Key Features

- Initial allocation of **₹12,000 crore in FY21**, increased to **₹1.3 trillion in FY24.**
- Supports post-pandemic recovery and infrastructure development.
- **₹30,000 crore** allocated for outcome-based funding.

Key Components

- **₹1.25 trillion, with 97%** approved for distribution.
- **₹55,000 crore** allocated based on states' shares of central taxes.
- **₹95,000 crore** contingent on states meeting reform criteria.

Eligibility Criteria

States must implement reforms in specific sectors:

- Development of **tourist centers.**
- Implementation of **vehicle scrappage policy.**
- Industrial growth promotion.

Implementation and Monitoring

- Central government administers the scheme.

- Leading beneficiaries are **Uttar Pradesh (₹13,042 crore),
Bihar (₹12,907 crore), Madhya Pradesh (₹10,635 crore).**

REVAMPED COACHING SCHEME FOR DISADVANTAGED STUDENTS

Current Context

- Expanded to include **PM CARES beneficiaries** along with **Scheduled Castes (SCs) and Other Backward Classes (OBCs).**
- **Launched By & Year: Government of India, during the Sixth Five-Year Plan.**

Key Features

- Free coaching for **UPSC, State PSCs, banking, insurance, PSUs, IITs, AIIMS, IIMs, and law exams.**
- Financial support covering **₹20,000-₹75,000** for coaching fees.
- **Monthly stipend of ₹4,000 for 12 months.**
- **Additional ₹15,000** for interview preparation for Civil Services and State Services mains qualifiers.

Key Components

- Central universities to oversee the selection process.
- **3,500** students selected annually, with **70% reserved for SCs and 30% for OBCs.**
- **30% of seats** in each category reserved for **female candidates.**

Eligibility Criteria

- **SC/OBC** students with a family income of **₹8 lakh or less**.
- **Minimum 50% marks** in the last board examination.
- PM CARES beneficiaries exempt from income and selection criteria.

Implementation and Monitoring

- Administered by the **Dr. Ambedkar Foundation (DAF)** in collaboration with Central Universities.
- Coaching centers operate under the **Dr. Ambedkar Centre of Excellence (DACE).**
- **Biometric attendance tracking** and monthly progress reports required.
- **Online Learning Management System** established for monitoring and faculty verification.

CREDIT GUARANTEE SCHEME FOR E-NWRS (ELECTRONIC-NEGOTIABLE WAREHOUSE RECEIPTS)

Current Context

- **₹1,000** crore allocated to improve agricultural financing under the **Digital India Mission.**
- **Launched By & Year**: Government of India, 2024.

Key Features

- **Farmers** can pledge stored goods in warehouses to secure low-interest loans.
- **e-NWRs facilitate paperless transactions** and easy access to credit.
- **NeRL (National e-Repository Limited)** holds an 88% market share in issuing e-NWRs.
- RBI raised the Priority Sector Lending limits for e-NWR-based financing.

Key Components

- Loans up to **₹75 lakh** for individual farmers.
- Loans up to **₹2 crore** for **Farmer Producer Organisations (FPOs).**
- Minimal guarantee fee to increase accessibility.
- Post-harvest lending expected to reach **₹1 lakh crore** in the next decade.

Eligibility Criteria

- Farmers and **FPOs** with stored goods in registered warehouses.
- Warehouses must be registered with the **Warehouse Development and Regulatory Authority (WDRA).**

Implementation and Monitoring

- Administered by the **Ministry of Agriculture & Farmers' Welfare.**
- **NeRL** oversees e-NWR issuance and loan disbursement.

PRIME MINISTER'S INTERNSHIP SCHEME (PMIS)

Current Context

- Launch of a dedicated mobile app to **simplify the registration process** for applicants.
- **Launched By & Year: Ministry of Corporate Affairs (MCA), 2024**

Key feature

- Provides professional experience and training t**o 10 million youth** over **five years.**

Key components

- **₹5,000** monthly stipend
- One-time **₹6,000** grant for incidental expenses
- Facilitation centre in **Kolkata for candidate guidance**
- **70+ Information, Education, and Communication (IEC)** events for awareness

Eligibility criteria

- **Age in between 21-24 years**
- Qualifications are **10th, 12th, UG degree, ITI, or technical certification**

Implementation and monitoring

- **Ministry of Corporate Affairs (MCA)** in collaboration with Confederation of Indian Industry (CII)
- Model career centres with **PMIS cells** for outreach
- Target for 2025 is **1.25 lakh internships**

NATIONAL CODE AGAINST AGE FRAUD IN SPORTS (NCAAFS) 2025

Current Context

- Draft released for public comments after **15** years to **prevent age fraud in sports.**
- Launched By & Year: Ministry of Youth Affairs & Sports, 2025 Key feature
- Establishes **strict verification and penalties** to ensure fair competition.

Key components

- Mandatory age verification is to secure digital database for athlete records
- Medical examination protocols are **TW3 method, MRI scans, AI-based bone assessments**
- Strict penalties:
  - **First offense:** 2-year ban, forfeiture of titles
  - **Second offense**: Lifetime ban, legal action

Eligibility criteria

- Applies to all registered athletes under **National Sports Federations (NSFs)**.

Implementation and monitoring

- Integrity officers for compliance
- **QR-enabled ID** cards for participation
- Ministry to monitor via compliance reports from **NSFs & Sports Authority of India (SAI)**

UNIFIED PENSION SCHEME (UPS)

Current Context

- Government advances **₹7,000 crore for UPS** as part of additional budget expenditure.
- Launched By & Year: Government of India, April 1, 2025

Key feature

- Ensures assured retirement payouts for central government employees.

Key components

- Fund-based model are **Joint contributions from employees & government**
- Financial allocation are **₹6,250 crore for first year + ₹800 crore arrears**
- Supplementary demands are **₹51,462.86 crore for pensions & subsidies**

Eligibility criteria

- Central government employees **(23 lakh beneficiaries).**

Implementation and monitoring

- Ministry of Finance & Pension Regulatory Authorities

MODIFIED ETHANOL INTEREST SUBVENTION SCHEME

Current Context

- Government enhances viability of **Cooperative sugar mills (CSMs)** through multi-feedstock ethanol production
- **Launched By & Year: Ministry of Petroleum & Natural Gas, 2025**

Key feature

- Converts sugarcane-based **ethanol plants** into multi-feedstock facilities.

Key components

- Interest subvention is **6% per annum or 50% of bank rate for 5 years**
- **Expanded feedstocks** are Maize, damaged food grains (DFG) alongside sugarcane
- Ethanol blending target is **20% by 2025 (currently at 19.6%)**

Eligibility criteria

- Cooperative sugar mills **(CSMs)** & ethanol producers

Implementation and monitoring

- **Ministry of Petroleum & Natural Gas**
- Financial assistance through banks

MONITORING VIA ETHANOL BLENDED PETROL (EBP) PROGRAMME ELECTRONICS COMPONENT MANUFACTURING SCHEME

Current Context

- Approved by the **Union Cabinet on March 28, 2025**, with a budget of **₹22,919 crore.**
- **Launched By & Year: Government of India, 2025.**

Key Features

- Aims to boost **Domestic Value Addition (DVA) i**n electronics from **20% to 40% within five years.**
- Encourages local manufacturing of passive and active components essential for electronic products.

Key Components

- Focuses on sub-assemblies and bare components such as **display modules, camera modules, non-SMDs, and lithium-ion cells.**
- Special attention to capital goods production in **manufacturing hubs like Coimbatore and Bengaluru.**

Eligibility Criteria

- Open to electronics manufacturers producing crucial components for the industry.

Implementation & Monitoring

- Incentives linked to factory turnover and employment creation, unlike **previous PLI-based schemes.**
- Expected investment of **₹59,350 crore,** leading to **₹4,56,500 crore** in production and **91,600 direct jobs.**
- Scheme duration of **six years**, with a one-year gestation period.

- Fund allocation details to be announced soon.

BHIM-UPI SMALL MERCHANT INCENTIVE SCHEME

Current Context

- Introduced for **FY 2024-25** to enhance digital payments
- **Launched By & Year: Government of India, 2024.**

Key Features

- Focuses on **Person-to-Merchant (P2M)** UPI transactions up to **₹2,000.**
- Encourages small merchants to adopt digital payments by offering a **0.15% incentive per transaction.**

Key Components

- **Zero Merchant Discount Rate (MDR)** for small merchants.
- Large merchants are not eligible for incentives.
- Performance-based disbursement
  - **80%** of the incentive upfront to acquiring banks.
  - **20%** based on performance **(technical decline rate < 0.75%, system uptime > 99.5%).**

Eligibility Criteria

- Small merchants accepting **BHIM-UPI** payments.

Implementation & Monitoring

- Budget allocation of **₹1,500 crore for FY 2024-25.**
- Target transaction volume of **₹20,000 crore.**
- Expanding **UPI** penetration in **rural areas** with innovative payment solutions.
- Supports the vision of a **less-cash** economy and financial inclusion.

TERMS IN NEWS

Terms in News

SOIL ACIDIFICATION

Current Context

- India faces acidic soil issues in parts of Jharkhand, West Bengal, Odisha, and Kerala.
- Decline in soil pH due to acid rain, excessive fertilizer use, and industrial pollution.
- Leads to loss of soil fertility, reduced crop yield, and metal toxicity.

BIOCOVER

About

- A layer of organic material (compost, soil, or biochar) placed over landfills to reduce methane emissions.
- Enhances microbial activity, converting methane into less harmful CO_2.
- Used in waste management and climate mitigation strategies.

HYDROGEL

Current context

- India is exploring hydrogel use in agriculture for water conservation.

About

- Water-absorbing polymer that can retain hundreds of times its weight in water.
- Used in agriculture (soil moisture retention), medical applications (wound healing), and water purification.
- Helps in drought-prone areas by improving soil water retention.

BIOPLASTICS

Current context

- India promotes bioplastics under Plastic Waste Management Rules and Single-Use Plastic ban.

About

- Plastics made from renewable sources like corn starch, sugarcane, or algae.
- Biodegradable or compostable, reducing plastic pollution.
- The Global Plastics Treaty (UNEA) supports bioplastics development.

STEEL SLAG

Current Context

- India promotes steel slag-based roads and fertilizers for sustainability.

About

- Byproduct of steel production, rich in calcium, silicon, and iron.
- Used in road construction, cement production, and soil improvement.

LIGHT POLLUTION

Current Context

- India promotes dark sky reserves (e.g., Ladakh Dark Sky Reserve) to curb light pollution.

About

- Excessive, misdirected, or artificial light disrupting ecosystems and human health.
- Causes sleep disorders, affects wildlife, and wastes energy.
- Major sources: streetlights, buildings, and advertising billboards.

BIO-BITUMEN

Current Context

- India is exploring bio-bitumen for sustainable infrastructure.

About

- Eco-friendly alternative to petroleum-based bitumen, made from biomass (wood, algae, or agricultural waste).
- Used in road construction, reducing carbon footprint.
- EU & UNEP support bio-bitumen for green transportation.

GRASSHOPPER EFFECT

Current Context

- India faces toxic chemical deposition from industrial emissions.

About

- Long-range transport of pollutants through atmospheric cycles.

- Pollutants like POPs, heavy metals, and pesticides evaporate, travel, and re-deposit in colder regions (e.g., Arctic).
- Leads to bioaccumulation in ecosystems, affecting wildlife and humans.
- UNEP & Stockholm Convention regulate global pollutant movement.

WHITE CATEGORY INDUSTRIES

Current Context

- CPCB continues to expand the White Category list to promote ease of doing business with minimal environmental clearance requirements.

About

- Industries classified as non-polluting and exempt from Pollution Control Board (PCB) clearance.
- Includes solar power plants, organic farming, LED manufacturing, handloom weaving, and assembly units.
- Introduced under the Categorization of Industries (2016) by CPCB.

India's Context

- State PCBs follow CPCB guidelines for White Category industries.
- Aims to promote green industries while ensuring environmental protection.

CENTRAL POLLUTION CONTROL BOARD (CPCB)

Current Context

- CPCB is revising air and water quality norms under the NCAP and Jal Jeevan Mission.

About

- Statutory body under the Environment Protection Act, 1986.
- Monitors air, water, and noise pollution and enforces environmental regulations.
- Advises the government on pollution control measures.

India's Initiatives

- NCAP (National Clean Air Programme) – Targets 40% reduction in air pollution by 2026.
- Water Pollution Monitoring – Implements Namami Gange, Jal Jeevan Mission.
- EPR (Extended Producer Responsibility) – Enforces plastic and e-waste management rules.

NATIONAL GREEN TRIBUNAL (NGT)

Current Context

- NGT imposed strict penalties on industries violating environmental norms.
- Ongoing cases on air pollution, river pollution, and deforestation.

About

- Quasi-judicial body established in 2010 under the NGT Act, 2010.
- Fast-tracks environmental cases related to pollution, deforestation, and climate change.
- Has the power to impose fines, revoke clearances, and order restoration measures.

India's Context

- Delhi Pollution Cases – Implemented GRAP & NCAP measures.
- Illegal Mining – Intervened in cases in Goa, Jharkhand, and Odisha.
- River Conservation – Monitoring Yamuna and Ganga clean-up efforts.

CENTRAL GROUND WATER BOARD (CGWB)

Current Context

- Recent CGWB reports highlight groundwater depletion in Punjab, Haryana, and Rajasthan.
- Government promoting artificial recharge and groundwater conservation techniques.

About

- Regulates groundwater resources under the Ministry of Jal Shakti.
- Conducts aquifer mapping, groundwater surveys, and monitoring.
- Issues guidelines for groundwater extraction and conservation.

India's Context

- Water-stressed regions – Punjab, Haryana, Rajasthan, Gujarat, Tamil Nadu.
- Initiatives like Jal Shakti Abhiyan, Atal Bhujal Yojana focus on groundwater recharge.

COMMISSION FOR AIR QUALITY MANAGEMENT (CAQM)

Current Context

- CAQM has intensified winter pollution control measures in Delhi-NCR, including strict GRAP (Graded Response Action Plan) enforcement.
- New focus on stubble management using bio-decomposers and alternative cropping patterns.

About

- Statutory body established in 2021 under the Commission for Air Quality Management in NCR and Adjoining Areas Act, 2021.
- Oversees air quality management in Delhi, Punjab, Haryana, Uttar Pradesh, and Rajasthan.
- Replaces multiple pollution control bodies for a centralized approach.

India's Initiatives

- Implements NCAP (National Clean Air Programme) to reduce air pollution by **40%** by 2026.
- Enforces GRAP (Graded Response Action Plan) to tackle severe pollution episodes.
- Promotes CNG, EVs, and stubble management to reduce emissions.

RENEWABLE ENERGY IN INDIA

Current Context

- India aims to achieve **500 GW** of non-fossil fuel capacity by 2030 under its updated NDCs.
- New solar parks, wind energy expansion, and offshore wind projects are in progress.
- Green Hydrogen Mission and PLI scheme for solar PV manufacturing are being aggressively promoted.

About

- India is the 4th largest producer of renewable energy globally.
- Major sources: Solar, Wind, Biomass, Small Hydro, and Green Hydrogen.
- Faster adoption due to falling costs and government incentives.

India's Initiatives

- **National Solar Mission** – Target of **280 GW** solar capacity by 2030.
- **National Wind-Solar Hybrid Policy** – Integrates wind and solar power.

- **Green Hydrogen Mission** – Aims for 5 MMT production by 2030.
- Renewable Energy Parks & Ultra Mega Solar Projects in Gujarat, Rajasthan, and Ladakh.

Global Initiatives

- **International Solar Alliance (ISA)** – India-led initiative to promote solar energy (HQ: Gurugram).
- O**ne Sun, One World, One Grid (OSOWOG)** – India's initiative for a global solar grid.
- **Mission Innovation (MI)** – India is a member, accelerating clean energy R&D.

Key Reports & Findings

- **IRENA 2024 Report:** India is among the top 5 countries in renewable energy investment.
- **IEA Report:** India's renewable energy growth is fastest after China.

Related News

- India recently commissioned the world's largest floating solar plant in Madhya Pradesh.
- Govt approved Viability Gap Funding (VGF) for offshore wind projects.

OFFSHORE WIND ENERGY IN INDIA

Current Context

- India is set to develop its first offshore wind farms in Tamil Nadu and Gujarat, backed by Viability Gap Funding (VGF) approved in 2024.
- The government aims for **30 GW** of offshore wind capacity by 2030 as part of its energy transition strategy.

About

- Offshore wind energy uses wind turbines installed in seas/oceans for electricity generation.
- Offers higher efficiency due to stronger and more consistent winds than onshore wind farms.

India's Initiatives

- **National Offshore Wind Energy Policy (2015)** – Framework for offshore wind development.
- **MNRE & NIWE studies** – Identified Tamil Nadu and Gujarat coasts for potential offshore wind projects.
- **Viability Gap Funding (VGF)** – Approved in 2024 to support initial high costs.
- First 1 GW project planned near Gujarat's Gulf of Khambhat.

Global Initiatives

- **Global Wind Energy Council (GWEC) –** India is a key member, collaborating on offshore wind development.
- **Mission Innovation (MI) –** India participates in R&D for offshore wind technologies.

Key Reports & Findings

- **IEA Offshore Wind Outlook 2024:** India has a high potential (over 70 GW) for offshore wind but needs policy push.
- **GWEC Report 2024:** India's offshore wind sector is emerging, with the first auctions expected soon.

Related News

- First offshore wind auctions planned in 2025 for **Tamil Nadu and Gujarat.**
- India is exploring collaborations with **Denmark and the UK** for offshore wind expertise.

NATIONAL GREEN HYDROGEN MISSION

Current Context

- India is aiming to become a global hub for green hydrogen production with a target of **5 MMT (Million Metric Tons)** by 2030.
- First green hydrogen projects commissioned in **Gujarat, Rajasthan, and Odisha.**
- Government allocated **₹19,744** crore for mission implementation.

About

- Launched in 2023 to promote green hydrogen production, storage, and export.
- Green hydrogen is produced using renewable energy and electrolysis, unlike grey hydrogen (from fossil fuels).
- Key uses: Industry (steel, fertilizers, refineries), transport, and energy storage.

India's Initiatives

- Strategic Interventions for Green Hydrogen Transition (SIGHT) program: Incentives for electrolyzers & green hydrogen production.
- Viability Gap Funding (VGF) for offshore wind energy projects to power green hydrogen production.
- First Green Hydrogen Mobility Project in Ladakh, developing hydrogen-powered buses.

Global Initiatives

- India-Germany Green Hydrogen Task Force to promote hydrogen trade.
- Mission Innovation (MI) Hydrogen Initiative – India is a key participant.

GEOTHERMAL ENERGY IN INDIA

Current Context

- India is set to develop its first geothermal power plant in Puga, Ladakh.
- MNRE (Ministry of New & Renewable Energy) has identified potential sites in Himachal Pradesh, Jharkhand, and Chhattisgarh for future projects.

About

- Geothermal energy is heat derived from the Earth's interior, used for electricity generation and direct heating.
- India has an estimated 10 GW potential, but it remains underutilized due to high initial costs.

India's Initiatives

- Draft Geothermal Energy Policy (2022) – Aims to promote exploration and development.
- First pilot project in Puga, Ladakh, undertaken by ONGC.
- Direct-use applications in hot springs for heating, agriculture, and tourism in Himachal Pradesh and Uttarakhand.

Global Initiatives

- India is part of the International Geothermal Association (IGA) for research collaboration.
- Learning from Iceland, the USA, and the Philippines, which are leaders in geothermal energy.

Key Reports & Findings

- IRENA 2024 Report: India's geothermal sector is in the nascent stage, requiring policy and investment push.
- IEA Report: Geothermal can play a role in India's energy transition, especially in remote areas.

Related News

- Puga Geothermal Project Phase-1 to be commissioned by 2026, generating up to 10 MW of power.

NATURAL FARMING

Current Context

- Government expanding natural farming under PM-PRANAM scheme to reduce chemical fertilizer use.
- Himachal Pradesh, Gujarat, and Andhra Pradesh leading in large-scale adoption.

About

- A chemical-free, sustainable farming method based on indigenous techniques.

- Uses bio-inputs like cow dung, urine, and compost, instead of synthetic fertilizers and pesticides.
- Promotes soil health, biodiversity, and water conservation.

India's Initiatives
- Bharatiya Prakritik Krishi Paddhati (BPKP) under Paramparagat Krishi Vikas Yojana (PKVY) promotes natural farming.
- PM-PRANAM (2023) incentivizes states to reduce fertilizer use.
- Zero Budget Natural Farming (ZBNF), pioneered by Subhash Palekar, promoted in Andhra Pradesh.

Global Initiatives
- FAO promotes agroecology, including natural farming, for sustainable agriculture.

Key Reports & Findings
- NITI Aayog Report (2024): Natural farming improves soil fertility and farmer income.
- FAO Report: Emphasizes natural farming's role in climate resilience.

ILLEGAL SAND MINING

Current Context
- Crackdown on illegal sand mining intensified with satellite surveillance and AI-based monitoring.
- NGT and Supreme Court directives to regulate sand mining and protect river ecosystems.

About
- Extraction of sand without legal permission, leading to environmental degradation.
- Causes riverbank erosion, loss of aquatic biodiversity, and groundwater depletion.
- Major hotspots: Ganga, Yamuna, Godavari, Narmada, and Cauvery river basins.

India's Initiatives
- Sustainable Sand Mining Guidelines (2016, 2020) by MoEF&CC.
- Enforcement of e-auction and GPS tracking of sand mining trucks.
- State-specific policies: Maharashtra, Karnataka, and Tamil Nadu implementing AI-based monitoring.

Related News
- Drones deployed in Uttar Pradesh and Bihar to monitor illegal sand mining.

- Supreme Court ordered a nationwide policy for sustainable sand mining.

INTERNATIONAL SOLAR ALLIANCE (ISA)

Current Context
- ISA expanding partnerships to finance solar projects in developing nations.
- India launched the 'SolarX Grand Challenge' to boost solar startups under ISA.

About
- Launched in 2015 by India and France during COP21 (Paris Agreement).
- Aims to promote solar energy globally by facilitating finance, technology transfer, and capacity building.
- Focuses on solar applications in agriculture, rooftop solar, and large-scale solar parks.

India's Initiatives
- PM-KUSUM Scheme: Promotes solar-powered irrigation.
- One Sun, One World, One Grid (OSOWOG): Vision for a global solar grid interconnection.
- India hosts ISA headquarters in Gurugram.

Global Initiatives
- Over 120 member countries, including Africa, Asia-Pacific, and Latin America.
- ISA Solar Finance Facility (2024) launched to mobilize $1 trillion for solar projects.

Key Reports & Findings
- IEA Report (2024): ISA is a key driver of solar expansion in developing nations.
- UNEP Solar Energy Report: Solar capacity under ISA grew by **30%** in 2023-24.

Related News
- ISA signed MoU with **World Bank and ADB** to fund solar projects.
- India's **solar module exports surged under ISA collaborations**.

Key Takeaways
- **ISA is central to India's renewable energy diplomacy**.
- Aims to **make solar power accessible and affordable worldwide**.

INTERNATIONAL ENERGY AGENCY (IEA)

Current Context

- IEA released the World Energy Outlook 2024, highlighting India's rising energy demand and renewable energy leadership.
- India is expected to overtake the EU in energy consumption by 2030.

About

- Established in 1974 during the oil crisis, headquartered in Paris, France.
- Works to ensure energy security, economic growth, and environmental sustainability.
- Publishes key reports like World Energy Outlook, Global Energy Review, and Net Zero by 2050.

India's Status & Initiatives

- India became an IEA 'Association Country' in 2017.
- Collaborates on energy transition, renewable energy, and energy efficiency.
- IEA supports India's National Green Hydrogen Mission and solar expansion under ISA.

Global Initiatives

- Net Zero Roadmap (2021): Guides countries toward carbon neutrality.
- Clean Energy Transitions Programme (CETP): Supports developing countries in clean energy policies.

Key Reports & Findings

- World Energy Outlook 2024: India to account for **25%** of global energy demand growth by 2040.
- IEA Coal Report: Predicts a gradual decline in India's coal use despite high energy needs.

INTERNATIONAL RENEWABLE ENERGY AGENCY (IRENA)

Current Context

- IRENA's World Energy Transition Outlook 2024 highlights India as a key player in global renewable energy expansion.
- India and IRENA signed an MoU to promote green hydrogen and offshore wind energy.

About

- Established in 2009, headquartered in Abu Dhabi, UAE.
- Supports renewable energy deployment and facilitates global energy transition.
- Publishes key reports like World Energy Transitions Outlook, Renewable Energy Statistics, and Global Renewables Outlook.

India's Status & Initiatives

- India is a founding member of IRENA.
- Collaborates on solar, wind, bioenergy, and green hydrogen.
- National Green Hydrogen Mission aligns with IRENA's hydrogen roadmap.

Global Initiatives

- Coalition for Action: Encourages renewable energy investments.
- Renewables Readiness Assessments (RRA): Helps nations develop policy frameworks for renewables.

Key Reports & Findings

- World Energy Transition Outlook 2024: Global renewable capacity must triple by 2030 to meet climate goals.
- IRENA's Renewable Energy Jobs Report: India among top 3 nations in renewable energy employment.

Related News

- IRENA partnered with India's Ministry of New & Renewable Energy (MNRE) for a green hydrogen roadmap.
- India set to achieve 500 GW renewable energy capacity by 2030 with IRENA's technical support.

WORLD ENERGY COUNCIL (WEC)

Current Context

- WEC's World Energy Trilemma Index 2024 ranked India's energy system performance based on security, equity, and sustainability.
- India is expanding its renewable energy mix to improve its global ranking.

About

- Founded in 1923, headquartered in London, UK.
- A global energy network that advises on sustainable energy policies.
- Publishes key reports like World Energy Trilemma Index, World Energy Issues Monitor, and Energy Scenarios.

India's Status & Initiatives

- India is an active member of WEC through the World Energy Council India (WEC India).
- Works on energy security, clean energy transition, and sustainable development.
- Aligns with India's target of 500 GW renewable energy capacity by 2030.

- World Energy Scenarios: Predicts future energy trends.
- Energy Trilemma Index: Assesses countries on energy security, affordability, and sustainability.

Key Reports & Findings

- World Energy Trilemma Index 2024: India improving in energy security but needs progress in affordability.
- WEC Energy Issues Monitor 2024: Highlights India's leadership in solar energy expansion.

REPORTS AND INDICES

Reports and Indices

GLOBAL HUNGER INDEX (GHI) 2024

Current Context

- India ranks **105th out of 127 countries** in the **Global Hunger Index (GHI) 2024**, classified under **'serious' hunger levels**. It lags behind **Sri Lanka, Nepal, Myanmar, and Bangladesh** but ranks above **Pakistan and Afghanistan**.

Key Findings

- **India's GHI Score: 27.3 (Serious category)**.
- **Child Wasting: Highest globally (18.7%)**.
- **Child Stunting: 35.5%**.
- **Undernourishment: 13.7%**.
- **Under-5 Mortality Rate: 2.9%** (improved).

India's GHI Score Over Time:

Year	Score	Category
2000	38.4	Alarming
2008	35.2	Alarming
2016	29.3	Serious
2024	27.3	Serious

Global Concerns

- Hunger reduction **stalled since 2016**, threatening the **Zero Hunger by 2030** goal.
- **42 countries** still face **'serious' or 'alarming'** hunger levels.
- **Climate change & gender inequality** worsen food insecurity.

ASIA POWER INDEX 2024

Current Context

- India has overtaken Japan to become the **third-most powerful nation** in the **Asia Power Index**, marking a significant geopolitical milestone.

Key Factors Driving India's Rise

- **Economic Growth:** Strong **post-pandemic recovery** and a **4.2-point rise** in **Economic Capability**, positioning India as the **third-largest economy (PPP terms)**.
- **Demographic Advantage: 8.2-point increase** in **Future Resources** due to a **young workforce**, unlike aging populations in **China & Japan**.
- **Diplomatic Influence:** India's **non-aligned foreign policy** and active **multilateral engagements** secured it **6th place** in **diplomatic dialogues (2023)**.

- **Cultural Influence:** A strong **global diaspora** and **cultural exports** continue to enhance India's soft power.

GLOBAL INNOVATION INDEX (GII) 2024

Current Context

- India has secured the **39th position** in the **Global Innovation Index (GII) 2024** among **133 economies**, reflecting its **growing innovation ecosystem**. It ranks **1st in Central & Southern Asia** and **among lower-middle-income economies**.

Key Highlights

- **Steady Progress:** Ranked **81st in 2015**, now **39th in 2024**.
- **Top S&T Clusters:** Mumbai, Delhi, Bengaluru, Chennai among **Top 100 globally**.
- **Global Innovation Leaders:** Switzerland, Sweden, USA, Singapore, UK.
- **Fastest Rising Nations:** India, China, Turkey, Vietnam, Philippines.

Key Government Initiatives

- **Startup India (2016):** Promotes entrepreneurship, recognized **1,49,414 startups**.
- **Digital India:** Focuses on **digital infrastructure, governance, and citizen empowerment**.
- **Atal Innovation Mission (AIM, 2016):**
  - **10,000 Atal Tinkering Labs** in schools.
  - **3500+ startups incubated**.
  - **32,000+ jobs created**.

GLOBAL CYBERSECURITY INDEX 2024

Current Context

- India has attained **Tier 1 status** in the **Global Cybersecurity Index (GCI) 2024**, published by the **International Telecommunication Union (ITU)**, with a **score of 98.49/100**. This positions India among **top-ranked nations** in cybersecurity.

Key Highlights

- **Government Leadership:** The **Department of Teleacommunications (DoT)** led India's representation in **GCI 2024**, with **Minister Jyotiraditya Scindia** calling it a **proud moment for Bharat**.
- **Assessment Parameters:** The ranking was based on **five pillars—legal, technical, organizational, capacity**

development, and cooperation—evaluated through **83 questions and 20 key indicators**.

CYBERSECURITY INITIATIVES

- **Strong cyber laws & frameworks** to combat cybercrime.
- **Sectoral Computer Incident Response Teams (CSIRTs)** for industry-specific cybersecurity.
- **Education & Awareness Programs** integrated into school curricula.
- **Skill development & R&D incentives** to promote cybersecurity innovation.
- **International collaborations & agreements** enhancing global cyber resilience.

WORLD INTELLECTUAL PROPERTY REPORT 2024

Current Context

- India has emerged as a global leader in **intellectual property (IP) filings**, ranking among the **top 10 countries** in **patents, trademarks, and industrial designs**, as per **WIPO's World Intellectual Property Indicators (WIPI)** World Intellectual Property Indicators **2024**.

Key Findings

Patents – India Ranks 6th Globally

- **64,480 patent filings in 2023**, with **55.2% from Indian residents**, marking a shift toward local innovation.
- **Patent grants rose by 149.4%**, reflecting improved processing efficiency.
- **Patent-to-GDP ratio increased from 144 (2013) to 381 (2023)**, highlighting IP's growing role in India's economy.

Industrial Design – 36.4% Surge

- India saw **record growth** in industrial design applications.
- Major sectors: **Textiles & Accessories, Tools & Machines, Health & Cosmetics**.
- Indicates India's shift toward **design-driven manufacturing** and product innovation.

Trademarks – 4th Globally

- **3.2 million active trademarks**, ranking **2nd globally in total registrations**.
- **90% of filings were by Indian residents**, reflecting increased brand awareness.
- Key sectors: **Health (21.9%), Agriculture (15.3%), Clothing (12.8%)**.

India's Role in Global IP Trends

- India is **one of the fastest-growing IP markets**, driving global innovation and brand protection.

- Resident filings dominate, reflecting **self-reliance (Atmanirbhar Bharat) and a maturing domestic innovation ecosystem**.

Government Initiatives Fueling IP Growth

- **National IPR Policy (2016):** Strengthens legal frameworks & enforcement.
- **NIPAM (National IP Awareness Mission):** Educates businesses & students on IP rights.
- **SPRIHA Scheme:** Integrates IP education in universities.
- **TISC (Technology Innovation Support Centres):** Supports commercialization of patents.

GLOBAL INVESTMENT TRENDS MONITOR REPORT 2024

Current Context

- The **United Nations Conference on Trade and Development (UNCTAD)** has released its **Global Investment Trends Monitor Report 2024**, highlighting an **8% decline in global Foreign Direct Investment (FDI)** and a **significant drop in international project finance**, impacting infrastructure and energy investments.

Key Findings

Decline in International Project Finance

- **Developed economies: 29% decline** in international project finance.
- **Developing countries: 23% drop in project numbers, 33% drop in value**.
- **Countries with significant declines: Brazil, China, India, Indonesia, Mexico** (higher than the global average).

Renewable Energy Investment Trends

- **Global decline: 16% drop in both number and value** of projects.
- **Regional breakdown:**
  - **North America:** ↓ **22%**
  - **Developing Asia:** ↓ **18%**
  - **Latin America & Caribbean:** ↓ **14%**
  - **Africa:** ↑ **8%** (only region with an increase).

SDG-Related Investments

- **Overall decline: 11% drop** in SDG-related investments.
- **Sectors affected: Infrastructure, agrifood systems, water & sanitation**.

Future Outlook

- **FDI expected to recover moderately in 2025** due to improved financing conditions.

- **Challenges: Geopolitical tensions and global economic instability** remain key risks.

CLIMATE RISK INDEX 2025

Current Context

- The **Climate Risk Index (CRI) 2025**, published by **Germanwatch**, ranks **India as the 6th most affected country** by extreme weather events over the past **three decades (1993–2023)**. The report underscores India's **high exposure to climate-related disasters** such as **floods, cyclones, and heatwaves**.

About the Climate Risk Index (CRI)

- **Annual report** assessing the impact of extreme weather on different countries.
- **Ranks nations** based on **economic losses and human casualties** (deaths, injuries, and displacement).
- Uses data from **EM-DAT (International Disaster Database)** and **IMF**.
- Published since **2006** by **Germanwatch**, a German non-profit focused on climate policy.

Key Findings for India

- **India's Position: 6th among the top 10 most affected nations** globally.
- **Extreme Weather Impact on India (1993–2023):**
  - Over **400 major disasters**, including **floods, heatwaves, and cyclones**.
  - Economic losses estimated at **$180 billion**.
  - **10% of global extreme weather-related deaths** occurred in India.
  - **4.3% of worldwide economic damages** were recorded in India.
- **Other High-Risk Countries: Dominica, China, Honduras, Myanmar, and Italy** rank above India.

INDIA IN QS WORLD FUTURE SKILLS INDEX 2025

Current Context

- India ranks **25th** in the **QS World Future Skills Index 2025**, classified as a **"future skills contender."** This reflects its progress in preparing the workforce for emerging job markets.

About the Index

- Developed by **Quacquarelli Symonds (QS),** the index evaluates countries on their readiness for **innovation, sustainability, and future job demands.**

Key Indicators

- **Skills Fit:** Alignment of education with industry needs.
- **Academic Readiness:** Higher education's role in AI, digital, and green skills.
- **Economic Transformation:** Workforce adaptability to economic shifts.
- **Future of Work:** Preparedness for technological changes.

India's Outlook

- Strong digital infrastructure and skill programs drive progress, but **gaps in vocational training and industry-academia collaboration** remain.

FISCAL HEALTH INDEX 2025

Current Context

- NITI Aayog released the **Fiscal Health Index 2025**, evaluating the fiscal strength of **18 major states** for the year **2022-23**.

Purpose of the Index

- Provides an **annual assessment** of state finances.
- Aims to improve **fiscal governance, economic stability, and policy planning**.
- Offers **data-driven insights** to guide financial decision-making.

Ranking Parameters

States were ranked based on **five key indicators**:

- **Expenditure Quality** – Efficiency in resource allocation.
- **Revenue Strength** – Ability to generate income.
- **Fiscal Discipline** – Control over spending and deficits.
- **Debt Burden** – Overall debt levels.
- **Debt Sustainability** – Long-term ability to manage liabilities.

State Rankings

- **Top Performers: Odisha (1st), Chhattisgarh, Goa**.
- **Low Performers: Punjab, Andhra Pradesh, West Bengal, Kerala**.
- **Strong Contenders: Uttar Pradesh, Telangana, Madhya Pradesh, Karnataka**.

INDIA SKILLS REPORT 2025

Current Context

- The **India Skills Report 2025**, released by **Wheebox** in collaboration with key industry and academic bodies, highlights a significant rise in employability among Indian graduates, reaching **54.81%**.

About the Report

- Conducted through the **Global Employability Test**, assessing **6.5 lakh candidates**.
- Incorporates insights from **1,000+ companies** across **15 industries**.
- Evaluates workforce readiness in emerging job sectors.

Key Findings

- **Graduate Employability:** Increased from **33% (2014) to 54.81% (2025)**.
- **Top-Performing States:** Maharashtra (84%), Delhi, Karnataka, Andhra Pradesh**.
- **Driving Factors:** Growth in **AI, cloud computing, automation**, and evolving work models.
- **Global Impact:** Digital jobs and

SDG INDIA INDEX

Current Context

- **NITI Aayog to release SDG India Index 2024,** assessing India's progress towards the UN Sustainable Development Goals (SDGs). Focus on climate action, gender equality, and poverty reduction in line with **India's Vision 2047.**

About

- **Launched by NITI Aayog in 2018,** it measures the performance of Indian states and UTs on 17 SDGs.
- Uses composite scores (0-100) based on key indicators.
- **Categories:** Aspirant (<50), Performer (50-64), Front-runner (65-99), Achiever (100).

India's Status & Initiatives

- **Kerala, Himachal Pradesh, Tamil Nadu consistently top performers.**
- **Bihar, Jharkhand, and Uttar Pradesh** lag in health, education, and poverty reduction.
- Aligned with India's Viksit Bharat 2047 strategy for sustainable development.

Global Initiatives

- **UN SDG Report 2024:** Highlights India's progress in clean energy but challenges in hunger and inequality.
- India's Localisation of SDGs (LSDGs) strategy for grassroots implementation.

Key Reports & Findings

- **SDG India Index 2023: India scored 66 out of 100**, with significant progress in clean energy (SDG 7) but concerns in gender equality (SDG 5).

- UNESCAP Report: India on track for renewable energy but needs better waste management policies.

Related News

- NITI Aayog working on a revamped **SDG index methodology to include climate resilience.**
- State-level SDG rankings influencing policy and funding allocations.

Key Takeaways

- Crucial tool for tracking India's progress on SDGs at the state and national levels.
- Focus on localized implementation and climate resilience in upcoming assessments.

WORLD ECONOMIC OUTLOOK (WEO) – IMF

Current Context

- **IMF projects India's GDP growth at 6.5% for 2025**, making it one of the fastest-growing major economies. Global growth estimated at **3.2%**, with the US and China slowing due to economic uncertainties.

About

- **Published twice a year (April & October) by the International Monetary Fund (IMF).**
- Analyzes global economic trends, growth forecasts, inflation, trade, and fiscal conditions.

India's Context

- India remains a key driver of global growth, contributing **15%** to world GDP expansion.
- Inflation projected to moderate to **4.5%**, supported by stable monetary policy.

Key Findings (2024 Report)

- Advanced economies to grow at **1.5%**, while emerging economies to grow at **4.1%**.
- India's per capita income is expected to reach **$3,000** by 2026.

GLOBAL FINANCIAL STABILITY REPORT – IMF

Current Context

- IMF warns of **financial market volatility** due to high global debt and interest rate hikes.
- Banking stress in developed economies poses a risk to emerging markets.

About

- **Published twice a year by the IMF** to assess risks in global financial systems, debt sustainability, and banking stability.

India's Context

- India's banking sector remains resilient, with Gross NPA ratio at **2.6% (12-year low).**
- Forex reserves at **$640 billion**, ensuring stability against external shocks.

Key Findings (2024 Report)

- Global debt reached **93%** of GDP, highest since WWII.
- Tighter monetary policies affecting capital flows to emerging markets.

WORLD INVESTMENT REPORT – UNCTAD

Current Context

- Global FDI flows declined by **12%** in 2024, but India attracted $82 billion in FDI, ranking among the top five globally.

About

- **Published annually by the United Nations Conference on Trade and Development (UNCTAD).**
- Analyzes trends in Foreign Direct Investment (FDI) and investment policies.

India's Context

- **Top FDI sectors: IT, renewable energy, and infrastructure.**
- FDI in manufacturing surged due to the PLI scheme.

Key Findings (2024 Report)

- **China and the EU saw a decline in FDI, while India and ASEAN saw growth.**

EASE OF DOING BUSINESS INDEX (REPLACED BY B-READY) – WORLD BANK

Current Context

- **The World Bank replaced EoDB with the Business Ready (B-READY) Project in 2024 to ensure transparency.**

About

- **EoDB ranked countries based on business regulations and ease of starting a business.**
- Discontinued in 2021 due to data manipulation issues, replaced by B-READY.

India's Context

- **India ranked 63rd in EoDB 2020, now focusing on new parameters under B-READY.**
- Government simplifying labor laws & business regulations.

WORLD ENERGY OUTLOOK – IEA

Current Context

- **India is set to become the largest energy consumer by 2040, according to IEA.**

About

- **Published annually by the International Energy Agency (IEA).**
- Analyzes energy demand, supply trends, and renewable energy adoption.

India's Context

- **India's renewable capacity is 456 GW, aiming for 500 GW by 2030.**
- **Green Hydrogen and Offshore Wind** projects expanding.
- **India leading in International Solar Alliance (ISA) initiatives.**

Key Findings (2024 Report)

- **Solar & wind** are expected to dominate global electricity generation by 2050.

EMISSIONS GAP REPORT – UNEP

Current Context

- **Global emissions need to reduce by 43% by 2030 to meet the 1.5°C target.**

About

- **Published annually by the United Nations Environment Programme (UNEP).**
- Analyzes the gap between current emissions and required reductions under the Paris Agreement.

India's Context

- **India's per capita emissions remain lower than the global average.**
- National Adaptation Plan focusing on climate resilience.
- India pushing for climate finance support at COP29.

Key Findings (2024 Report)

- **Top polluters: China (31%), USA (14%), EU (9%).**

CLIMATE CHANGE PERFORMANCE INDEX (CCPI) – GERMANWATCH, CAN & NEWCLIMATE INSTITUTE

Current Context

- **India ranked 7th in CCPI 2024, leading in renewable energy adoption.**

About

- Assesses climate action based on **emissions, renewable energy use, and policies.**
- **Denmark, Sweden, and India among the top performers.**

India's Context

- India improving **energy efficiency & reducing coal dependency.**

GLOBAL RISK REPORT – WEF

Current Context

- **Extreme weather & biodiversity loss** identified as top global risks.

About

- **Published annually by World Economic Forum (WEF).**
- Identifies economic, environmental, and geopolitical risks.

India's Context

- India focusing on disaster resilience & green energy investments.

Key Findings (2024 Report)

- Food security & water crisis among major risks.

LIVING PLANET REPORT – WWF

Current Context

- **Wildlife populations declined by 68% since 1970, highlighting biodiversity loss.**

About

- **Published biennially by World Wide Fund for Nature (WWF).**
- Tracks biodiversity loss and ecosystem degradation.

India's Context

- **Project Tiger, Project Elephant, and conservation reserves expanding.**

Key Findings (2024 Report)

- **Freshwater ecosystems** are the most threatened..

STATE OF GLOBAL AIR REPORT – HEI & IHME

Current Context

- **India among the top 5 countries with highest PM2.5 levels.**

About

- **Published annually by Health Effects Institute (HEI) & Institute for Health Metrics and Evaluation (IHME).**
- Provides data on air pollution & its health impacts.

India's Context

- **NCAP (National Clean Air Programme) targets 40% reduction in PM levels by 2026.**
- India expanding **EV adoption & green energy policies.**

Key Findings (2024 Report)

- **Air pollution remains the 4th leading cause of death globally.**

Epilogue

As you close these pages, remember—the pursuit of civil services is not just an academic exercise, but a **test of resolve, adaptability, and purpose**. Knowledge alone does not define a future bureaucrat; it is the ability to **apply, analyze, and lead** that sets one apart.

Through this edition of *Saadhak*, we have distilled **months of current affairs into structured, exam-oriented insights**, ensuring that every moment spent here translates into **meaningful progress**. But preparation is an evolving process, and so is *Saadhak*. Our future editions will integrate **infographics to simplify complexity** and a **question-answer bank to refine your approach**, bridging the gap between information and application.

The road ahead will demand **discipline, resilience, and an unwavering commitment** to the goal. But those who embrace the process, who refine their vision, and who push beyond their limits—will find themselves standing at the gates of LBSNAA, ready to serve, ready to lead.

The nation awaits those who are prepared to transform knowledge into action.

Infographics

BYOL

Chronological Journey of Indian History: From Prehistoric Times to Modern Era

1. Pre-historic Period:

- **Proto-humans (Homo erectus):** The presence of Homo erectus in India about 20 lakh years ago.
- **Homo sapiens:** Human evolution reaches the subcontinent with Homo sapiens around 70,000 BC.
- **Lifestyle:** Early humans were primarily gatherers and hunters, living in the wild.
- **Tribal Inhabitants:** Tribes like Nagas (North-East), Santhals (East India), Bhils (Central India), Gonds (Central India), and Todas (South India) are considered to be the first inhabitants.
- **Languages:** The indigenous languages were Austric (pre-Dravidian) languages, such as Munda and Gondvi, and not Dravidian or Aryan languages.

2. Prehistoric Cultural Periods:

Paleolithic Period:

Characteristics	Use of fire, limestone tools, and hunting-gathering.
Sites	Bhimbetka (M.P.), Hunsgi, Kurnool Caves, Narmada Valley (Hathnora), Kaladgi Basin.
Tools	Stone tools, including axes and scrapers.

Mesolithic Period (10,000 BC – 8,000 BC):

Climatic Changes	A significant climatic shift, transitioning from the Ice Age.
Domestication	Beginning of animal domestication and cattle rearing.
Microliths	Small stone tools are found at sites like Brahmagiri (Mysore), and Narmada (Gujarat).

Neolithic Period :

Agriculture	Start of agriculture and crop cultivation.
Wheel Invention	Introduction of the wheel.
Early Settlements	Inamgaon became one of the earliest villages.
Key Sites	Mehrgarh (Pakistan), Burzahom and Gufkral (Kashmir), Chirand (Bihar), Daojali - Hading (Tripura/Assam).

Chalcolithic Period

Copper Age	Early use of copper, marked the transition to metal-based cultures.
Indus Valley Civilization	Flourished from 2700 BC to 1900 BC, marking one of the world's oldest urban civilizations.
Key Sites	Harappa, Mohenjo-Daro, Dholavira.

3. Iron Age and Vedic Period:

- **Aryans:** The arrival of Aryans around 1500 BC led to the formation of Vedic culture.
- **Vedic Texts:** Vedas were composed during this period, forming the foundation of Hinduism.
- **Mahajanapadas:** The rise of Mahajanapadas (large kingdoms), most notably the Magadha Empire.
- **Jainism and Buddhism:** Emergence of Jainism and Buddhism, challenging Vedic orthodoxy.
- **Key Dynasties:**

Magadha Empire	Bimbisara (Haryanka Kula)
Nanda Empire	Mahapadma Nanda, Dhanananda

4. Mauryan Empire:

- **Key Rulers:**

Chandragupta Maurya	Founder of the Mauryan Empire.
Bindusara	Son of Chandragupta.
Ashoka the Great (268-232 BC)	Known for spreading Buddhism after the Kalinga War.

- **Post-Mauryan Kingdoms:**

Sunga Dynasty, Kanva Dynasty, Satavahanas.
Indo-Greek, Parthian, Saka, and Kushana Empires emerged in this period.

5. Gupta Empire:

- **Golden Age of India:** Known for advancements in science, mathematics, literature, and art.
- **Key Ruler:** Samudragupta (often called the "Indian Napoleon").
- **Decline:** After the fall of the Gupta Empire, many smaller kingdoms and empires rose, including the Vakatakas, Pallavas, Chalukyas, and the Rajput states.

Medieval India

1. Tripartite Struggle:

- **Dynasties Involved:** The Pratiharas, Palas, and Rashtrakutas fought for control of the central Gangetic valley, leading to an era of political instability.

BYOL

2. Islamic Invasions and the Rise of Sufism:

- **Muhammad bin Qasim's Invasion (AD 712):** Led to the spread of Islam in the Indian subcontinent.
- **Muhammad Ghazni (1000–1027):** His multiple invasions significantly impacted India, especially his raids on temples and treasures.
- **Muhammad Ghori (1175–1206):** Conquered northern India, leading to the establishment of the Delhi Sultanate.

3. Delhi Sultanate:

- **Dynasties:**

Slave Dynasty	The First Sultanate of Delhi was established by Qutb-ud-Din Aibak.
Khilji, Tughlaq, Sayyid, and Lodi Dynasties	Each played a key role in consolidating and expanding the Sultanate.

- **Significant Changes:** The spread of Islam, urbanization, and the introduction of new administrative systems.

4. Mughal Empire:

- **Great Mughals:** Powerful rulers like Babur, Akbar, Shah Jahan, and Aurangzeb.
- **Achievements:** Cultural amalgamation, expansion of empire, and significant advancements in art, architecture (Taj Mahal), and administration.
- **Later Mughals:** After Aurangzeb, the Mughal Empire weakened, leading to British colonial dominance.

5. South Indian Kingdoms (Medieval Era):

- **Vijayanagara Empire:** Flourished between the 14th and 17th centuries, known for its prosperity, art, and literature.
- **Bahmani Sultanate:** Dominant in Deccan India.
- **Chola, Chera, and Pandya Kingdoms:** Prosperous and culturally rich kingdoms in the south.

Modern India

1. First War of Indian Independence (1857):

- Also known as the Sepoy Mutiny, it marked the beginning of the struggle against British colonial rule.

2. Formation of Political Organizations:

- **Indian National Congress (1885):** Aimed at bringing reforms to British India and eventually seeking independence.
- **Muslim League (1906):** Played a crucial role in the creation of Pakistan.

3. Movements for Independence:

- **Non-Cooperation Movement (1920):** Led by Gandhi, calling for non-violent resistance against British rule.
- **Civil Disobedience Movement (1930):** Gandhi's Salt March and widespread protests against British salt taxes.
- **Quit India Movement (1942):** A direct call for British withdrawal from India.

4. Partition and Independence (1947):

- India gained independence from British rule, leading to the partition of India and the creation of Pakistan.

5. Constitutional and Economic Developments:

- **Constitution of India (1950):** India adopted its first Constitution, laying down the laws and regulations for governance and civil rights.
- **Economic Developments:** Post-independence India focused on self-sufficiency, industrialization, and poverty alleviation.

6. Post-Independence Wars:

- **India-Pakistan Wars (1947, 1965, 1971):** Three major wars, including the creation of Bangladesh in 1971.
- **India-China War (1962):** Border conflicts with China led to a brief but significant war.

7. New Economic Policy (1991):

- A major shift towards liberalization, privatization, and globalization, transforming India's economy.

8. Scientific and Technological Advancements:

- **Nuclear and Space Programs:** India developed its nuclear capabilities and advanced its space program with significant achievements like the Mars Orbiter Mission.

Acknowledgement

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The journey of bringing *Saadhak* to life has been one of dedication, passion, and unwavering perseverance. More than just a compilation of current affairs, this magazine embodies the relentless spirit of every UPSC aspirant who dares to dream, to strive, and to turn challenges into stepping stones toward success.

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To the aspirants—**you are the heartbeat** of *Saadhak*. Your resilience, hunger for knowledge, and determination inspire this initiative. This magazine is for you and because of you. May it serve as a beacon of clarity, confidence, and encouragement on your journey to success.

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With gratitude and best wishes,
Ishrat Kashafi
COO & Chief Editor