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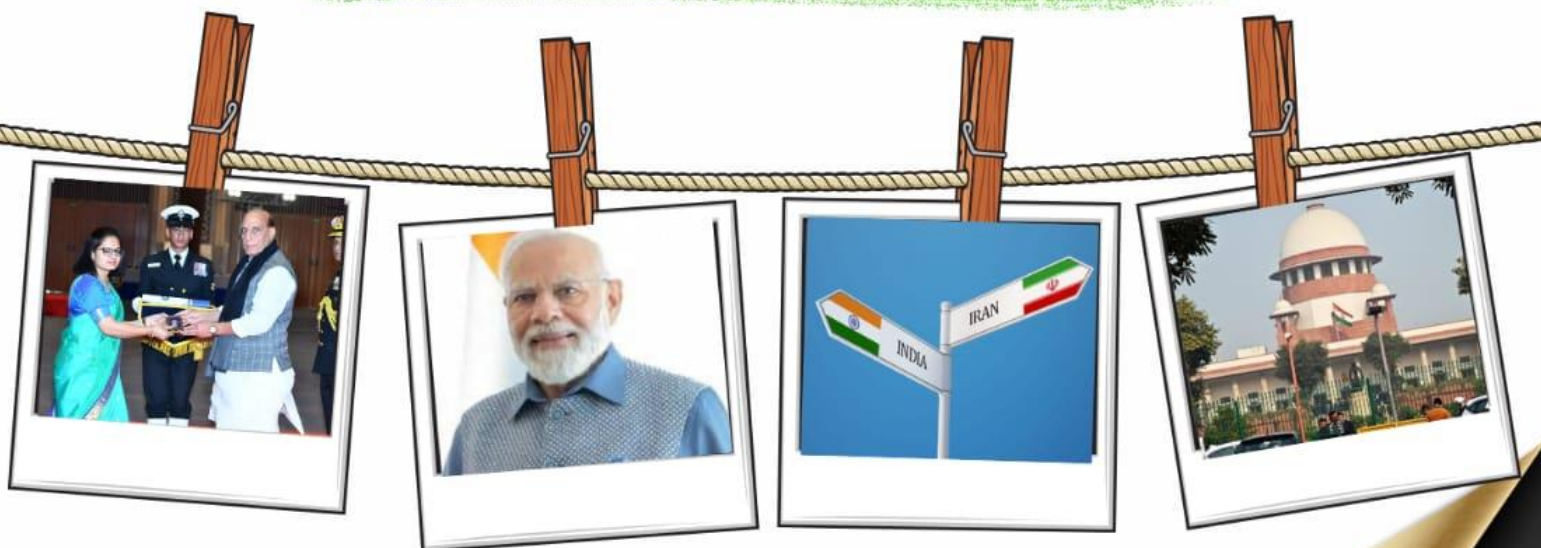
Monthly Current Affairs



To The Point

by Dhananjay Gautam

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US Reassesses Sanctions Waiver for India's Chabahar Port Project

Context: The United States is currently reviewing the sanctions waiver granted to India for its involvement in the Chabahar Port project in Iran. This move could have major implications for India's connectivity plans with Central Asia.

Background:

- The US has imposed multiple sanctions on Iran, primarily targeting its nuclear program and economic activities.
- India was granted a waiver for its role in developing Chabahar Port, recognizing its humanitarian and strategic importance.



US Sanctions Waivers for Chabahar:

- First Waiver (2018):** The US exempted India from sanctions related to Chabahar, acknowledging its role in regional connectivity and humanitarian efforts.
- Renewed Waivers:** The waiver was extended in subsequent years, allowing India to continue operations at the Shahid Beheshti Terminal and pursue connectivity projects.

Impact of US Sanctions on India:

1. Disruption in Chabahar's Development:

- The new US review could restrict India's ability to continue its operations at the port.
- India has already faced global pressure for continuing to import oil from Russia, despite US and Western sanctions.

2. Trade and Connectivity Concerns:

- Since 2018, the Chabahar Port has handled over 90,000 TEUs (twenty-foot equivalent units) of container traffic and more than 8.4 million metric tons of cargo.
- Any new restrictions could slow down progress and reduce trade efficiency.

3. Declining Trade with Iran:

- US sanctions have led to a significant decline in India-Iran trade.
- In 2018-19, India imported crude oil from Iran worth \$13 billion.
- Post 2019, imports dropped drastically to less than \$1 billion annually.

Chabahar Port: A Strategic Gateway:

- Located on the Gulf of Oman, Chabahar Port is Iran's only oceanic port, situated in Sistan and Baluchestan Province.
- The port has two key terminals:
 - Shahid Kalantari Port** – An older facility with limited capacity for feeder vessels.
 - Shahid Beheshti Port** – Currently undergoing four-phase development, aiming to reach 82 million tons annual capacity upon completion.

Why Chabahar Port is Crucial for India?

1. Strategic Importance:

- Bypasses Pakistan, providing India with a direct trade route to Afghanistan and Central Asia.
- Strengthens India's regional presence and offers an alternative to China's Belt and Road Initiative (BRI).

2. Economic Benefits:

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- Facilitates trade through the **International North-South Transport Corridor (INSTC)**, cutting **transport costs** and **reducing transit time**.
- The **Economic Survey 2024-25** reported a **43% rise** in **vessel traffic** and a **34% increase** in **container traffic** at the **Shahid Beheshti Terminal**.

3. India's Investment in Chabahar:

- Under the **2024 agreement**, **India Ports Global Ltd (IPGL)** has committed **\$120 million** to equip the port.
- India has also extended a **\$250 million credit facility** for **infrastructure development** linked to Chabahar.

What Lies Ahead?

- India has **successfully balanced** its **strategic relations** with both the **US and Iran**.
- The potential **revocation of the Chabahar waiver** poses a **diplomatic challenge** for India.
- Given its **regional importance**, India must continue to **invest** in **Chabahar** while engaging in **careful diplomatic negotiations** with both **Washington and Tehran**.

The **future of Chabahar** remains crucial for **India's foreign policy**, **trade ambitions**, and **regional connectivity** with **Central Asia and Afghanistan**.

The Future of USAID: Global Implications and Potential Shutdown

Context: The **United States Agency for International Development (USAID)** faces an uncertain future as the **Trump administration** considers merging it with the **U.S. Department of State**. This move would involve **major funding cuts** and a possible **downsizing of USAID's workforce**, raising concerns about the future of **U.S. humanitarian aid** and its global impact.



What is USAID? Understanding Its Role and Importance

Origins and Mission:

Established in the **1960s** under the **Foreign Assistance Act of 1961**, USAID is **legally mandated by Congress** to oversee and administer **U.S. international aid programs**.

Key Areas of Focus:

Operating in **over 60 countries** with a workforce of nearly **10,000 personnel**, USAID plays a vital role in:

- Food Security** – Provides famine relief and operates an advanced **food shortage prediction system**.
- Healthcare** – Funds **vaccination programs**, **pandemic prevention**, and **global disease control efforts**.
- Infrastructure & Development** – Supports **clean water initiatives**, **disaster relief**, and **economic growth programs**.
- Humanitarian Assistance** – Aids war-affected regions such as **Ukraine** and **sub-Saharan Africa**.

USAID's Budget and Global Spending:

The **U.S. remains the world's largest donor**, allocating **\$68 billion** to international aid in 2023. USAID received the **largest share—\$40 billion**—most of which was directed toward **Asia, Africa, and Europe**, particularly **Ukraine**.

In comparison, **the U.K. and other global powers** spend significantly less on international aid, highlighting the **U.S.'s dominant role** in global humanitarian efforts.

Why is the Trump Administration Targeting USAID?

Criticism of Foreign Aid Spending:

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- **Donald Trump** has long criticized **foreign aid**, claiming it **wastes U.S. taxpayer money**. He issued an executive order **pausing international spending** for 90 days, causing **multiple aid programs to be suspended**.
- **Public Opinion** – Polls show that many **American voters favor reducing foreign aid**, aligning with Trump's stance.
- **Elon Musk's Influence** – A key **Trump advisor**, Musk has **pushed for drastic spending cuts**, leading to tensions between USAID and the administration.

Consequences of the Spending Freeze:

- **Critical programs**, such as **medical aid and clean water initiatives**, faced immediate disruptions.
- **Security concerns** arose when reports suggested that **prison guards in Syria**, responsible for detaining **Islamic State militants**, **nearly abandoned their posts** due to funding shortages.
- **International humanitarian organizations** described the spending freeze as a **severe disruption to global aid efforts**.

Can the U.S. President Unilaterally Shut Down USAID?

Although the Trump administration is considering **dismantling USAID**, completely shutting it down would require **congressional approval**.

A **possible alternative** would be to **merge USAID with the State Department**, similar to how the **U.K. integrated its international aid department with the Foreign Office in 2020**. This restructuring would **limit USAID's independence** while keeping some aid functions intact.

What Would Be the Global Impact of USAID's Closure?

Humanitarian Consequences:

- **Critical aid programs**, such as **mine clearance, pandemic response, and prosthetic aid for war victims**, would be at risk.
- Millions of vulnerable populations **rely on USAID funding for healthcare, food security, and disaster relief**.

Foreign Policy Implications:

- Critics argue that **reducing U.S. foreign aid** would **weaken American global influence** and **harm diplomatic relationships**.
- Countries that depend on **U.S. assistance** could **turn to other global powers** for aid, altering global alliances.

Security Risks:

- USAID funding plays a role in **stabilizing conflict zones**—its removal could lead to **greater instability and security threats**.
- **Counterterrorism efforts** may be undermined, especially in **regions where USAID supports governance and development programs**.

Geopolitical Shifts:

- A weakened **U.S. aid presence** could create an **opportunity for China** to expand its **global influence** by offering alternative **development projects and investments**.

Conclusion:

The **proposed restructuring or closure of USAID** marks a **major shift in U.S. foreign policy**, aligning with **Trump's "America First" strategy**. While **supporters argue that reducing foreign aid saves taxpayer money**, critics warn that such a move **could have severe humanitarian, diplomatic, and security consequences**.



Turkey-Syria Talks: Kurdish Fighters and Defense Agreements Take Center Stage

Context: In a major diplomatic development, **Turkish President Recep Tayyip Erdogan** met with **Syria's interim President Ahmed al-Sharaa** in Ankara. This meeting marks a **significant shift in Turkey-Syria relations**, focusing on **security concerns and potential defense agreements**.



This was **al-Sharaa's second international visit** since taking office, following discussions with **Saudi Arabia's Crown Prince Mohammed bin Salman**.

Key Points from the Meeting:

- The two leaders discussed **strengthening security cooperation**, particularly against **Kurdish fighters in northeastern Syria and the Islamic State (ISIS/ISIL)**.
- Erdogan **reaffirmed Turkey's support for Syria's anti-terror efforts**, specifically against groups like **ISIS and the Kurdistan Workers' Party (PKK)**, which Turkey classifies as a **terrorist organization**.
- Turkey is considering establishing additional military bases in Syria** as part of a **new defense agreement** between the two nations.
- Al-Sharaa **opposed Kurdish self-rule** and demanded the **disarmament of the Syrian Democratic Forces (SDF)**, signaling Syria's commitment to maintaining **territorial integrity**.

Ongoing Turkey-Syria Tensions:

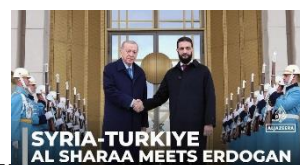
- The **Turkey-Syria border stretches 909 kilometers**, from the **Mediterranean Sea in the west to Iraq in the east**.
- A key source of friction is the **presence of Kurdish militant groups** in northern Syria.
- The **Kurdistan Workers' Party (PKK)** has been engaged in an insurgency against Turkey since the 1980s and is **designated as a terrorist group by Turkey**.
- The **Kurds**, a major ethnic group in the Middle East, are spread across **Turkey, Syria, Iraq, Iran, and Armenia** and have long sought an independent state, **Kurdistan**.
- The **Syrian Democratic Forces (SDF)**, a **Kurdish-led militia**, was a **key U.S. ally against ISIS**, but **Turkey views the group as an extension of the PKK**, raising concerns over its growing influence near Turkey's borders.

What's Next?

The **Turkey-Syria security discussions** could reshape **regional power dynamics**, with potential **military agreements and anti-terror measures** affecting not just these two countries, but also the **broader Middle East conflict**. The **fate of the SDF and Kurdish groups** remains uncertain as **Turkey and Syria push for stronger territorial control**.

Baltic States Cut Energy Ties with Russia, Join European Grid

Context: The **Baltic nations—Estonia, Latvia, and Lithuania—have officially disconnected from Russia's electricity grid**, marking the end of more than **30 years of reliance** on the Soviet-era power system. This move is a **major geopolitical shift**, as the three countries now fully integrate into the **European energy network**.



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Key Developments in the Transition:

- In **2024, Estonia, Latvia, and Lithuania notified Russia and Belarus** of their plan to disconnect, preventing any unexpected escalations.
- Over the years, **16 power lines linking the Baltics to Russia and Belarus were dismantled** in preparation for this move.
- To ensure a smooth transition, the Baltic nations **developed new energy infrastructure**, including **underwater power cables in the Baltic Sea**, connecting them to Europe's energy network.
- The **Kaliningrad region**, a Russian exclave between **Lithuania and Poland**, has **already been energy-independent**, relying on its own power generation systems. Thus, the disconnection has **minimal impact on the exclave**.

Geopolitical and Strategic Significance:

- This move is a **symbol of autonomy and resilience**, highlighting the Baltic states' **determination to cut ties with Moscow** after decades of uneasy relations.
- The decision is particularly **significant amid ongoing tensions with Russia**, especially after its **invasion of Ukraine in 2022**.
- By joining the **European energy grid**, the Baltic nations **strengthen their energy security**, ensuring full control over their power supply and reducing the risk of **Russian energy manipulation**.

The Baltic Nations: A Shift Towards Europe:

- The **Baltic states—Estonia, Latvia, and Lithuania—are located in Northern Europe, along the eastern coast of the Baltic Sea**.
- Formerly part of the **Soviet Union**, they **declared independence in 1990** following the USSR's collapse.
- Since **joining the European Union (EU) and NATO in 2004**, they have rapidly modernized their **democratic institutions, economies, and infrastructure**.
- Their focus has been on **deepening integration with Western Europe**, further distancing themselves from Russia.

Geographical Positioning of the Baltic States:

- **Estonia is the northernmost**, sharing borders with the **Gulf of Finland to the north, Latvia to the south, and Russia to the east**.
- **Latvia lies between Estonia and Lithuania**, with **Russia to the east and the Baltic Sea to the west**.
- **Lithuania, the southernmost Baltic nation**, borders **Latvia to the north, Poland and Belarus to the south and east, and the Baltic Sea to the west**.

A New Era of Energy Independence:

The **Baltic nations' disconnection from Russia's power grid is more than just an energy shift—it is a bold statement of sovereignty and strategic independence**. By fully integrating into the **European energy system**, Estonia, Latvia, and Lithuania ensure a **stable, self-reliant, and secure future**, free from Russian influence.



India's Leadership in AI Governance: Co-Chairing the AI Action Summit 2025

Context: India has accepted France's invitation to co-chair the AI Action Summit, scheduled for February 10-11, 2025, in Paris.

- The summit follows previous global AI meetings held in the UK (2023) and South Korea (2024), reflecting India's growing influence in shaping global AI governance.



India's Leadership in Global AI Governance:

Championing the Global South's AI Interests:

- India has been a strong voice for developing nations in AI governance at global platforms like the G20 and the Global Partnership on Artificial Intelligence (GPAI).
- During India's G20 Presidency in 2023, the bloc endorsed a regulatory approach that balances AI innovation with risk mitigation.
- At the GPAI Summit hosted by India, the focus was on ensuring equitable AI access for developing countries.

India's AI Infrastructure Push:

- India is setting up a national AI computing facility with over 18,600 GPUs, supported by a 40% government subsidy, serving as a model for equitable AI access.
- India will advocate for greater access to cloud computing platforms, open-source AI models, and distributed computing solutions at the AI Action Summit.

Key Priorities for India at the AI Action Summit:

1. Expanding AI Access for All:

- Developing nations face restrictions on AI technology exports, limiting their progress.
- India will push for flexible cross-border AI technology transfers while ensuring compliance with safety norms.

2. AI for Social Impact:

- India will highlight AI's potential in solving key societal challenges, including:
 - **Healthcare:** AI-powered early disease detection tailored to local health systems.
 - **Education:** Personalized learning solutions adapted to diverse regional education needs.
 - **Agriculture:** AI-driven tools designed for region-specific farming practices.
- **Proposal for an AI Use-Case Repository:** A global database to help developing nations adopt AI solutions effectively.

3. Addressing AI Risks in the Global South:

- AI risks in developing nations differ from those in advanced economies—India will ensure these concerns are addressed in global AI governance.
- **Preserving Cultural and Linguistic Diversity:** AI language models are mostly trained on Western data, leading to cultural erosion. India will advocate for AI models that support regional languages and cultures.
- **Proposal for a Global AI Risk Repository:** A central database to document AI-related harms in developing economies, shaping future AI regulations.

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India's Role in Previous Global AI Summits:

1. AI Safety Summit 2023 (Bletchley Park, UK):

- First-ever major global AI safety summit, focusing on AI risks and regulations.
- Participating nations: US, UK, China, India, and others.
- UK launched the AI Safety Institute (AIS) to monitor AI risks.

2. AI Safety Summit 2024 (Seoul, South Korea): Follow-up to the UK Summit, addressing cybersecurity risks, deepfake threats, and AI ethics.

3. AI for Good Global Summit 2024 (Geneva, Switzerland) Hosted by the UN's ITU, focusing on AI's role in sustainability, healthcare, and education.

4. World AI Summit 2024 (Amsterdam, Netherlands):

- Largest AI summit with policymakers, tech leaders, and AI researchers.
- Discussions on deep learning advancements, ethical AI, and global AI regulations.

5. Global INDIAai Summit 2024 (New Delhi, India):

- India's flagship AI event, promoting AI innovation and democratization.
- Key highlights:
 - AI partnerships with the OECD and GPAI.
 - Showcasing of India's deep-tech AI startups.

India's Role in the Global Partnership on Artificial Intelligence (GPAI):

- GPAI is a global initiative that bridges AI research and real-world applications.
- Established during the 2018 G7 Summit by Canada and France and officially launched in June 2020.
- India joined as a founding member in 2020 and later held the GPAI presidency for 2022-23.
- GPAI Secretariat is hosted at the OECD, with 29 member countries, including Australia, Canada, France, Germany, India, Japan, the UK, the US, and the EU.

India's AI Vision for the Future:

- As co-chair of the AI Action Summit 2025, India will continue leading global AI discussions, ensuring responsible and inclusive AI development.
- Balancing AI innovation with ethical considerations and equitable access will remain India's top priority.
- With strong AI infrastructure, global partnerships, and proactive governance, India is shaping the future of AI for the world.

New Zealand Raises Concerns Over Cook Islands' Growing Ties with China

Context: New Zealand's Foreign Minister, Winston Peters, has expressed concerns over the Cook Islands' upcoming agreement with China.

- The Cook Islands' Prime Minister, Mark Brown, is set to visit Beijing next week to finalize a "comprehensive strategic partnership" with China.



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- **New Zealand is worried about the security and strategic implications** of the deal and has criticized the Cook Islands for **not consulting them beforehand**.

Cook Islands' Relationship with New Zealand:

A Self-Governing Nation Under "Free Association" with New Zealand:

- The **Cook Islands is a small Pacific nation** that maintains a **unique "free association" arrangement** with New Zealand.
- This means the Cook Islands has **its own government** but **relies on New Zealand for defense and foreign affairs**.

Key Aspects of Their Relationship:

- **New Zealand Citizenship:** Cook Islanders hold **New Zealand passports**.
- **Financial and Diplomatic Support:** New Zealand provides **economic aid, defense support, and diplomatic backing**.
- **Consultation on Security Matters:** New Zealand expects to be **informed about any agreements** that may have **strategic or security implications**.

China's Expanding Influence in the Pacific:

Growing Presence in the Region:

- China has been **strengthening its ties with Pacific nations** through **economic aid, diplomatic engagements, and infrastructure projects**.
- This expansion is seen as a **challenge to the influence of New Zealand, Australia, and the U.S.** in the Pacific.

Strategic Concerns for Western Powers:

- Western nations worry that China's **deepening relationships in the Pacific** could lead to:
 - **Military footholds in the region.**
 - **Economic dependence on China.**
 - **Shifts in regional alliances away from traditional partners like New Zealand and Australia.**

About the Cook Islands:

Location & Governance:

- The **Cook Islands is an island nation in Polynesia, South Pacific Ocean**.
- It is **self-governing but in free association with New Zealand**.

Key Facts:

- **Capital:** Avarua, located on **Rarotonga**, the largest island.
- **Government:** Parliamentary democracy with a **Prime Minister as head of government**.
- **Economic Focus:** Tourism, offshore banking, and fishing are major contributors to the economy.

What's Next?

- The **Cook Islands' state visit to Beijing** will be closely watched by New Zealand and other Pacific nations.
- If the **strategic partnership with China expands**, it could **reshape regional alliances and increase tensions** in the Pacific.
- New Zealand may **seek reassurances or new agreements** to maintain its influence over the Cook Islands.

The outcome of this agreement could **signal a shift in power dynamics in the Pacific**, affecting not just the Cook Islands but the **broader geopolitical landscape of the region**.

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India Launches EFTA Desk to Boost Trade and Investment Ties



India-EFTA
Trade and Economic Partnership Agreement

Context: India has launched the **EFTA Desk** to serve as the **primary point of contact** for **businesses from European Free Trade Association (EFTA) nations**. This initiative will provide **market insights**, **address business concerns**, and **support expansion efforts** in India.

The **EFTA Desk** is a crucial component of the **India-EFTA Free Trade Agreement (TEPA)**, which was signed in **2024** to enhance **bilateral trade and investment**.

Key Highlights of TEPA:

First-Ever Binding Free Trade Agreement:

- **Guaranteed investment of \$100 billion** over the next **15 years**.
- Creation of **1 million direct jobs** in India.

Major Tariff Reductions:

- **EFTA eliminates 92.2% of tariff lines**, benefiting **99.6% of India's exports**.
- Indian exporters gain **wider access to EFTA markets** with lower duties.

Expanded Market Access:

- **Full access for non-agricultural products**.
- **Special concessions on Processed Agricultural Products (PAP)**.

Enhanced Services Access:

EFTA offers improved access to India's **services sector** through:

- **Mode 1:** Digital delivery of services.
- **Mode 3:** Establishing a commercial presence.
- **Mode 4:** Easier temporary stay for key professionals.

Intellectual Property Rights (IPR) Protection:

- Aligns with **TRIPS standards** for **stronger intellectual property safeguards**.

Recognition of Professional Qualifications:

- Covers professions such as **nursing, chartered accountancy, and architecture**.

Rules of Origin & Trade Safeguards:

- **Clear regulations** to ensure **smooth trade operations** and **protect national interests**.

Challenges Associated with TEPA:

- **Strict IPR rules** could impact India's **generic pharmaceutical industry**.
- **Trade imbalances**, particularly due to **high gold imports from Switzerland**, require careful monitoring.
- The **16-year-long negotiation process** highlights the **complexity of aligning economic interests**.

About EFTA:

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The **European Free Trade Association (EFTA)** was established in **1960** to promote **free trade and economic cooperation** among its member countries:

- **Iceland**
- **Liechtenstein**
- **Norway**
- **Switzerland**

Among these, **Switzerland is India's largest EFTA trade partner**, followed by **Norway**.

Conclusion:

The **India-EFTA TEPA** marks a **major milestone** in India's trade policy, promising **significant investment, job creation, and enhanced market access**. The **EFTA Desk** will play a crucial role in **strengthening business ties, resolving trade challenges, and ensuring a smooth implementation of the agreement**.



India-Sri Lanka Fishing Dispute: A Persistent Maritime Challenge

Context: The **Sri Lankan Navy** recently arrested **Indian fishermen** for **fishing in Sri Lankan waters** in the **Palk Bay**, reigniting the long-standing India-Sri Lanka fishing dispute.

In **2024**, the number of **Indian fishermen arrested in Sri Lanka** crossed **500**, marking the highest in a decade, compared to **787 arrests in 2014**.

Key Issues in the India-Sri Lanka Fishing Dispute:

1. Recurrent Arrests & Vessel Seizures:

- **Indian fishermen accidentally stray into Sri Lankan waters** due to **engine failures, weather changes, or the search for better fish stocks**.
- **Sri Lankan authorities confiscate boats, impose heavy fines, and destroy fishing vessels** even after fishermen are released.

2. Violation of International Maritime Boundary Line (IMBL):

- **Indian fishermen argue historical fishing rights** beyond the **IMBL**, citing traditional practices.
- The **Palk Bay is equally divided** between India and Sri Lanka, but **fishing rights remain disputed**.
- The **IMBL, as per UNCLOS**, defines **territorial waters, maritime jurisdiction, and fishing rights**, but enforcement remains contentious.

3. Depletion of Fish Stocks:

- **Overfishing on the Indian side** of the **IMBL** has forced Indian fishermen into Sri Lankan waters.
- Sri Lanka views this as **"poaching"**, impacting **local livelihoods** and **posing security risks**.

4. Environmental Damage Due to Bottom Trawling:

- **Indian fishermen use bottom trawling**, dragging **weighted nets along the seabed**, which:
 - **Destroys marine habitats** like coral reefs and sponges.
 - **Depletes fish populations**, leading to **severe ecological damage**.
- Sri Lanka **strongly opposes bottom trawling**, pushing for a **sustainable fishing solution**.

5. Sri Lanka's National Security Concerns:

- **Regular incursions by Indian fishing trawlers** are seen as a **security risk** by Sri Lanka.

Download Our Application over the potential resurgence of Tamil militant groups using fishing vessels.





6. Katchatheevu Island Dispute:

- Katchatheevu, a 285-acre islet, was ceded to Sri Lanka in 1974.
- Indian fishermen are **only allowed to dry nets and rest** there, fueling political demands in Tamil Nadu for **its return to India**.

International Laws on Freedom of Fishing:

1. UN Fish Stocks Agreement (UNFSA, 1995):

- Mandates **conservation and management** of fishery resources.
- Countries must **either become members of Regional Fisheries Management Organizations (RFMOs) or follow their conservation rules**.

2. UNCLOS, 1982:

- **Article 87 limits freedom of fishing** on the **high seas**.
- **Illegal fishing** occurs if **States fail to comply** with UNCLOS regulations.

Palk Bay: A Strategic and Ecological Hotspot

- Palk Bay, a **narrow stretch of water** between **southern India and northern Sri Lanka**, is **rich in biodiversity** due to monsoon-driven nutrient inflows.
- **Boundaries:**
 - **Southern boundary:** Pamban Strait, Rameswaram Island, Adam's Bridge (Rama Setu).
 - **Northeastern boundary:** Palk Strait, linking **Palk Bay to the Bay of Bengal**.
- **Fishing Conflict:**
 - **Escalated post-2009** after the **end of the Sri Lankan civil war**.
 - **Peaked in 2013** due to **overfishing and bottom trawling** by Indian fishermen.

Implications of the Indo-Sri Lanka Fishing Conflict:

1. Livelihood Crisis:

- **Indian fishermen face frequent arrests**, causing **financial distress** for their families.
- **Sea conflicts have led to fatalities and missing fishermen**, heightening risks for fishing communities.

2. Enforcement Challenges:

- **Surveillance and patrolling costs for IMBL enforcement** have significantly increased.

3. Smuggling and Security Risks:

- Authorities **struggle to differentiate between fishermen and smugglers**, making the **IMBL vulnerable to illegal trade and security threats**.

4. Political Ramifications:

- Allegations of **Sri Lankan Navy's harsh actions** fuel **diplomatic tensions** between India and Sri Lanka.
- India's stance on **UN resolutions concerning Sri Lanka's human rights record** has been influenced by the dispute.

5. Environmental Damage:

- **Bottom trawling harms marine ecosystems**, affecting fish breeding and reducing fish stocks.
- **Recovery from trawling damage can take thousands of years**.

6. Economic Consequences:

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- **Overfishing reduces fishery resources and fisher incomes.**
- **Sri Lanka loses an estimated \$730 million annually** due to Indian fishing incursions.

Conclusion:

The **India-Sri Lanka fishing dispute** is a complex issue involving **livelihood concerns, maritime laws, security risks, and environmental challenges**. A **collaborative approach**, focusing on **sustainable fishing, alternative livelihoods, and joint resource management**, is essential for a **long-term resolution**.

Strengthening **bilateral ties, ensuring fair regulations, and balancing economic interests** will help mitigate conflicts while preserving marine ecosystems and protecting fishermen's rights.

U.S. Tariff Policies on Steel, Aluminium, and Trade Relations with India



Context: U.S. President **Donald Trump** has announced a **25% tariff** on steel and aluminium imports from multiple countries, including **Canada, Mexico, and China**. This move is poised to reshape global trade dynamics, potentially drive inflation, and impact bilateral relations with key trading partners, including **India**.

Key Context and Developments:

U.S. Tariffs on Steel & Aluminium:

- **25% Tariff on Steel Imports:** Aimed at reducing steel imports to the U.S. and boosting local steel manufacturing.
- **Aluminium Imports Affected:** Similarly, **aluminium** imports will face new trade penalties, hurting suppliers.
- **Key Suppliers to the U.S.:** **Canada, China, Mexico** are major suppliers of these metals, with potential for major ripple effects across global trade.

Impact of Trump's Steel Tariff Threat on India:

1. Impact on Indian Industries & Exports:

- **Competitiveness Concerns:** Indian steelmakers fear that the U.S.'s tariffs could significantly reduce India's ability to compete in the **U.S. steel market**, a crucial export destination.
- **Export Market Contraction:** India, a major exporter of steel, might face **lost market share** in the U.S. due to increased tariff barriers.

2. Rise in Steel Imports & Dumping Risks:

- **Diversion of Global Steel Trade:** The U.S.'s tariffs might **divert global steel trade** towards countries like **India**, potentially leading to **steel dumping** by producers from **China, Japan, and South Korea**.
- **Price Pressure:** Steel imports into India surged, with **Chinese steel imports rising by 80%** in 2024, potentially causing **price pressure** and **losses** for Indian manufacturers.

3. Impact on Global Trade & Inflation:

- **Currency Depreciation:** A **weaker rupee** could exacerbate **imported inflation risks**, especially with rising steel prices.
- **Global Trade Tensions:** Countries like **South Korea** are concerned about how U.S. tariffs will affect their industries and exports.
- **Reciprocal Tariffs:** President Trump hinted at **imposing new tariffs** on products from countries that impose **higher tariffs on U.S. goods**, escalating the trade conflict.

India's Response and Trade Concessions:

1. Lowering Import Duties:

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India is looking to **reduce import duties on U.S. farm products** to ease **trade tensions**:

- **Pecan Nuts**: India already reduced duties on **pecan nuts** from **100% to 30%** in early 2023 to improve trade relations.
- **Other Farm Products**: Potential further reductions in duties to pacify Trump's tariff stance and smooth trade discussions

2. Restoring GSP Status:

- **Generalized System of Preferences (GSP)**: India will lobby for the **restoration of its preferential trade status under GSP**, which was revoked by the U.S. in 2019.
- **GSP Benefits**: Under GSP, India enjoyed **lower or zero tariffs** on several products, enhancing **market access** for Indian exports to the U.S.

3. Safeguard Measures:

India is considering **safeguard measures** to protect its industries in the event of a **sudden surge in imports**:

- **Anti-Dumping Duty**: Protecting local industries from unfairly low-priced foreign goods.
- **Countervailing Duty**: Addressing **foreign subsidies** that distort competition.
- **Tariffs & Quotas**: Imposing taxes or limits to control the influx of foreign products.

Overview of GSP (Generalized System of Preferences):

What is GSP?

The **Generalized System of Preferences (GSP)** is a U.S. trade program aimed at supporting the **economic growth of developing countries** by offering **preferential tariff treatment** for their exports.

Key Features of GSP:

- **Duty-Free & Reduced Tariffs**: Eligible products from **developing nations** can enter the U.S. market with **lower or zero tariffs**.
- **Non-Reciprocal Basis**: Initially offered without requiring reciprocal trade concessions from beneficiaries.
- **Market Access**: GSP has historically helped increase exports from developing nations, fostering economic development and diversification.

Benefits of GSP for India:

- **Enhanced Competitiveness**: **Lower or zero tariffs** on Indian exports to the U.S. make products more competitive in the U.S. market.
- **Stronger Market Presence**: GSP helps Indian exporters **increase their foothold** in the U.S. and **improve profit margins**.

Conclusion:

The **U.S. tariff policies** on steel and aluminium, alongside broader trade dynamics, have significant implications for **India**. The **renewed tariffs** raise **concerns** for Indian steelmakers while also **reshaping trade strategies** for agricultural exports.

India's response, including **reducing import duties on U.S. farm products** and lobbying for **restoration of its GSP status**, reflects an effort to **counterbalance** the impact of U.S. trade policies. However, tensions may continue to rise unless diplomatic solutions, including **safeguard measures** and **cooperative trade agreements**, can be achieved.

Panama's Withdrawal from the Belt and Road Initiative (BRI)



Context: Panama has recently made headlines by **withdrawing** from China's **Belt and Road Initiative (BRI)**, a strategic development program launched by China in 2013. This marks a significant shift in Panama's



relationship with Beijing, as it chose not to renew its **Memorandum of Understanding (MoU)** with China, signed in **2017**.

In response, China summoned Panama's **Ambassador** to protest this decision, accusing the **United States** of exerting pressure to undermine China's infrastructure projects. This move has raised questions about the growing influence of the U.S. in **Latin America** and the changing dynamics of international trade and geopolitics.

The Trump Factor: A Backdrop of Tension:

U.S. President **Donald Trump** has long expressed concerns over China's growing influence in the region, particularly with regard to the **Panama Canal**. He claimed that **China** was gaining strategic control over the canal, suggesting that it should be **returned** to U.S. control.

Trump alleged that Panama was unfairly charging U.S. ships using the canal and even made claims that **Chinese soldiers** were operating the canal. However, Panama's **President José Raul Mulino** vehemently denied these accusations, affirming that there were no **Chinese soldiers** stationed at the canal and emphasizing that Panama remains open to investments from **all countries**, not just China.

Chinese Influence and Investments in the Panama Canal:

China has been involved in the Panama Canal for years, with **Chinese companies** holding significant stakes in the region's infrastructure. For example:

- **Panama Ports Company (PPC)**, a subsidiary of **Hong Kong-based Hutchison Port Holdings**, has managed two key ports at either end of the canal since **1997**.
- **China Ocean Shipping (Group) Company (COSCO)**, one of the canal's largest users, plays a crucial role in the region's trade. In **2021**, PPC's contract for port operations was **extended** for another **25 years**, although the extension is currently under review by Panama.

This involvement has led to fears in the U.S. that **Chinese control** over strategic infrastructure could provide China with **geopolitical leverage**, especially in times of international conflict. The U.S. sees these **Chinese companies** as being aligned with the **Chinese government's interests**, further escalating concerns.

The Geopolitical Importance of the Panama Canal:

The **Panama Canal**, completed in **1914**, serves as a critical waterway connecting the **Atlantic** and **Pacific Oceans**, significantly reducing the travel time for ships. Originally constructed by the U.S., the canal was under American control until the **Torrijos-Carter Treaties** of **1977**, which paved the way for Panama to take control of the canal by **1999**, although the U.S. retained military defense rights.

The canal remains vital for **global trade**, particularly for **U.S. shipping routes**, increasing its **geopolitical significance**. The U.S. and other Western powers have long been wary of any foreign influence that could disrupt their access to this crucial trade artery.

About the Belt and Road Initiative (BRI):

The **Belt and Road Initiative (BRI)** is a global development strategy spearheaded by **China** to enhance **regional connectivity** and foster **economic cooperation** across **Asia, Europe, and Africa**. Launched in **2013**, the BRI aims to revive the ancient **Silk Road** trade routes through investments in infrastructure and trade.

- To fund BRI projects, China offers **loans** to participating countries, which often come with **commercial interest rates** and a fixed repayment period.
- Critics in the West have accused China of **debt-trapping** countries through "**predatory loans**", pressuring them to cede valuable assets in return for the funding.

Despite criticism, the BRI continues to expand, with **over 140 countries** joining the initiative by **2024**, covering nearly **75%** of the world's population and over half of its GDP.

Panama's Decision: A Symbol of Changing Global Alliances?

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Panama's withdrawal from the BRI is not just a diplomatic decision—it signals potential shifts in **global alliances**. While the **U.S.** and China continue their geopolitical rivalry, Panama's choice reflects broader concerns about **China's expanding influence** in Latin America and the region's need for **balanced partnerships**.

The **U.S.**, through its strategic political and economic influence, appears to be encouraging countries like Panama to reconsider their relationships with China. As geopolitical tensions rise, this shift could have long-term implications for the **BRI**, especially in **Latin America**.

Conclusion: A Changing Landscape

Panama's decision to distance itself from China's BRI marks a key turning point in international trade dynamics, with the U.S. playing a central role in shaping the future of the region. As the **BRI** continues to expand, it remains to be seen how countries like Panama will navigate the pressures from both **China** and the **U.S.**, balancing economic growth with geopolitical considerations.

Trump-Putin Talks: US Pushes for Ukraine War Settlement

Context: In a **major diplomatic move**, President Donald Trump held a "**lengthy and highly productive**" conversation with **Russian President Vladimir Putin**—their first confirmed dialogue since Trump's return to office.



The discussion marked the beginning of a **US-led initiative** to **negotiate an end to the Ukraine war**, signaling a **potential turning point in global diplomacy**.

Trump Takes on Mediator Role in Ukraine Conflict:

Trump's Renewed Focus on Ending the War:

From the start of his **second term**, Trump has made **ending the Ukraine war a priority**. His administration is working towards **facilitating peace talks between Russia and Ukraine**, aiming to bring stability to the region.

Russia's Response & Diplomatic Signals:

- The **Kremlin confirmed the 90-minute conversation** between the two leaders.
- **Putin welcomed Trump's peace initiative**, acknowledging the need for both nations to work together on **global stability**.

Trump's Evolving Stance on Russia:

- Trump's **approach to Russia has shifted significantly** from his first term, when he was accused of being **too accommodating** toward Putin.
- While he previously **praised Putin's strategic tactics**, he has now **adopted a more critical position**, questioning Russia's conduct in the war.

Challenges Facing the Peace Process:

Despite Trump's **diplomatic push**, there are **several obstacles** to achieving peace:

- **Ukrainian President Zelenskyy** remains **unwilling to compromise Ukraine's sovereignty**, especially given **strong military and financial backing from the West**.
- **Western nations remain skeptical** of Russia's intentions, fearing that Moscow may use negotiations as a delay tactic while solidifying its hold over **eastern Ukraine**.

Europe Pushes for a Role in Peace Talks:

European Leaders Demand Inclusion:

European leaders have made it clear that **Ukraine and Europe must be involved** in any diplomatic resolution.

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Trump's Shift on NATO & Ukraine's Borders:

- Trump has hinted at a **major policy shift**, suggesting that Ukraine should abandon its NATO ambitions.
- He has also questioned whether **Ukraine's pre-2014 borders are realistic**, indicating a **possible compromise with Russia**.

US Prioritizing Other Global Concerns:

Experts suggest that Trump's administration is **shifting focus away from European security**, instead emphasizing:

- **Border control policies**
- **Strengthening US-China deterrence**

The Importance of the Trump-Putin Call:

A Shift in Global Power Dynamics:

Trump's direct **negotiations with Putin signal a major departure** from past US foreign policy.

- He invoked **World War II comparisons**, likening his diplomacy with Putin to the historic **Yalta Summit**.
- This move effectively **ends Russia's diplomatic isolation**, which had lasted over a decade.

A Ceasefire in Sight?

- Trump **announced immediate talks** to negotiate a ceasefire in Ukraine.
- A **meeting with Putin in Saudi Arabia** is already in the works, hinting at a **potential diplomatic breakthrough**.

Europe's Absence from Negotiations:

- Much like in **1945**, Europe has been **sidelined** in US-Russia negotiations.
- **Trump's administration rejects Ukraine's NATO membership bid**, acknowledging that reclaiming lost territories is **increasingly unrealistic**.

Russia's Weakened Position Could Encourage Negotiations:

- Past US-Russia talks, including **Biden's 2021 Geneva summit with Putin**, collapsed due to **Moscow's rigid demands**.
- However, **after three years of war**, Russia's position has **weakened**, making it more likely to **consider serious negotiations**.

Could Trump Visit Moscow?

If successful, Trump may **visit Moscow for Russia's Victory Day in May**, a **symbolic step towards a US-Russia deal**. For Putin, this would mean **recognition of Russia's great power status** and a **shift in Europe's security structure in Moscow's favor**.

What This Means for Asia & India:

Asia's Geopolitical Landscape Could Change:

If Trump succeeds in brokering a **Ukraine peace deal**, his **next focus may shift towards China**. Key questions arise:

- Will Trump **shift his foreign policy towards countering China**?
- Could he extend his **peace negotiations to Taiwan**?
- How will a **potential US-Russia reconciliation impact Moscow-Beijing relations**?

Implications for India:

For **India**, this is a **critical moment** in global diplomacy.

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- Unlike in the 20th century, India now holds significant geopolitical influence.
- PM Modi's upcoming meeting with Trump will be a chance to understand his larger global strategy.

Economic & Trade Considerations:

Beyond geopolitics, India and the US may collaborate on economic restructuring:

- Countering China's trade dominance will be a major topic.
- With both nations facing large trade deficits with China, Modi might align with Trump's push for a new economic order led by democratic nations.

As the global power balance shifts, all eyes are now on how Trump's Ukraine peace efforts unfold and what they mean for the future of international diplomacy



Trump's Reciprocal Tariffs: Impact on India's Economy & Atmanirbhar

Context: US President Donald Trump has announced plans to implement reciprocal tariffs on all countries, set to take effect after April 1st. This move could disrupt global trade, potentially reversing progress made over the past century and undermining World Trade Organization (WTO) agreements. By targeting both allies and rivals, Trump is signaling a major shift in international trade policies.

What Are Reciprocal Tariffs?

Tariffs are taxes imposed by a country on imported goods, making them more expensive for domestic buyers.

The Move Towards Free Trade

Since World War II, global economies have embraced free trade, recognizing that open markets lead to economic prosperity. Agreements like GATT and the WTO allowed developing nations, including India, to impose higher tariffs to protect local industries from competition with highly industrialized nations.

Trump's Shift to Reciprocal Tariffs:

Trump's "reciprocal tariffs" policy aims to end preferential treatment for any country. Under this system, the US will impose the same level of tariffs on imports as other nations place on US exports. Trump argues that this method is fairer and reduces the need for complex trade agreements, overriding decades of global trade norms designed to protect developing economies.

How Will Reciprocal Tariffs Be Calculated?

The final methodology for calculating reciprocal tariffs is still under development, with the US trade department expected to finalize country-specific rates by April.

Beyond Just Matching Tariffs:

Instead of simply mirroring import duties, the US will factor in subsidies and financial assistance that other governments provide to their export industries. For instance, if India offers subsidies to certain sectors, the US may impose higher tariffs on those products to create a "level playing field."

Impact on Developing Countries:

If this policy is enforced strictly, developing nations like India—which offer significant subsidies—could face higher tariffs on their goods entering the US market.

For example: Between 2022 and 2024, India allocated \$1 billion (₹8,700 crore) under the Production Linked Incentive (PLI) scheme to boost mobile phone exports. Since the PLI scheme is essentially a subsidy, it could prompt the US to increase tariffs on Indian-made electronics and other subsidized goods.

Why Is Trump Imposing Reciprocal Tariffs?

Trump's decision is driven by multiple factors, not just a desire to target specific countries.

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Targeting Allies & Competitors Alike:

While **China** remains America's **biggest trade rival**, Trump has also criticized **allies like Canada, Mexico, and the EU**, accusing them of **unfair trade practices**.

Trump's Obsession with Trade Deficits:

Trump strongly opposes **trade deficits**, which occur when a country **imports more than it exports**.

- The **US trade deficit** is nearing **\$1 trillion**.
- **China** enjoys a **trade surplus of over \$1 trillion**. Trump views this as proof that the **world is "cheating" the US** by not engaging in **fair trade**.

How Trump Plans to Fix the Trade Deficit:

- **Forcing Countries to Import More US Goods** – Encouraging nations to **buy American** to balance trade.
- **Compelling Foreign Companies to Manufacture in the US** – Raising tariffs to **make it costlier for foreign firms to export**, pushing them to **set up factories in the US instead**.

Impact of Reciprocal Tariffs on India:

Since **India** has **traditionally imposed higher tariffs** on US goods, it is expected to be **one of the most affected nations**.

India-US Trade Snapshot (April–Nov 2024):

- **Total Bilateral Trade: \$82.52 billion**
- **India's Exports to the US: \$52.89 billion**
- **India's Imports from the US: \$29.63 billion**
- **Trade Surplus (India's Favor): \$23.26 billion**

Sectors Most at Risk:

Higher US tariffs could negatively impact **key Indian exports**, including:

- **Food Products**
- **Textiles & Apparel**
- **Electrical Machinery**
- **Gems & Jewelry**
- **Pharmaceuticals**
- **Automobiles**

Increase in US Imports to India:

To **reduce the trade gap**, India may be pressured to **import more US goods**, such as:

- **Defense Equipment**
- **Crude Oil**
- **Consumer Goods**

Rupee Depreciation Risk:

Higher **US imports** will increase demand for **US dollars**, potentially leading to a **weaker Indian rupee**.

Impact on Domestic Consumption & GDP Growth:

Final Thoughts:

Trump's **reciprocal tariffs policy** could reshape **India-US trade relations**, bringing **both challenges and opportunities**.

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While some sectors might benefit, the threat to India's exports and Atmanirbhar Bharat cannot be ignored. Going forward, India must strategically navigate these trade barriers to protect economic interests while ensuring stronger engagement with global markets.

India & USA Launch Autonomous Systems Industry Alliance (ASIA) for Underwater Domain



Context: During the Indian Prime Minister's recent visit to the USA, India and the United States announced the Autonomous Systems Industry Alliance (ASIA) to boost industry collaboration and production in the Indo-Pacific.

What is Underwater Domain Awareness (UDA)?

UDA is a maritime strategy that leverages technology, policies, and intelligence to monitor and manage underwater activities effectively.

Why is UDA Important for India?

- **Enhances Regional Security** – Helps detect threats like piracy, terrorism, and maritime conflicts for timely action.
- **Boosts the Blue Economy** – Supports marine resources, fisheries, and environmental protection for sustainable growth.
- **Strengthens Diplomacy** – Improves cooperation with neighboring nations in the maritime domain.

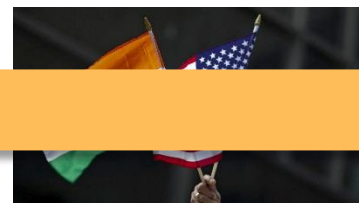
Key Technologies in UDA:

1. **Unmanned Underwater Vehicles (UUVs)** – India has developed UUVs like MAYA, AMOGH, and ADAMYA for deep-sea surveillance.
2. **Acoustic Surveillance** – Uses Sonar Systems, Sonobuoys, and the Sea Picket for advanced underwater monitoring.
3. **LIDAR Technology** – Bathymetric LIDAR uses green light to map seafloors and riverbeds with precision.

India-USA Collaboration in UDA:

- India is the first country to partner with the USA on UDA technologies.
- India's BEL has signed deals with Ultra Maritime (USA) for Multistatic Active (MSA) Sonobuoys and L3 Harris (USA) for advanced sonar systems.

This initiative will redefine India's maritime capabilities, strengthen regional security, and pave the way for cutting-edge underwater tech.



India-US Nuclear Cooperation: A Renewed Strategic Alliance

Context: The India-US nuclear cooperation has taken a significant step forward, showcasing a diplomatic victory for India amid tough trade negotiations with the new US administration. This renewal brings with it key advantages for both nations, including:

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- A reaffirmed commitment to the 123 Civil Nuclear Agreement.
- A recognition of the **past stagnation** in the partnership.
- A renewed push to **maximize benefits** from the Indo-US nuclear deal, signed **two decades ago**.

Large-Scale Localization & Technology Transfer:

- Despite the US's often **protectionist trade stance**, the renewed nuclear cooperation agreement emphasizes **joint reactor building** on Indian soil. This marks a key shift, as it includes **local manufacturing** and **technology transfer**—a move away from Washington's usual focus on keeping manufacturing within the US.

Upgrading Reactor Specialisation:

- This new deal presents **India** with the unique opportunity to modernize its **reactor technology**, bringing it in line with **global standards**. This will accelerate **capacity expansion** and enhance India's ability to meet growing energy demands.

Small Modular Reactors (SMRs): A Growing Focus:

- India is setting its sights on entering the rapidly expanding **SMR** segment, leveraging the expertise of its **private sector**. While India has experience with **220MWe PHWRs**, these reactors are becoming outdated compared to the globally dominant **pressurised water reactors (PWRs)**. By exploring **SMR collaborations**, India aims to become a key player in the future of nuclear energy.

Strategic Collaborations in SMR Development:

- India is in discussions with **Holtec International**, a leading nuclear technology exporter, to explore potential **SMR projects**. This collaboration comes at a time when the **US** and **India** are focused on countering **China's leadership** in the **SMR** space—an area with strategic importance in the **Global South**.

Unlocking New Economic and Technological Potential:

- The partnership provides India with the chance to overcome its **technological limitations**, which have historically hindered its progress in the nuclear sector. By joining forces with the US, India could **end its technological isolation**, significantly boosting its role in the **global nuclear market**.

Holtec International's Role and Investments:

- **Holtec International** is making significant investments in India's nuclear future, with plans to expand operations, including the establishment of a **nuclear technology campus** in **Pune** and a **specialty manufacturing plant**. These investments are expected to drive **foreign investment** and contribute to **economic growth**.

Reviving the Nuclear Partnership:

- The original **123 Agreement**, signed in **2007**, was designed to foster full civil nuclear energy cooperation. However, it faced significant challenges. India's ongoing efforts to amend its laws may finally break the deadlock, leading to **joint manufacturing** and **SMR projects**.

SMRs: The Future of Nuclear Energy:

Small Modular Reactors (SMRs), ranging from **30MWe to 300MWe**, are increasingly recognized as a **sustainable and commercially viable energy option**. **Holtec's SMR-300**, backed by the **US Department of Energy**, is currently in early design stages, with potential deployments in countries like the **UK** and **Canada**. Other Western competitors, including **Rolls-Royce**, **NuScale**, **Westinghouse**, and **GE-Hitachi**, are also heavily invested in the SMR market.

In conclusion, the **India-US nuclear cooperation** renewal marks a critical step toward **technological advancements**, **economic growth**, and **strategic influence** on the global nuclear stage.



India and Qatar Forge Strategic Partnership to Enhance Trade, Investment & Energy Cooperation



Context: India and Qatar have strengthened their bilateral relations with the signing of a **Strategic Partnership Agreement**, aiming to boost **trade, investment, and energy cooperation**. The visit of **Qatar's Amir, Sheikh Tamim Bin Hamad Al-Thani**, to India marked a significant milestone in diplomatic and economic collaboration.

India-Qatar Bilateral Relations:

India and Qatar share **historic ties, high-level diplomatic engagements, and a strong Indian diaspora**, playing a crucial role in Qatar's development.

Defense Collaboration:

- Defense ties include **training programs, naval visits, and participation in DIMDEX (Doha International Maritime Defence Exhibition and Conference)**.
- The **Defense Cooperation Agreement**, extended in **2018**, is managed by the **Joint Defence Cooperation Committee (JDCC)**.

Trade and Investment Relations:

- Bilateral trade** between India and Qatar stood at **\$18.77 billion in 2022-23**.
- India's exports to Qatar were valued at **\$1.96 billion**, while imports from Qatar reached **\$16.8 billion**.
- India is among Qatar's **top three export destinations**, alongside **China and Japan**.

Energy Cooperation:

- Qatar is India's largest supplier of LNG**, delivering **10.74 million metric tonnes (MMT) worth \$8.32 billion in 2022-23**, accounting for **48% of India's total LNG imports**.
- It is also the **largest supplier of LPG to India**, providing **5.33 MMT worth \$4.04 billion**, covering **29% of India's LPG imports**.

Cultural and Labor Relations:

- Over 835,000 Indian nationals** reside in Qatar, making up **27% of its population**.
- Qatar has introduced **labor reforms**, including the **abolition of the Kafala system, introduction of minimum wages, and enhanced worker protections**.

Key Outcomes of the Visit:

Upgrading Relations to a Strategic Partnership:

- India and Qatar have elevated their diplomatic ties to a **Strategic Partnership**, joining **UAE, Saudi Arabia, Oman, and Kuwait** in India's **Gulf Cooperation Council (GCC)** engagements.

Doubling Bilateral Trade to \$28 Billion:

- Both nations set an ambitious goal to **double bilateral trade to \$28 billion by 2030**, focusing on **trade, investment, and energy**.

Qatar's \$10 Billion Investment in India:

~~Download~~ ~~Qatar's Sovereign Wealth Fund~~ has committed ~~\$10 billion~~ for investments in



- Infrastructure
- Ports & Shipbuilding
- Renewable Energy
- Smart Cities & Food Parks
- Startups, AI, Robotics, and Machine Learning

Exploring a Free Trade Agreement (FTA):

- India and Qatar discussed the possibility of an **FTA** to enhance economic collaboration.
- Separately, India is also negotiating an **FTA with the GCC**, which includes Qatar.

Key Trade and Financial Developments:

- **Qatar Investment Authority (QIA)** will establish an office in **India** to expand investment operations.
- India's **UPI payment system** will be operational at **Qatar National Bank (QNB) Point of Sales terminals**.
- **Qatar National Bank** will expand its presence in **India** by opening an office in **GIFT City, Gujarat**.

Agreements and MoUs Signed:

- Two major **agreements** and five **Memorandums of Understanding (MoUs)** were signed, covering:
 - **Economic cooperation**
 - **Youth affairs**
 - **Double taxation avoidance**

Strengthening Energy Partnership:

- **Qatar** reaffirmed its commitment to **India's energy security**.
- A long-term agreement between **Qatar Energy** and **Petronet LNG Limited** was signed, ensuring the supply of **7.5 MMT of LNG annually for 20 years starting in 2028**.

Conclusion:

Qatar remains a **key strategic partner for India**, given its **geopolitical significance, trade potential, energy resources, and large Indian diaspora**. This visit marked a **major reset in relations** following tensions over the imprisonment of **eight Indian Navy veterans**—seven of whom have returned, while one remains in Qatar.

This new **Strategic Partnership** signals a new era of **economic, security, and energy cooperation**, solidifying India-Qatar ties for years to come.



OPEC+ Welcomes Brazil as a New Member

Context: **Brazil** has recently **secured approval** to join **OPEC+**, solidifying its position as a **key global oil player**. This move reflects Brazil's **growing influence** in the energy sector.

What is OPEC?

The **Organization of the Petroleum Exporting Countries (OPEC)** is a **permanent, intergovernmental organization** made up of **major oil-exporting nations**.

Key Facts About OPEC:

- **Established in:** 1960, Baghdad, Iraq.
- **Founding Members:** Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela.

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- **Headquarters:** Vienna, Austria.
- **Current Members:** Algeria, Congo, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Saudi Arabia, United Arab Emirates, and Venezuela.
- **Annual Meetings:** Member nations convene to **determine global oil production policies**.

Objectives of OPEC:

- **Regulating global oil supply and prices** to ensure **stability in the market**.
- **Coordinating petroleum policies** among member countries.
- **Ensuring a steady supply of petroleum** to consumers.
- **Providing fair returns on investment** for oil producers.

OPEC Membership Criteria:

- Open to any country that is a **significant oil exporter**.
- Must share the **common goals and principles** of the organization.

What is OPEC+?

OPEC+ is an **alliance between OPEC nations and additional oil-producing countries**, including **Russia**.

- **Formed in:** 2016.
- **Purpose:** To extend **oil production control** beyond OPEC's core members, allowing **greater influence over global oil markets**.

Why is Brazil's Membership Significant?

- **Brazil officially invited to OPEC+ in 2023.**
- Currently the **7th-largest oil producer in the world**.
- Produces **4.3 million barrels per day**, accounting for **4% of global output**.
- **In 2024, crude oil surpassed soybeans as Brazil's top export**, making up **13.3% of total foreign sales**.

Conclusion:

Brazil's entry into **OPEC+** marks a **strategic shift in the global oil market**, reinforcing its **rising influence** in the energy sector. With its **growing production capacity** and **expanding role in international oil trade**, Brazil is set to play a **pivotal role in shaping the future of global oil policies**.



India Elected as Vice President of IALA

Context: India has been **elected as the Vice President** of the **International Organization of Aids to Marine Navigation (IALA)** during a meeting held in **Singapore**. This achievement further strengthens India's role in global maritime safety and navigation.

About IALA:

The **International Organization of Aids to Marine Navigation (IALA)** is a leading global body dedicated to **enhancing maritime safety and navigation systems** worldwide.

Key Facts About IALA:

- **Established in:** 1957 as a **Non-Governmental Organization (NGO)** and a **non-profit international technical association**.

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- **Transition to IGO:** In 2024, IALA changed its status from an NGO to an **Intergovernmental Organization (IGO)** after 34 countries ratified a convention.
- **Formerly Known As:** International Association of Lighthouse Authorities.
- **Motto:** "Successful Voyages, Sustainable Planet."

Objectives of IALA:

IALA focuses on **improving global navigation systems** by:

- **Enhancing and harmonizing aids to navigation** worldwide.
- **Ensuring the safe, efficient, and cost-effective movement of vessels.**
- **Encouraging environmental sustainability** in maritime operations.

Membership:

- **Total Members: 200**, including:
 - **80 national authorities** responsible for marine navigation.
 - **60 commercial firms** contributing to navigation technologies.
- **India's Membership:** Since 1957, India has played an active role in IALA's mission.

India's Growing Role in IALA:

- **Hosting the IALA Council Meeting in December 2025.**
- **Hosting the IALA Conference & General Assembly in September 2027, Mumbai.**

Global Collaboration and SDGs Support:

IALA fosters **cooperation among nations** to:

- **Develop standardized navigation aids** across the world.
- **Assist developing nations** in adopting modern navigation technologies.
- **Support the United Nations Sustainable Development Goals (SDGs)** by promoting safer and more sustainable marine navigation.

Conclusion:

India's election as **Vice President of IALA** is a **major milestone** in its maritime leadership. With its **long-standing commitment to safe and efficient navigation**, India is set to play a **pivotal role** in shaping the future of global marine transportation.



Ukraine's Mineral Wealth: US-Ukraine Rare Earth Deal, Geopolitical Significance

Context: Former **US President Donald Trump** has accused **Ukraine** of **backing out** of an informal deal that allegedly granted the **United States access to 50% of Ukraine's mineral wealth** in exchange for military support against Russia.

Why Are Ukraine's Minerals So Important?

A Treasure Trove of Critical Minerals:

Ukraine is home to **vast reserves of rare and valuable minerals** that play a crucial role in:

- **Defense & Aerospace** – Used in **advanced weapon systems**.
- **Clean Technology** – Essential for **electric vehicles (EVs)** and renewable energy technologies.

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- **Electronics & Semiconductors** – Key components in smartphones, computers, and industrial electronics.

A Geopolitical Battleground for Resources:

- **China currently dominates the supply** of many critical minerals, giving Ukraine's reserves **huge strategic importance** for the **US and Western nations**.
- The US has long sought **rare-earth elements, titanium, gallium, and other critical materials** to **reduce its reliance on China** and secure **supply chains** for **military and clean energy sectors**.
- Trump's **interest in acquiring Greenland** was partly driven by its mineral reserves—a strategy similar to the current focus on Ukraine.

Key Categories of Ukraine's Minerals:

- **Rare Earth Elements (REEs)**: A group of **17 elements** crucial for high-tech industries.
- **Critical Minerals**: Countries define these based on **economic and security needs**.
 - For example, **India identified 30 critical minerals** in 2023.

US Proposal on Ukraine's Resources: A Controversial Bargain:

- Ukraine sees **mineral trade agreements** as a way to **secure future US support**, while Trump insists the US **deserves compensation** for its past military aid.
- The specifics of the deal remain **unclear**, but Trump claims **Ukraine owes the US \$500 billion** in exchange for previous military and financial assistance.
- This amount **far exceeds the \$69.2 billion** in **military aid** that the **US has provided to Ukraine since 2014**.
- Some **US officials argue** that securing **economic stakes in Ukraine's mining sector** would act as a **security guarantee**, ensuring **long-term US investment in defending its interests**.
- **However, President Zelenskyy prefers direct military and economic guarantees** rather than indirect security through mineral extraction agreements.

Challenges in the US Gaining Access to 50% of Ukraine's Mineral Wealth:

1. Legal Barriers:

- Ukraine's **constitution states that all subsoil resources belong to its people**.
- Any agreement must **comply with Ukrainian laws**, making large-scale foreign ownership of mineral reserves difficult.

2. Uncertainty About Mineral Reserves:

- Much of Ukraine's **geological data is outdated**, with many surveys dating back to the **Soviet era (pre-1991)**.
- The **actual quality and quantity of Ukraine's mineral deposits remain uncertain**, limiting the feasibility of large-scale extraction.

3. Existing EU Agreements:

- Ukraine signed a '**Strategic Partnership on Raw Materials**' with the **European Union (EU) in July 2021**—before Russia's full-scale invasion in 2022.
- This agreement **already grants the EU preferential access to Ukraine's minerals**, complicating any potential US-Ukraine mineral deal.

4. Russian Occupation of Key Resource Areas:

- A **significant portion of Ukraine's mineral wealth is in Russian-controlled territories**.
- **Russia currently occupies one-fifth of Ukraine**, including **rare earth element reserves**.
- **Russian forces are now just 4 miles away from the Shevchenko lithium deposit**, according to media reports.

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- This means that even if Ukraine agrees to a **US mineral deal**, much of its resource-rich land may remain **out of its control**.

Conclusion:

Ukraine's **mineral wealth** has become a key **geopolitical asset**, attracting **global competition** between the **US, EU, and China**. While **securing US support through mineral trade seems appealing**, legal barriers, **Russian territorial control**, and **existing EU agreements** make such deals extremely complicated. As the **war continues**, Ukraine must **carefully navigate international resource agreements** to **maximize its strategic and economic interests** while ensuring **sovereign control over its natural wealth**.



India and China's Efforts to Strengthen the G20 Amid Global Challenge

Context: India's **External Affairs Minister** highlighted the collaborative efforts of **India and China** in safeguarding the integrity of the **G20**, despite increasing **global polarization**.

Key Discussions Between India and China:

- **Bilateral Relations:** Both nations discussed various issues, including developments along the **Line of Actual Control (LAC)**.
- **Resumption of the Kailash Mansarovar Pilgrimage:** Talks were held on reviving this significant religious journey.
- **Trans-Border River Talks:** Discussions focused on water-sharing and management between the two countries.
- **Enhanced Connectivity:** Improving **flight operations** and easing **travel restrictions** were also on the agenda.

Origins and Evolution of the G20:

- **Established in 1999** in response to the **Asian financial crisis (1997-1998)** as an informal forum for **Finance Ministers and Central Bank Governors**.
- Initially focused on **macroeconomic policies**, but later expanded to cover **trade, climate change, health, agriculture, energy, and anti-corruption**.
- **Membership:** Consists of **19 countries**—Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, South Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, UK, and the US—along with two regional organizations, the **European Union (EU)** and the **African Union (AU)**.
- **Presidency Rotation:** The **G20 does not have a permanent secretariat**; instead, the **presidency rotates annually** among member nations.

Interesting Facts About G20:

- The **G20 unites the world's largest economies**, facilitating discussions on **economic, political, and social issues**.
- Before the **African Union (AU)** joined, the G20 accounted for **85% of global GDP**, **75% of global trade**, and **two-thirds of the world's population**.

India's Role in the G20:

- **G20 Leadership in 2023:** India showcased its ability to foster **global consensus** through the **Leaders' Declaration**.
- **Inclusivity at the Core:** India ensured that **public concerns** were represented through **11 Engagement Groups**, including **youth, women, the private sector, and civil society**.

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- **Commitment to Sustainable Development:** India prioritized **Sustainable Development Goal 1 (SDG 1) – "No Poverty"**, aligning with global development objectives.
- **Voice of the Global South:** India represented **developing nations**, advocating for their interests and challenges on a global platform.

Why G20 Matters for India:

- **Economic Strength:** India's diverse and growing economy positions it as a key contributor to **global policymaking**.
- **Foreign Investments:** The G20 forum enhances India's ability to **attract investments**, fostering **job creation, technological advancements, and infrastructure growth**.
- **Inclusive Growth:** India's leadership in the G20 aims to deliver **tangible benefits**, including **higher investments, employment opportunities, and poverty alleviation**.

Challenges India Faces in G20 Leadership:

- **Navigating Global Tensions:** Balancing relations between major powers like the **US, China, and Russia** is a complex challenge.
- **Sustainability vs. Growth:** India's **industrialization** must align with its **climate commitments**, requiring strategic planning.
- **Developed vs. Developing Nations:** Bridging the divide between **advanced economies and emerging markets** remains a key hurdle.

The Road Ahead for India:

India's participation in the **G20 strengthens its global standing** and enhances its **leadership in international affairs**. Despite existing **challenges**, India's active role offers **immense opportunities to drive global change, accelerate economic growth, and champion the interests of developing nations**.

As India rises on the **global stage**, its leadership in the **G20 will bring widespread benefits to citizens, farmers, workers, and the middle class**, ensuring **inclusive and sustainable prosperity** for all.

Bay of Bengal Inter-Governmental Organisation: Strengthening Regional Fisheries Cooperation



Context: India has taken over the **Chairmanship** of the **Bay of Bengal (BOB) Inter-Governmental Organisation** from **Bangladesh** at the **13th Governing Council Meeting** held in **Malé, Maldives**. This marks a significant step in fostering regional collaboration in the **fisheries sector**.

Understanding the Bay of Bengal Inter-Governmental Organisation:

Established in **2003**, the **Bay of Bengal Inter-Governmental Organisation** is a **regional fisheries body** committed to supporting its member nations in enhancing **livelihood opportunities** and improving the **quality of life** for **small-scale and artisanal fisherfolk** in the **Bay of Bengal region**.

Historical Background:

- The organisation evolved from the **Bay of Bengal Programme**, initiated by the **Food and Agriculture Organization (FAO)** of the **United Nations (UN)** in **1979**.
- Over the years, it has established **international benchmarks** in **fisheries management**, delivering **tangible benefits** to member nations.

Member Nations:





- **Full Members:** Bangladesh, India, Maldives, and Sri Lanka.
- **Cooperating Non-Contracting Parties:** Indonesia, Malaysia, Myanmar, and Thailand.

Key Objectives:

The **Bay of Bengal Inter-Governmental Organisation** is dedicated to promoting **sustainable fisheries management** and **regional cooperation** through:

- **Raising awareness** about the importance of **marine fisheries management**.
- **Enhancing skills** through **training and education** programs.
- **Facilitating technology transfer** for the growth of **small-scale fisheries**.
- **Establishing a regional information network** for effective collaboration.
- **Encouraging women's participation** in the **marine fisheries value chain**.

Final Thoughts:

With **India at the helm**, the **Bay of Bengal Inter-Governmental Organisation** is set to strengthen **regional partnerships**, enhance **fisheries management**, and uplift **coastal communities**. The focus remains on **sustainability, innovation, and inclusivity**, ensuring a **prosperous future** for the **Bay of Bengal's marine ecosystem** and the people who depend on it.

The Ancient Tea Horse Road: A Historic Trade Link Between India and China



Context: China's **Ambassador to India, Xu Feihong**, recently highlighted the historical **Tea Horse Road**, a trade route spanning over **2,000 km**, connecting **China to India via Tibet**. This ancient pathway played a crucial role in fostering commerce and cultural exchanges between the two nations.

Unraveling the Tea Horse Road:

The **Tea Horse Road** was a significant **trade network** that linked **China, Tibet, and India** for centuries. Though less known than the **Silk Road**, it was essential for the exchange of **tea, horses, and other valuable commodities**.

On **February 25, 2025**, China's ambassador emphasized its **historical importance**, showcasing how this route strengthened **India-China ties** through trade and cultural interactions.

Origins of the Tea Horse Road:

The **Tea Horse Road** dates back to the **Tang Dynasty (618-907 CE)** when trade between **Southwest China, Tibet, and India** flourished.

- **Buddhist monk Yijing (635-713 CE)** documented these early exchanges, mentioning trade in **sugar, textiles, and rice noodles** from China, while Tibet and India provided **horses, gold, saffron, and medicinal herbs**.
- By the **10th century (Song Dynasty, 960-1279 CE)**, official markets were established to **regulate the exchange of tea and horses**, the two dominant commodities.

A Network of Roads Through Challenging Terrains:

The **Tea Horse Road** was not a **single route** but a **complex network of trails** stretching from **Southwest China to India, Nepal, and Bangladesh**.

Key Features of the Route:

- **Total Distance:** Over **2,000 km**
- **Major Trade Centers:** Dali, Lijiang (Yunnan Province), and Lhasa (Tibet)

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- **Extreme Elevations:** Peaked at **10,000 feet** in the Himalayas
- **Difficult Conditions:** Traders faced **harsh terrains, extreme weather, and high altitudes**

Despite these hardships, merchants carried **tea from Sichuan to Tibet and India**, returning with **horses and other essential goods**.

Tea and Horses – The Backbone of the Trade:

- **Tea:** A daily necessity for **Tibetan nomads**, particularly in **cold and harsh climates**. **Yak butter tea** became a staple, offering **warmth and energy**.
- **Horses:** Essential for **China's military**. The **central plains of China** lacked horses, making **Tibetan and Yunnan steeds highly valuable**, especially during conflicts against **Mongolian tribes**.
- To **regulate trade**, the **Song Dynasty government** set up **official markets**, ensuring a controlled and stable exchange of **tea and horses**.

The Tea Horse Road in Modern History:

Expansion of Trade in the Early 20th Century:

With the **fall of the Qing Dynasty (1912)**, the **Tea Horse Road** gained importance as **Yunnan's tea industry expanded**, integrating China further into the **global market**.

World War II: A Strategic Supply Route:

During **World War II**, when Japan occupied **China's eastern ports**, the **Tea Horse Road** became a **critical alternative supply route** for transporting **goods and military supplies** to **China's resistance forces**.

Post-1949 Decline:

With the establishment of the **People's Republic of China in 1949**, the **Tea Horse Road** lost its significance.

- **Mao Zedong's land reforms** altered **traditional trade patterns**.
- **Modern transportation networks** gradually replaced the ancient route.
- However, **historical sites like Lijiang** retained their cultural relevance, with **Lijiang becoming a UNESCO World Heritage Site in 1997**.

Reviving the Tea Horse Road: A Cultural Renaissance:

China is actively promoting **tourism along the ancient route**, showcasing its **rich history and cultural significance**.

- **Lijiang, a former trade hub**, has been transformed into a **cultural heritage site**, attracting global visitors.
- **UNESCO recognizes Lijiang** as a key **trade distribution center** where **Sichuan, Yunnan, and Tibet** intersected with the **Southern Silk Road**.

Conclusion: A Timeless Legacy:

The **Tea Horse Road** was more than just a **trade route**—it was a **lifeline** connecting **China, Tibet, and India** for centuries. Though its **economic importance has faded**, it remains a **symbol of historical trade and cultural exchange**. Efforts to **preserve its legacy** through **tourism, research, and heritage conservation** highlight its role in shaping **regional economies and cross-border interactions**. This renewed focus serves as a **reminder of the deep historical ties between India and China**, emphasizing the **enduring legacy of this ancient trade corridor**.

U.S. Aligns with Russia at UN, Calls for 'Swift End' to War

Context: On the **third anniversary of Russia's invasion of Ukraine**, the **United Nations Security Council (UNSC)** adopted a **U.S.-drafted resolution** urging an end to the ongoing conflict and the establishment of lasting peace. The resolution, which takes a **neutral stance**,



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was described by **Russia's UN Ambassador Vassily Nebenzia** as reflecting "**constructive changes**" in the U.S. position on the war.

Key Aspects of the Resolution:

- The resolution **does not explicitly side** with either Russia or Ukraine but encourages a **peaceful resolution** to the war.
- It underscores the **UN's commitment** to maintaining **global peace, security, and diplomatic conflict resolution**.
- It expresses **mourning for the loss of lives** and calls for a **swift and lasting peace**.
- **Voting Outcome:**
 - The resolution passed with **10 votes in favor**.
 - **France, Britain, Denmark, Greece, and Slovenia abstained**.
 - **Russia voted in favor**, despite its **failed attempt to amend** the draft.

UN Security Council's Past Actions on the Conflict:

Russia's Veto Power:

- The **Security Council has remained deadlocked** for much of the war due to **Russia's veto power**, which has blocked any significant action against its military actions in Ukraine.

Support from the General Assembly:

- Despite the **Security Council's limitations**, the **UN General Assembly (with 193 member states)** has consistently supported **Ukraine's sovereignty and territorial integrity**.
- The General Assembly has advocated for a **just and lasting peace**, in accordance with the **UN Charter**.

UN Security Council: Decision-Making Dynamics:

- The **Security Council** consists of **15 members**:
 - **5 permanent members (U.S., Russia, China, France, and the U.K.)**
 - **10 non-permanent members**, elected for two-year terms.
- Each member has **one vote**, and decisions require **at least 9 votes in favor**, including the support of all **five permanent members**.
- A **"No" vote from any permanent member** can block the resolution from passing.

Shifting U.S. Stance on the Russia-Ukraine Conflict:

- **Historically**, the **United States has been one of Ukraine's strongest allies**, providing extensive **military and financial aid** while leading **global sanctions** against Russia.
- The U.S. has spearheaded efforts to **punish Russia** through **economic sanctions** targeting **finance, defense, energy, and technology sectors**.
- Previously, the U.S. backed Ukraine's position in **peace negotiations** while insisting that **Russia must face severe consequences** for its actions.
- **Recent Shift:** Under the **Trump administration**, the U.S. has **adopted a more neutral stance**, moving away from direct **confrontation with Russia** and instead **focusing on diplomatic resolutions**.

This latest **UN resolution signals a notable shift in U.S. policy**, reflecting a **more balanced approach** to the Russia-Ukraine conflict and emphasizing the urgency of **ending hostilities through diplomacy**.



India-EU Strengthen Strategic Ties: Focus on Defence, Security, and Trade

Context: India and the **European Union (EU)** are set to **deepen their defence, security, and economic collaboration** in **2025**, with multiple key proposals under discussion. The two sides aim to strengthen their **strategic partnership**, addressing areas such as **maritime security, counter-terrorism, and trade negotiations**, especially in the backdrop of the **Ukraine conflict** and ongoing **Free Trade Agreement (FTA)** talks.

Key Areas of Cooperation:

1. Defence and Security Partnership:

- The **EU plans to deploy a liaison officer** at **India's Navy's Information Fusion Centre**, reinforcing **maritime security** in the Indian Ocean.
- **Counter-terrorism cooperation** will be a priority, focusing on the **growing security risks posed by commercial drones** and other emerging threats.

2. India's Stance on the Ukraine Conflict:

- The **EU is seeking India's support** in **enforcing sanctions against Russia**, amid growing concerns over **Russia's economic resilience**.
- **India maintains a neutral position**, emphasizing the need for **dialogue and diplomatic resolutions** to ensure **regional stability**.

3. Free Trade Agreement (FTA) Talks:

- India and the EU are actively **negotiating an FTA**, with the **tenth round of discussions** scheduled for **March 2025 in Brussels**.
- The **EU aims to lower tariffs** on key exports such as **whiskey, wine, and automobiles**, which currently face **high trade barriers in India**.
- However, **India is focused on protecting its domestic industries**, particularly **small businesses, steel, and aluminium sectors**, which could be impacted by the **EU's Carbon Border Adjustment Mechanism (CBAM)**.

4. Boosting Connectivity and Technology Collaboration:

- Both sides are working on strengthening connectivity through initiatives like the **India-Middle East-Europe Corridor** and expanding **undersea cable networks**.
- **Technology cooperation** remains a priority, particularly in areas such as **green hydrogen, electric vehicle (EV) battery innovation, and space technology**.

Understanding Open and Closed Economies:

What Defines an Open or Closed Economy?

Economies are categorized based on **the movement of goods, services, capital, and labor across borders**.

Closed Economy: Characteristics & Example:

A **closed economy** is one that does **not engage in international trade**, meaning **no exports or imports**.

Features:

~~Download Self-sufficient, relying entirely on domestic production.~~



- **No foreign investments** or capital inflows.
- **No dependence on global markets** for essential resources.
- **Example:** North Korea follows a largely closed economic model.

Open Economy: Characteristics & Example:

An **open economy** actively engages in **international trade and investment**.

Features:

- **Imports and exports** of goods and services.
- **Foreign direct investment (FDI)** and cross-border capital flows.
- **Integrated with global markets**, making it susceptible to external economic fluctuations.
- In an **open economy**, residents can **work, trade, and invest freely across international borders**.
- **Example:** The United States and most modern economies function as open economies.

India's Economic Model: A Balance Between Open and Closed Policies:

- **India follows a mixed economic model**, combining aspects of an **open economy** while retaining **protectionist policies** in certain sectors.
- **Liberalization in 1991** marked a turning point, **opening India's markets** to global trade and investment.
- Despite increased global integration, **India continues to impose tariffs and trade barriers** on key imports to **protect domestic industries**.

Conclusion:

The **India-EU partnership** is entering a new phase, with expanded **cooperation in defence, security, and trade**. While India remains cautious on **sanctions against Russia**, its commitment to **FTA negotiations, maritime security, and technological collaboration** highlights the growing significance of its ties with the EU. **Striking a balance between economic openness and protectionism will be crucial for India** as it navigates global trade and geopolitical challenges.

Trump's \$5M Gold Card Visa: Impact on US Immigration & Indian Investment

Context: Former US President Donald Trump has introduced a new "Gold Card" visa program, aiming to **replace the existing EB-5 visa system**.

Under this proposal, **foreign investors can secure U.S. residency and a path to citizenship** by making a **\$5 million investment**.

The existing **EB-5 visa program**, launched in **1990**, allows foreign investors to gain a **Green Card** with a **minimum investment of \$1.05 million** (or **\$800,000 in distressed areas**). However, the EB-5 program has faced **allegations of fraud and misuse**, including its **involvement in funding Trump family businesses**.

Understanding the EB-5 Visa Program:

Objective:

Established in **1990**, the **EB-5 visa** was designed to **boost the U.S. economy** through **job creation and capital investment** by foreign investors.

Investment Requirements:

- Foreign nationals must invest **at least \$1,050,000**, or **\$800,000 in economically distressed regions** (Targeted Employment Areas - TEAs).





- Investments must lead to the **creation of at least 10 full-time jobs** for U.S. workers.

Annual Cap & Reservations:

- The **EB-5 program is capped at 10,000 visas per year.**
- 3,000 visas are reserved** for investments in high-unemployment areas.

Criticism & Controversies:

- The program has been **accused of funding luxury projects** instead of promoting economic growth.
- Trump family businesses** have allegedly benefited from EB-5 funds.
- Critics argue that **it has deviated from its original goal of job creation.**

Legal Challenges & Reforms:

- President Biden renewed the program in 2022**, raising investment thresholds.
- In **2019, Trump attempted to increase the minimum investment to \$900,000**, but the decision was overturned by a federal judge in 2021.

Administration & Processing:

- The **USCIS (United States Citizenship and Immigration Services)** will likely oversee the program.
- The **Department of State & Department of Commerce** may also be involved in regulating **foreign investments.**

Potential Benefits of the Gold Card Visa:

Attracting Ultra-Wealthy Investors:

- The **simplified residency pathway** may encourage **high-net-worth individuals** to move to the U.S.
- Wealthy investors could **boost the real estate sector, luxury markets, and local economies.**

Minimizing Fraud Risks:

- The **EB-5 program faced fraud allegations**, leading to **calls for stricter regulations.**
- A **direct high-cost purchase model** could **reduce misuse** and eliminate **loopholes.**

Concerns & Criticism of the Gold Card Visa:

"Citizenship for Sale" Controversy:

- Prioritizing **wealth over merit** could **disadvantage skilled professionals** seeking U.S. residency.
- Raises **ethical and political concerns** regarding **fairness in immigration policy.**

Risk of Financial Misuse:

- Investment-based immigration programs** are often linked to **money laundering** and **foreign influence.**
- Without **strong regulatory oversight**, such a program could **pose security risks.**

No Economic Contribution Requirement:

- Unlike EB-5, the **Gold Card Visa does not mandate job creation or business investment.**
- Passive investors could **gain residency without contributing to the U.S. economy.**

Policy Precedents & Global Examples:

- Canada discontinued a similar program** due to **widespread misuse** and **lack of economic benefits.**
- Raises key questions:
 - Should U.S. citizenship be available for purchase?



- Should immigration prioritize skills over wealth?

Challenges in Implementing the Gold Card Program:

Legislative Hurdles in Congress:

- Immigration policy changes require **Congressional approval**.
- While **Republicans hold a majority**, not all may support a program seen as "selling citizenship."
- **Democrats are expected to oppose** the initiative.

Legal Uncertainty:

- **Most legal challenges in immigration** arise from **administration** rather than policy.
- **It remains unclear how courts will respond** to this proposal.

Impact on Indian Investors & Green Card Aspirants:

Limited Appeal for Indian Investors:

- In **2023**, only **631 Indians** secured **Green Cards** through the **EB-5 program**.
- With a **\$5 million price tag (43 crore)**, the **Gold Card** may not attract many **Indian investors**.

Impact on Green Card Applicants from Other Categories:

- Over **1 million Indians** are currently waiting for **U.S. Green Cards**.
- In **employment-based categories**, the **backlog** for **Indian applicants** is expected to reach **2.19 million** by **2030**.
- The introduction of the **Gold Card Visa** could **further extend waiting periods** for traditional applicants.

Final Thoughts:

The **Gold Card Visa** represents a **controversial shift in U.S. immigration policy**, favoring **wealth over merit-based selection**. While it aims to **attract ultra-rich investors**, concerns over **economic impact, fairness, and security risks** remain.

For **Indian investors**, the **high cost** and **uncertain benefits** make it a **less attractive alternative to traditional Green Card routes**. As discussions continue, the **political and legal future of the Gold Card Visa** remains uncertain.



Tariffs and India: Key Insights from GTRI's Latest Report

Context: The **Global Trade Research Initiative (GTRI)** has released a comprehensive report analyzing the **potential impact of the U.S. Reciprocal Tariff Plan** on India's exports. The study also outlines **strategic actions** for the **Indian government and industry stakeholders** to minimize economic losses.

Understanding the U.S. Reciprocal Tariff Plan:

The **U.S. Reciprocal Tariff Plan** is designed to **address trade imbalances** by **imposing higher tariffs** on countries with which the **United States runs a trade deficit**. If implemented, this plan could significantly alter **India-U.S. trade relations**, affecting multiple sectors.

How Will This Impact India?

Increase in Tariffs on Indian Exports:

- Currently, **Indian exports** face an average **U.S. tariff of 2.8%**.
- Under the new plan, this could **increase to 4.9%**, making Indian goods **less competitive in the U.S. market**.

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Sector-Wise Impact of Higher Tariffs:

Agriculture: The Hardest Hit:

- Farm exports, including **shrimp, dairy, and processed foods**, could face tariffs as high as **38.2%**.
- This would make **Indian agricultural products more expensive in the U.S.**, reducing their demand.

Industrial Goods: Major Risks for Key Sectors:

- **Pharmaceuticals, diamonds & jewelry, and electronics** are expected to be **heavily affected**.
- The **pharmaceutical sector alone** could face a **tariff hike of 10.9%**, leading to **higher costs for generic medicines** and **reduced global competitiveness**.

Minimal Impact on Some Sectors

- **Petroleum, minerals, and garments** are expected to **remain largely unaffected**, as current trade agreements and demand dynamics keep these sectors stable.

Recommended Strategies for India:

1. Propose an Advance Tariff Offer Instead of an FTA:

- India should **offer a "zero-for-zero" tariff strategy**, identifying products where **tariffs can be eliminated for U.S. imports** without harming **domestic industries**.
- This approach can **prevent unilateral tariff hikes** and maintain **trade stability**.

2. Consider Retaliatory Measures:

- India should **reject unfair trade concessions** and be prepared to **implement countermeasures** if the U.S. imposes excessive tariffs.
- A strategy similar to **China's trade retaliation** can help **safeguard Indian economic interests**.

3. Resolve Trade Data Discrepancies:

- There is a **significant difference** in trade data reported by **India and the U.S.**
- **Reconciling these discrepancies** is crucial to prevent **tariff decisions based on inaccurate figures**.

Conclusion:

The **U.S. Reciprocal Tariff Plan** poses a **serious challenge to Indian exports**, particularly in **agriculture and industrial goods**. To mitigate potential losses, **India must proactively engage in trade negotiations**, **push for fair tariff structures**, and **prepare for countermeasures if necessary**. The **GTRI report** serves as a **crucial roadmap** for both the **government and industry leaders** to navigate the evolving **global trade landscape**.



Nuclear Weapons: A Path to Annihilation, Warns UN Chief

Context: The **United Nations Secretary-General** has issued a stark warning, calling **nuclear weapons** a **"one-way road to annihilation."** His statement comes amidst **rising global tensions** and growing concerns over **nuclear proliferation**.

Adding to the urgency, the **Doomsday Clock** was moved **one second closer to midnight** last month, symbolizing an **increased risk of global catastrophe**.

What is the Doomsday Clock?

- Introduced in **1947** by the **Bulletin of the Atomic Scientists**, the **Doomsday Clock** is a symbolic measure of how close humanity is to **self-destruction** due to **nuclear threats, climate change, and emerging technologies**.

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Freedom UPSC with **Dhananjay Gautam**

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- The clock now stands at **just 90 seconds to midnight**, the closest it has ever been.

Current Threats Posed by Nuclear Weapons:

Rising Global Security Concerns:

- **Geopolitical tensions** and **declining trust among nations** are increasing the chances of **nuclear conflict**.
- **High military spending** on nuclear capabilities is **worsening global instability**.

Weakening of Disarmament Agreements:

- **Key international treaties and agreements** aimed at **nuclear disarmament** are being **undermined**.
- The **erosion of anti-proliferation frameworks** makes nuclear war a **more imminent threat**.

Nuclear Blackmail: A Dangerous Tactic:

- Nations are increasingly using **nuclear threats to intimidate or coerce rivals**, further **destabilizing international peace**.

Expansion of Nuclear Inventories:

- Several countries are **actively increasing their nuclear arsenals**, igniting a **new arms race**.
- Weapons development has extended to **outer space**, posing unprecedented risks.

Artificial Intelligence and the Risk of Uncontrolled Escalation:

- The **weaponization of AI** could lead to **reduced human oversight** in nuclear decision-making.
- This increases the danger of **unintended nuclear launches** due to **automated systems and miscalculations**.

Global Efforts to Prevent Nuclear Proliferation:

1. Conference on Disarmament:

- A multilateral forum addressing **nuclear disarmament, space security, and new-age weapons threats**.

2. Treaty on the Non-Proliferation of Nuclear Weapons (NPT):

- Prevents the **spread of nuclear weapons** and promotes **peaceful nuclear energy use**.

3. Comprehensive Nuclear-Test-Ban Treaty (CTBT):

- Aims to **eliminate all nuclear explosions**, whether **military or civilian**.

4. International Atomic Energy Agency (IAEA):

- The **leading global body for scientific and technical cooperation** in **peaceful nuclear energy applications**.

Conclusion:

With **growing nuclear threats, increasing global tensions, and a weakening commitment to disarmament**, the world stands at a **critical crossroads**. The UN Chief's warning serves as a **reminder that nuclear weapons pose an existential threat to humanity**. Urgent action is needed to **strengthen disarmament efforts, reinforce treaties, and prevent a catastrophic future**.

Karnataka Becomes Second State to Allow Dignified Death for the Terminally Ill

Context: In a landmark decision, the Karnataka Health Department has implemented the **Supreme Court's ruling** allowing terminally ill patients the right to **die with dignity**. Karnataka is now the **second state after Kerala** to adopt this directive, reaffirming the **right to a dignified death** under the **Indian Constitution**.

Understanding Euthanasia:

Euthanasia refers to the **intentional act of ending a person's life** to relieve them from extreme pain caused by an **incurable disease** or disorder. It can be **active** (deliberate intervention) or **passive** (withdrawal of life support).



Supreme Court's Stand on Passive Euthanasia:

1. Legal Recognition (2018 & 2023 Rulings):

- **2018:** The **Supreme Court** legalized **passive euthanasia**, recognizing it as a fundamental right under **Article 21 (Right to Life and Dignity)**.
- **2023:** The ruling **simplified** the procedure for **withdrawing life support**, ensuring a **structured, ethical** approach.

2. Conditions for Passive Euthanasia:

- ✓ **Applicable to patients with no hope of recovery.**
- ✓ Allowed for individuals in a **persistent vegetative state** or suffering from an **incurable, prolonged condition**.

3. Advance Medical Directive (AMD) or 'Living Will':

- ✓ Any **competent adult** can create an **AMD**, specifying their **medical treatment preferences** if they become unable to decide.
- ✓ The **AMD** allows **two nominated representatives** to make end-of-life decisions.

4. Approval Process for Withdrawing Life Support:

- ✓ **Medical Boards** in hospitals must oversee the decision:
 - **Primary Board** (Three senior doctors)
 - **Secondary Board** (Three senior doctors for review)
- ✓ **District Health Officer involvement** for ethical compliance.
- ✓ **Final approval by a Judicial Magistrate of the First Class (JMFC)** with a report to the **High Court Registrar**.

What is Passive Euthanasia?

Passive euthanasia means **withholding or withdrawing life-sustaining treatment (LST)**, allowing a **terminally ill patient** to die **naturally**.

Legal in India as per **Supreme Court rulings (2018 & 2023)** under strict **medical and legal safeguards**. The **Ministry of Health and Family Welfare (MoHFW)** has issued **draft guidelines** titled "**Guidelines for Withdrawal of Life Support in Terminally Ill Patients**."

Ethical Debate: Arguments For & Against Euthanasia:

1. Autonomy and the Right to Die:

- **Pro:** Every individual has the right to **choose how they live and die**. If a person **competently** chooses euthanasia, it should be **respected**.
- **Anti:** The right to life does **not** include the right to end it. Legalizing euthanasia **devalues human life** and sets a **dangerous precedent**.

2. Beneficence and Compassion:



- **Pro:** Doctors are ethically bound to **reduce suffering**. For patients in **unbearable pain**, euthanasia is an **act of compassion**.
- **Anti:** Instead of euthanasia, **palliative care** and **pain management** should be prioritized.

3. The Slippery Slope Argument:

- **Pro:** **Strict regulations** can prevent **misuse**.
- **Anti:** Once allowed, it may lead to **non-consensual euthanasia** or **pressure** on vulnerable groups like the **elderly and disabled**.

4. Sanctity of Life vs. Quality of Life:

- **Sanctity of Life:** Many religious beliefs argue that life is **sacred**, regardless of suffering.
- **Quality of Life:** When a patient's suffering is **irreversible**, euthanasia is a **humane alternative**.

Legal and Social Implications:

Global Perspectives:

Countries like **the Netherlands, Belgium, and Canada** allow **euthanasia under strict conditions**.

Legalization remains **controversial worldwide**, with concerns over **ethics, misuse, and medical practices**.

Potential Risks:

Abuse of euthanasia laws may lead to **non-consensual deaths**.

Could shift focus away from **healthcare improvements**.

Conclusion: A Step Towards a Humane Healthcare System

The implementation of **passive euthanasia in Karnataka** marks a **progressive shift** in India's **end-of-life care policies**. It upholds **personal dignity, autonomy, and compassionate decision-making**. However, **strict legal oversight and medical ethics** are essential to **prevent misuse and protect human rights**.

As India navigates this complex issue, a **balanced approach** is needed—ensuring that **patients' rights, ethical concerns, and legal safeguards** work together for a **just and humane medical system**.

UIDAI Introduces New Rules for Aadhaar Authentication

Context: The **Ministry of Electronics and Information Technology (MeitY)** has introduced the **Aadhaar Authentication for Good Governance (Social Welfare, Innovation, Knowledge) Amendment Rules, 2025** under the **Aadhaar Act, 2016** to enhance digital service accessibility.

Key Highlights of the 2025 Amendment:

1. Expanded Scope of Aadhaar Authentication:

- **Government and Non-Government Entities** can now utilize **Aadhaar authentication** for services that serve the **public interest**.
- New sectors included: **E-commerce, Travel, Tourism, Hospitality, and Healthcare**, enabling seamless service access beyond government initiatives.

2. Enhancing Service Delivery & Ease of Living:

- Aadhaar authentication will **simplify service access**, eliminating bureaucratic delays.
- Ensures **trusted digital transactions** between **service providers and users**.

3. Streamlined Approval Process:

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- Entities seeking Aadhaar authentication must submit applications via a **dedicated government portal**.
- The **Unique Identification Authority of India (UIDAI)** will **review applications** and provide recommendations.

Significance of the Amendments:

- **Encourages Innovation** by facilitating digital transformation.
- Enhances **knowledge-sharing and access to essential services**.
- Strengthens **government-private sector collaboration** for efficient service delivery.
- Ensures **regulatory oversight**, maintaining **privacy and security** standards.

Understanding Aadhaar:

- **Aadhaar** is a **12-digit unique identification number** issued by **UIDAI** (established under the **Aadhaar Act, 2016**) to residents of India.
- It is based on **biometric and demographic data**, ensuring **accuracy and preventing duplication**.
- **Aadhaar is NOT proof of Indian citizenship**.

Legal Framework of Aadhaar:

1. **Section 7 of the Aadhaar Act, 2016:** Aadhaar may be required for **benefits, subsidies, and services** funded by the **Consolidated Fund of India or State Governments**.
2. **Supreme Court Ruling (2018):** Declared Aadhaar **constitutional** but **not mandatory** for private services like **bank accounts, mobile numbers, and school admissions**.
3. **Aadhaar Metadata & Privacy Regulations:**
 - **UIDAI cannot store authentication data** beyond **six months**.
 - The **Right to Privacy judgment (2017) (Puttaswamy Case)** reaffirmed that **Aadhaar data must be secured and protected from misuse**.

The **2025 Amendments** mark a significant step towards **digital transformation, service efficiency, and privacy protection**, ensuring a **seamless and secure Aadhaar authentication process**.

SC Bans Manual Scavenging in Six Major Cities – A Historic Verdict

Context: The **Supreme Court of India** has issued a **landmark ruling**, prohibiting **manual scavenging and manual sewer cleaning** in six metropolitan cities. This decision comes in response to a **writ petition** aimed at eradicating this inhumane practice across the country.



What is Manual Scavenging?

Manual scavenging refers to the **dangerous and degrading** practice of manually cleaning and disposing of **human excreta** from dry latrines, open drains, septic tanks, and sewers. This **hazardous occupation** disproportionately affects **marginalized communities**, especially **Dalits**.

Current Status of Manual Scavenging in India

Despite being **legally banned**, **manual scavenging continues** due to **loopholes and poor enforcement**. **Alarming Statistics (2018-2023):**

- **443 deaths** reported due to manual scavenging (Ministry of Social Justice and Empowerment).
- **Delhi alone recorded 94 deaths** over the last 15 years, yet only **one conviction** was made.

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- **Caste Disparity:**
 - 97% of manual scavengers belong to Scheduled Castes (SCs):
 - 42,594 from SCs
 - 421 from Scheduled Tribes (STs)
 - 431 from Other Backward Classes (OBCs)

Challenges and Issues:

Continued Existence Despite Ban:

- Workers are often hired informally under contractual arrangements, bypassing legal restrictions.
- Lack of mechanization forces workers to clean sewers manually, exposing them to toxic gases and fatal accidents.
- Rehabilitation efforts under the 2013 Act have been poorly implemented.
- Deep-rooted caste discrimination keeps Dalits trapped in this degrading occupation.

Laws & Regulations Against Manual Scavenging:

Prohibition of Employment as Manual Scavengers and Their Rehabilitation Act, 2013

- Bans manual scavenging in all forms.
- Criminalizes the employment of manual scavengers.
- Mandates mechanization of sewer cleaning.

Supreme Court Interventions:

- 2014 (Safai Karamchari Andolan v. Union of India) – SC ordered 10 lakh compensation for the families of deceased manual scavengers.
- 2020 – SC directed stricter implementation of mechanized sewer cleaning.

Constitutional Provisions:

- Article 17 – Abolishes untouchability.
- Article 21 – Guarantees right to life and dignity.
- Article 23 – Prohibits forced labor.
- Article 42 – Ensures humane working conditions.

Government Initiatives to Eliminate Manual Scavenging:

NAMASTE Scheme (2023):

- Focuses on mechanizing sewer cleaning.
- Provides skill training and alternative employment opportunities.

Swachh Bharat Abhiyan:

- Aims to replace dry latrines with modern sanitation facilities.
- Promotes mechanized cleaning equipment to eliminate human involvement.
- Self-Employment Scheme for Rehabilitation of Manual Scavengers (SRMS)
- Provides 40,000 financial aid to former manual scavengers.
- Offers skill training for alternative livelihood options.

Way Forward: Eradicating Manual Scavenging for Good:

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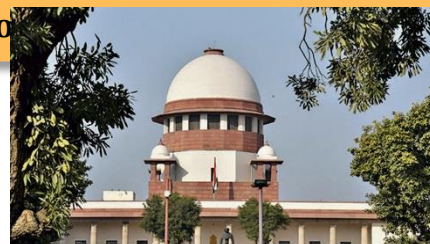


- ✓ **Strict enforcement** of the **2013 Act** with **heavy penalties** for violators.
- ✓ **Accelerate the adoption** of **mechanized cleaning methods** using **robots and advanced machines**.
- ✓ **Ensure full rehabilitation** of manual scavengers through **financial support and employment training**.
- ✓ **Raise awareness** to eliminate the **caste-based stigma** attached to sanitation work.

This **Supreme Court ruling** marks a **crucial step** toward **eradicating manual scavenging** and ensuring **dignity, safety, and justice** for all workers.

Supreme Court Advocates Legal Protection for Domestic Workers

Context: In a **historic decision**, the **Supreme Court of India** has directed the **Union government** to explore the need for a **dedicated law** for **domestic workers**. The Court has also mandated the creation of an **inter-ministerial committee** to assess and propose a **comprehensive legal framework** to safeguard their **rights, benefits, and working conditions**.



Current Status of Domestic Workers:

Lack of Legal Protection:

- Despite playing a **vital role** in millions of households, **domestic workers** remain largely **excluded** from key **labour laws** like the **Minimum Wages Act** and the **Equal Remuneration Act**.
- While some **state governments** have introduced **local regulations**, there is **no national legislation** to ensure their **rights and fair treatment**.

Vulnerability and Exploitation:

- **Domestic work** is predominantly a **female-dominated occupation**, with a significant number of workers belonging to **marginalized communities**.
- They endure **low wages, job insecurity, and excessive workloads** without fair compensation.
- **Social security benefits** are almost **non-existent**, leaving them financially vulnerable.
- The profession is often **undervalued** and seen as an **inherent skill of women**, making it **invisible** in formal labour discussions.

Challenges and Legal Interventions:

Global Standards: ILO Convention 189:

- India has **not ratified** the **International Labour Organization (ILO) Convention 189**, which guarantees **fair wages, social security, and protection against abuse** for domestic workers.

Regulation of Placement Agencies:

- The **Supreme Court** has previously directed the **mandatory registration of placement agencies** to prevent **worker exploitation**, but **implementation remains weak**.

Complex Employment Structures:

- Domestic work varies between **full-time and part-time roles**, making **standardized regulations** difficult to enforce.

Why a Separate Law is Necessary:

A **dedicated legal framework** is crucial to address the **unique challenges** faced by domestic workers:

1. Proof of Employment:

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- **Formal documentation** is essential to enforce **legal protections**, but domestic workers often lack **employment contracts**.

2. Employer Resistance:

- Many **households** do not consider themselves **formal employers**, making **legal accountability** difficult.

3. Power Imbalance:

- The **employer's home** serves as the **worker's workplace**, limiting **regulation, oversight, and protection** against exploitation.

Opportunities and Challenges in Implementation:

Ensuring Fundamental Rights:

- A well-structured law can establish **minimum wages, regulated working hours, and social security**, drastically improving **working conditions**.

Redefining Power Hierarchies:

- **Recognizing housework and caregiving as legitimate labour** will help challenge **existing inequalities** and ensure **fair treatment**.

Regional Success Models:

- States like **Kerala and Delhi** have already **implemented measures** for domestic workers, which can serve as **guidelines** for national policies.

Challenges in Enforcement:

- Even with **new legal protections, monitoring mechanisms and employer accountability** will be essential to ensure **effective implementation**.

Conclusion:

The **Supreme Court's directive** provides a **critical opportunity** to advocate for a **national law** protecting **domestic workers**. While legislation alone may not bring **immediate change**, it is a **significant first step** toward ensuring **fair wages, better working conditions, and social security**. The real impact will depend on the **recommendations of the committee** and the **Union government's commitment** to meaningful reforms.

A well-designed legal framework will **empower domestic workers**, giving them the **recognition and rights they deserve** in a society that has long overlooked their contributions.

Rules for Registering Live-in Relationships Under UCC

Context: With the implementation of the **Uniform Civil Code (UCC)** in Uttarakhand, new **rules for registering live-in relationships** have been introduced. These regulations aim to **legally recognize** such relationships but have also sparked debates regarding **privacy and state surveillance**.



Understanding Live-in Relationships in India:

Historical Perspective:

Traditionally, Indian society recognized only **marriage** as a legitimate form of committed relationship. **Live-in relationships** were stigmatized and socially unacceptable. However, with **globalization and cultural shifts**, societal acceptance of **cohabitation** has gradually increased.

Legal Recognition:

Indian courts have upheld the legality of live-in relationships, citing the **Right to Life and Personal Liberty** under **Article 21** of the Constitution.

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**Landmark Judgments:**

- **S. Khushboo v. Kanniammal (2010):** Recognized that **live-in relationships** fall under **personal liberty**.
- **Indra Sarma v. V.K.V. Sarma (2013):** Classified **live-in relationships** into different categories and extended protection under the **Protection of Women from Domestic Violence Act, 2005 (PWDVA)**.
- **D. Velusamy v. D. Patchaiammal (2010):** Clarified that **only relationships resembling marriage** qualify for legal protection under domestic violence laws.

Protection Under Domestic Violence Act (PWDVA, 2005):

- Women in live-in relationships can seek **legal protection** under this act.
- **Section 125 of the Criminal Procedure Code (CrPC)** allows women to claim **maintenance**.

Inheritance & Maintenance Rights:

- **Children born from live-in relationships** have the same **inheritance rights** as those from legal marriages.
- The **Supreme Court** has upheld these rights in multiple cases.

Rules for Registering Live-in Relationships Under UCC:

The **UCC in Uttarakhand** mandates **registration of live-in relationships** for both **state residents** and individuals from other parts of India.

Registration Process:

- Couples must register their relationship at both **commencement and termination** stages.
- Documents required include **Aadhaar-linked OTP verification**, a **registration fee**, and in some cases, a **certificate from a religious leader** confirming eligibility for marriage.

Prohibited Relationships:

- The UCC Act lists **74 prohibited relationships**—37 for men and 37 for women.
- Couples falling within these **restricted categories** must obtain **approval from religious leaders or community heads**.
- The **registrar** has the authority to **reject registrations** if the relationship is deemed **against public morality or customs**.

Key Concerns and Impacts:**Privacy Concerns:**

- The registration requirement raises concerns over **privacy violations**, as seen in the **Justice K.S. Puttaswamy v. Union of India** case.
- It could lead to **increased state surveillance** over personal lives.

Barriers for Interfaith and Inter-Caste Couples:

- The **approval requirement from religious leaders** may pose hurdles for **interfaith and inter-caste** relationships.

Rights of Women and Children:

- While women in live-in relationships can claim **maintenance**, these rights are **not absolute**.
- **Inheritance and legitimacy** of children need further legal clarity.

Potential for Misuse:

- Some individuals may **enter live-in relationships without long-term commitment** but later claim **legal rights**, leading to **legal disputes**.

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Social and Cultural Challenges:

- These rules challenge **traditional family values** and raise **moral and ethical concerns**, especially in **conservative communities**.

Conclusion & Way Forward:

The UCC in Uttarakhand is a step towards **legal recognition and protection** for live-in relationships. However, **balancing regulation with personal freedom** is crucial to maintaining **social harmony**.

Bhopal Bans Begging: A Step Towards Regulation or a Challenge to Rights?

Context: The Bhopal district administration has imposed a **ban on begging**, along with restrictions on **giving alms** or **buying goods** from beggars. This action has been enforced under **Section 163 of the Bharatiya Nagarik Suraksha Sanhita (BNSS), 2023**, which empowers the **District Magistrate (DM)** or an **Executive Magistrate** to intervene in cases of **public nuisance**.

Additionally, **Section 223 of BNSS** prescribes **punishment for non-compliance** with such orders.



Begging in India: A Persistent Concern

- As per **Census 2011**, India has **over 4.13 lakh beggars and vagrants**.
- Several cities have implemented similar bans before major events.
 - **2017:** Hyderabad **banned begging** before the **Global Entrepreneurship Summit**.
 - **2010:** Delhi **removed beggars** ahead of the **Commonwealth Games**.
- Such measures often attract criticism for **targeting vulnerable communities** instead of addressing **poverty and homelessness**.

Why Criminalize Begging?

1. **Public Nuisance & Beautification:** Beggars are seen as a **hindrance to tourism and investment**, especially before major international events.
2. **Traffic & Safety Concerns:** Begging at busy intersections **causes accidents and disrupts traffic flow**.
3. **Exploitation by Organized Syndicates:** Many beggars are part of **criminal networks**, where **children and disabled persons** are forced into begging.
4. **Public Health & Hygiene:** The presence of beggars in **crowded urban areas** raises **concerns about sanitation and disease transmission**.

Legal Framework on Begging in India:

Although there is **no national law** banning begging, **several states** have their own anti-begging laws, many of which **date back to colonial times**:

- **European Vagrancy Act, 1869:** A British-era law meant to **prevent poor Europeans in India from resorting to begging**.
- **Bombay Prevention of Begging Act, 1959:** Considered a **model law**, adopted by multiple states like **Gujarat, Karnataka, Uttar Pradesh, and Andhra Pradesh**.
- **Bengal Vagrancy Act, 1943 & Madras Prevention of Begging Act, 1945:** Pre-independence laws criminalizing begging and promoting **rehabilitation through workhouses**.



- **Vagrancy Laws under Concurrent List (Entry 15):** Allows both **Union and state governments** to regulate vagrancy and destitution.
- **Article 23 of the Indian Constitution:** Prohibits **human trafficking, forced labor (begar), and other exploitative practices.**

Why Does Begging Persist in India?

1. **Poverty & Unemployment:** Widespread **economic disparities** leave people with **no means of survival.**
2. **Lack of Social Security:** **Inadequate access** to food, healthcare, and shelter **forces people onto the streets.**
3. **Forced Begging & Human Trafficking:** Many **children and disabled persons** are forced into begging by organized crime syndicates.
4. **Migration & Urbanization:** Rural migrants seeking jobs often **fail to find work** and end up as beggars.
5. **Disability & Mental Health Issues:** The **absence of proper healthcare** leaves **disabled and mentally ill individuals** without support.

Impact of Criminalizing Begging:

1. **Violation of Human Rights:** Criminalizing begging **targets the poorest sections of society**, violating their right to dignity and equality.
2. **Arbitrary Detention:** Many **anti-begging laws** allow **authorities to detain beggars** without due legal process.
3. **Failure to Address Root Causes:** Simply banning begging **does not eliminate poverty or homelessness.**

Judicial Interventions:

1. **Delhi High Court (2018):** Struck down parts of the **Bombay Prevention of Begging Act**, calling them unconstitutional.
2. **Jammu & Kashmir High Court (2019):** Declared the **Prevention of Beggary Act** unconstitutional.
3. **Supreme Court (2021):** Recognized **begging as a socio-economic issue**, refusing to **impose a blanket ban** during COVID-19.

Government Initiatives for Rehabilitation:

1. **SMILE Scheme (2021)**
 - **Support for Marginalized Individuals for Livelihood and Enterprise**
 - A **Central Sector Scheme** focused on **rehabilitating beggars** and providing them with **livelihood opportunities.**
2. **Persons in Destitution (Protection, Care and Rehabilitation) Model Bill, 2016** Proposed by the **Ministry of Social Justice and Empowerment** but later **dropped.**
3. **Shelters & Skill Development Programs:** Several **states provide temporary shelters, food centers, and vocational training** to help beggars reintegrate into society.

Way Forward: Solutions Beyond Criminalization

1. **Legal Reforms** India needs a **comprehensive national law** that focuses on **rehabilitation instead of punishment.**
2. **Strengthening Social Welfare Schemes:** Expanding **social security programs, healthcare, and employment** can **address the root causes** of begging.
3. **Regulation of Street Vending:** Many beggars **resort to selling goods.** **Legalizing and supporting** street vending can **offer sustainable livelihoods.**
4. **Partnership with NGOs & Private Sector:** Collaborations with **NGOs and private organizations** can create **structured rehabilitation programs.**

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Final Thoughts:

While **banning begging** may address immediate urban concerns, it does not solve the deeper socio-economic issues that drive people to beg. A **holistic approach** combining rehabilitation, employment, and social welfare is needed to **truly uplift** the most vulnerable sections of society.

Rajasthan Introduces Bill to Curb 'Unlawful' Religious Conversions

Context: The Rajasthan government has introduced a **new Bill** aimed at **preventing religious conversions** carried out through **force, fraud, coercion, or inducement**.

Background:

- Rajasthan's first attempt to **pass an anti-conversion law** was in **2006**, but it faced **strong opposition** and was later **returned by the President**.
- In **2017**, the **Rajasthan High Court** issued **guidelines** to regulate **forced conversions** in the absence of a dedicated law.
- The **current Bill** is modeled on similar **anti-conversion laws** already enforced in **Madhya Pradesh and Uttarakhand**.



Key Provisions of the Bill:

1. Definition of Unlawful Conversion:

The Bill defines **unlawful religious conversion** as conversion carried out through:

- Coercion**
- Force**
- Allurement** (monetary benefits, gifts, or other incentives)
- Fraud or misrepresentation**

2. Burden of Proof:

- The **responsibility to prove** that a conversion was **not unlawful** lies with the **accused**.

3. Right to File Complaints:

- Blood relatives** such as **parents or siblings** of the affected person can **file an FIR** in case of suspected unlawful conversion.

4. Punishments for Unlawful Conversions:

Offence	Punishment	Fine
General unlawful conversion	1 to 5 years in jail	15,000
Conversion of minor, woman, or SC/ST person	2 to 10 years in jail	25,000
Mass conversions	3 to 10 years in jail	50,000
Repeat offenders	Double the punishment	-

- All offences** are **cognizable and non-bailable**, meaning **immediate arrest** without a warrant.

5. Voluntary Conversion Procedure:

- Anyone **willing to convert** must **submit a declaration** to the **District Magistrate (DM)** **60 days** in advance.
- The **conversion ceremony organizer** must **notify the DM** at least **30 days** prior.

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- Authorities will conduct an **investigation** to verify the **intent and legitimacy** of the conversion.
- After conversion, the individual must **appear before the DM within 21 days** to confirm the **change of faith**.

Why is the Bill Necessary?

The government argues that:

- Many **vulnerable individuals** are being **manipulated into conversion**.
- The law is **not against religious freedom** but seeks to **prevent fraudulent conversions**.
- It **ensures that religious conversions** occur **voluntarily** and without **external pressure**.

The Constitutional Debate:

- During the **Constituent Assembly debates**, some members feared that allowing the "**propagation of religion**" could lead to **forced conversions**.
- They suggested **replacing** the word "**propagate**" with "**practise privately**" to avoid misuse.
- However, **Article 25(1) of the Indian Constitution** was adopted, granting all individuals:
 - **Freedom of conscience**
 - **Right to profess, practise, and propagate religion**
- These rights, however, come with **reasonable restrictions** in the **interest of public order, morality, and health**.

Final Thoughts:

The Rajasthan government believes that this law will **protect individuals from coercion**, while critics argue it may **curb religious freedom**. The **balance between personal choice and legal oversight** will be crucial in **determining the impact** of this legislation.

India's Overseas Mobility Bill 2024: Ensuring Safe and Legal Migration

Context: The **Indian government** is actively working on a **new legislative framework** to streamline and safeguard **overseas employment** for its citizens. The **Overseas Mobility (Facilitation and Welfare) Bill, 2024** aims to replace the outdated **Emigration Act of 1983**, ensuring **safe, legal, and structured migration**.



This move comes at a critical juncture as the **US administration under President Donald Trump 2.0** has begun **deporting illegal Indian immigrants**. The bill is designed to **protect Indian workers abroad** while **enhancing legal migration pathways**.

Why is the Overseas Mobility Bill 2024 Needed?

Challenges with the Existing Emigration Act (1983)

- The current **Emigration Act** is **outdated** and does not reflect the **realities of modern migration trends**.
- It lacks provisions for **structured overseas employment** and **migrant welfare**.
- **Irregular migration routes** expose Indian workers to **exploitation and fraud**.

Urgency for a New Migration Framework:

- The **Parliamentary Standing Committee on External Affairs**, led by **Shashi Tharoor**, has emphasized the need for **comprehensive migration reform**.
- The **Ministry of External Affairs (MEA)** is working on a **legislative overhaul** to ensure **safe and orderly migration**.



- The bill will help **curb fraudulent recruitment agencies** and promote **transparency** in overseas employment opportunities.

Key Highlights of the Overseas Mobility Bill 2024:

1. Establishing a Safe and Orderly Migration System:

- The bill introduces a **structured framework** to facilitate **legal migration**.
- It ensures **transparency, safety, and protection** against **exploitation**.

2. Public Consultation & Stakeholder Engagement:

- The **Ministry of External Affairs** is collaborating with **multiple government ministries** before finalizing the draft.
- The **public will have 15-30 days** to submit feedback on the bill.
- It will undergo **inter-ministerial consultations** before being presented to the **Cabinet**.

3. Strengthening the Role of the Protector of Emigrants (PoE):

- The **PoE offices** will work closely with **Indian embassies and consulates** to safeguard **migrant welfare**.
- The bill ensures that PoE offices address **grievances, employment disputes**, and assist in **worker protection**.

4. Raising Awareness & Preventing Exploitation:

- **Indian embassies abroad** will launch **awareness campaigns** to educate **prospective migrants**.
- Official **advisories** will guide emigrants on **safe migration practices** and warn against **fraudulent recruitment agencies**.

5. Grievance Redressal & Repatriation Support:

- The bill aims to **strengthen support systems** for **Indian workers facing mistreatment abroad**.
- **Legal aid and repatriation assistance** will be provided to migrants in distress.

Significance of the Bill Amid US Deportations:

- The **US government** has **intensified deportations** of **illegal Indian immigrants**, increasing the need for **strict migration laws**.
- **Key statistics on Indian migrants in the US:**
 - **20,000 undocumented Indians** are currently **facing deportation** under **Trump 2.0**.
 - The **total undocumented Indian population** in the **US** stands at **approximately 725,000**, making it the **largest non-Latin American undocumented group**.
 - The **first batch of deportees** has already been **sent back to India**.

Impact of the Bill on Indian Migrants & Economy:

For Indian Workers Abroad:

- ✓ **Protection** from **fraudulent recruitment agencies**.
- ✓ **Stronger support system** through **embassies and government agencies**.
- ✓ **Legal migration pathways** ensuring **job security and fair wages**.

For the Indian Economy:

- ✓ **Legal migration** will **increase remittances**, a **major contributor** to **India's GDP**.
- ✓ **Strengthening India's labor force presence** in **Gulf nations, the US, and Europe**.
- ✓ **Reducing illegal migration** will **improve diplomatic ties** with **host countries**.

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Timeline & Next Steps:

- The MEA has assured that the **bill's draft** will be **finalized within a year**.
- The **Parliamentary Committee** has **demanding an update within three months** on the progress.
- Once enacted, the bill will **replace the Emigration Act of 1983**, modernizing India's migration policies.

Conclusion:

The **Overseas Mobility (Facilitation and Welfare) Bill, 2024** is a **landmark reform** aimed at **ensuring safe, legal, and structured migration** for Indian workers. With **tightening immigration policies** in countries like the US, India must create **robust migration frameworks** to **protect its workers** and **boost overseas employment opportunities**.

With **public consultations** and **ministerial reviews** underway, the bill is expected to be **enacted within a year**, ensuring **safer migration** and **stronger global opportunities** for Indian workers.

Home Ministry's Directive: Preventing the Misuse of the State Emblem of India

Context: The **Union Home Ministry** has directed **State Governments** to take strict measures to prevent the **misuse and improper depiction** of the **State Emblem of India**. The Ministry emphasized that the **Lion Capital emblem is incomplete without the national motto, "Satyameva Jayate"** written in **Devanagari script**.



Concerns Raised by the Government:

Incorrect Use of the Emblem:

- Many **government agencies** display the **State Emblem** on **official documents, seals, vehicles, buildings, and websites** without including the motto **"Satyameva Jayate."**
- Such an **incomplete representation** does not conform to **Appendix I & II of the Schedule** under the **State Emblem of India (Prohibition of Improper Use) Act, 2005**.
- **Violating these guidelines** amounts to a **legal offense**.

What is the State Emblem of India?

The **State Emblem of India** is the **official seal** of the **Government of India**, adapted from the **Sarnath Lion Capital of Emperor Ashoka**.

Key Features of the Emblem:

1. **Three lions** standing on an **abacus** (the fourth lion is hidden from view).
2. A **Dharma Chakra (Wheel of Law)** at the **center** of the abacus.
3. A **bull on the right** and a **galloping horse on the left** of the Dharma Chakra.
4. **Smaller Dharma Chakras** on the **extreme right and left**.
5. The **national motto "Satyameva Jayate"** written in **Devanagari script** below the emblem.

Misuse by Unauthorized Individuals and Organizations:

- Many **unauthorized individuals and authorities** illegally use the **State Emblem** on their **stationery, vehicles, and websites**.
- The **State Emblem of India** is reserved **only for specific government authorities** as per:
 - The **State Emblem of India (Prohibition of Improper Use) Act, 2005**.
 - The **State Emblem of India (Regulation of Use) Rules, 2007**.

**Strict Action Against Misuse:****Legal Consequences for Violators:**

- **Officials** responsible for the **incomplete display** of the emblem will face action.
- **Unauthorized individuals and organizations** using the emblem illegally will be penalized.
- **Punishment** includes:
 - **Imprisonment** of up to **2 years**.
 - A **fine of up to 5,000**.
 - **Or both**.
- **Falsely claiming** the right to use the emblem is also a **punishable offense**.

Government's Authority to Enforce the Law:

- The **Central Government** holds the authority to **frame rules, regulate use, and impose restrictions** on the **State Emblem of India**.
- The government can **seize or confiscate** any **unauthorized usage** of the emblem.

Conclusion:

The **State Emblem of India** is a **symbol of national dignity and sovereignty**. The **Home Ministry's directive** ensures that it is **used responsibly and displayed correctly**. By enforcing **strict laws and punishments for misuse**, the government aims to **protect the integrity** of this **national symbol** and uphold **legal compliance**.

Supreme Court to Assam: Deport Foreigners, Don't Detain Them Indefinitely

Context: On **February 4, 2025**, the **Supreme Court of India** strongly criticized the **Assam government** for keeping **foreigners in detention camps indefinitely** instead of **deporting them**. The court emphasized that individuals declared as **foreigners should not be detained for eternity** and urged authorities to resolve nationality verification and deportation issues effectively.

**Nationality Verification Crisis:**

- The **Assam government** revealed that **nationality verification forms** had **not been sent** to the **Ministry of External Affairs** due to a lack of proper **addresses of the detainees in their native country**.
- This has resulted in **foreigners being stuck in detention centers for over a decade**, making them effectively **stateless individuals**.

Supreme Court's Directives to the Centre and State:

- The **Union Government** was ordered to **clarify** how cases involving individuals with **unknown nationality** are being handled.
- The **Centre** must **submit a detailed report** listing:
 - The number of **declared foreigners**.
 - The **total number of deportations** so far.
- The **Assam government** was asked to file a **proper affidavit** detailing the **steps taken for compliance** with the court's directives.

Challenges in the Deportation Process:

- **India and Bangladesh** have been unable to resolve the issue of **repatriation**.

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- **India claims** these individuals **are not Indian citizens**, while **Bangladesh refuses to accept them**, leaving them **stateless**.
- As a result, some **foreigners have remained in detention for over 10 years with no resolution in sight**.

Monitoring of Detention Camps:

- The **Supreme Court** instructed the **Assam State Legal Services Authority** to conduct **surprise inspections** at the **Matia transit camp for foreigners**.
- The purpose of these visits is to:
 - **Ensure proper hygiene**.
 - **Check food quality** provided to detainees.
- The court reiterated that **Article 21 of the Indian Constitution** guarantees the **right to life and personal liberty** to **all individuals**, including **foreigners**.

Understanding Foreigners Tribunals (FTs):

Foreigners Tribunals (FTs) are **quasi-judicial bodies** set up under the **Foreigners (Tribunals) Order, 1964**, framed under **Section 3 of the Foreigners Act, 1946**.

Functions of FTs::

- They determine the **citizenship status** of individuals **suspected to be foreigners**.
- They handle cases **referred by local authorities**.

Foreigners (Tribunals) Order, 2019 – Key Amendments:

- **Outlines the procedure for appeals against National Register of Citizens (NRC) decisions**.
- **Empowers District Magistrates across India to establish Foreigners Tribunals**.
- **Although the law applies nationwide, FTs currently operate only in Assam**.

Structure of a Foreigners Tribunal:

- Each FT is led by a **judge, advocate, or civil servant with judicial experience**.
- Appointments are made based on **government guidelines** under the **Foreigners Tribunal Act, 1941** and the **Foreigners Tribunal Order, 1964**.

Powers and Responsibilities of FTs:

- FTs function with **civil court powers**, including:
 - **Issuing summons**.
 - **Examining documents**.
- **Notices must be served within 10 days** of receiving a reference.
- **Cases must be decided within 60 days**.
- Under **Section 9 of the Foreigners Act, 1946**, the **burden of proof lies on the individual** to establish their **Indian citizenship**.
- If **unable to prove their nationality**, individuals **may be sent to detention centers for deportation**.

Appeal and Review Process:

- A **review application** can be filed within **30 days** of the FT's order.
- **Adverse decisions** can be **challenged in the High Court**, and if necessary, further appealed in the **Supreme Court**.

Conclusion:

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The Supreme Court's directive serves as a **strong reminder** that **foreigners must be deported, not detained indefinitely**. The **failure to verify nationality** has left **many individuals stateless**, creating a **humanitarian and legal crisis**. The court's intervention aims to **push the government** towards finding a **just and efficient solution** while **ensuring that fundamental rights are upheld**.

Role of the Governor in Granting Assent to Bills

Context: The **Supreme Court of India** recently raised concerns regarding the **Tamil Nadu Governor's delay** in approving several **Bills**, some of which have been pending for over **three years**. This has sparked debates over the **Governor's constitutional role** and the implications of such delays on the **legislative process**.



Governor's Role in the Legislative Process:

As the **constitutional head** of a state, the **Governor** plays a vital role in the **law-making process**, particularly in giving **assent to Bills** passed by the **State Legislature**. However, the **discretionary powers** exercised by Governors in either withholding or delaying assent have often led to **legal debates** and **political controversies**.

Constitutional Provisions Related to the Governor's Assent:

Article 200: The Governor's Options for Assenting Bills

When a **Bill** is presented to the **Governor** after being passed by the **State Legislature**, the Governor has **four possible courses of action**:

1. **Grant Assent** – The Governor **approves** the Bill, making it a **law**.
2. **Withhold Assent** – The Governor **rejects** the Bill, preventing it from becoming law.
3. **Return the Bill for Reconsideration** – The Governor may **send the Bill back** to the **Legislature** with **suggestions**. However, if the Legislature **passes the Bill again without modifications**, the Governor **must** grant assent.
4. **Reserve the Bill for Presidential Assent** – If a Bill **contradicts the Constitution**, affects **High Court powers**, or is **inconsistent with central laws**, the Governor may **send it to the President** for a final decision.

Article 201: The President's Role in Reserved Bills

If a **Bill** is **reserved** for the **President's approval**, the **President** has two choices:

1. **Give Assent** – The Bill is **approved** and becomes **law**.
2. **Withhold Assent or Send for Reconsideration** – The President can **return** the Bill to the **State Legislature** for **modifications**. However, even if the **Legislature re-passes** the Bill, the **President is not bound** to approve it.

Controversies and Recent Concerns:

1. Delays in Assenting to Bills:

- The **Constitution** states that the **Governor should act "as soon as possible"**, but does not specify a **time limit** for decision-making.
- **Prolonged delays** can lead to a **constitutional crisis**, obstructing governance and **weakening democracy**.
- The use of a '**pocket veto**', where a **Governor neither assents nor returns the Bill**, has raised **serious legal and political concerns**.

2. Political Disputes and Federalism Concerns:



- Some **state governments** have accused Governors of acting **under the influence of the Central Government**, undermining the **spirit of federalism**.
- States like **West Bengal, Maharashtra, and Punjab** have witnessed **major conflicts** over the **Governor's refusal** to sign crucial Bills.

Supreme Court's Stand on the Governor's Role:

Key Judicial Interpretations:

1. **Shamsher Singh v. State of Punjab (1974)** – The **Governor must act on the aid and advice of the Council of Ministers**, except in specific cases.
2. **Nabam Rebia v. Deputy Speaker (2016)** – The **Governor cannot act arbitrarily or in a partisan manner** against the elected government.
3. **Rameshwar Prasad Case (2006)** – The **Governor's discretion** must be **fair, reasonable, and aligned with constitutional principles**.

Discretionary Powers of the Governor:

- The **Governor's authority to withhold assent or return a Bill** is **not absolute**.
- The **Sarkaria Commission (1987)** recommended that the **Governor should reserve Bills for Presidential Assent only in exceptional cases**.
- It also suggested that the **President should decide on such Bills within six months** and provide **reasons** if assent is withheld.

Proposed Reforms and the Way Forward:

1. Implementing Time-Bound Decision-Making:

- The **Supreme Court** has indicated that **Governors should not indefinitely delay assent**.
- The **Governor must promptly communicate** with the **State Legislature** and **provide reasons** for rejecting or reserving Bills.

2. Clarifying the Scope of Discretionary Powers:

- A **clear constitutional framework or judicial guidelines** should define the **Governor's limitations** in the assent process.
- Establishing **fixed timelines for decision-making** can help ensure **transparency and accountability**.

3. Strengthening Accountability Mechanisms:

- The **Governor's actions** should be subject to **judicial or parliamentary review** to prevent **political misuse**.
- Enhanced **judicial oversight** can ensure **Governors act fairly**, without **partisan influence**.

Conclusion:

The **role of Governors in assenting to Bills** has increasingly come under **legal and political scrutiny**. While the **Governor holds a crucial constitutional position**, the **indefinite delay** in approving Bills can **obstruct governance and weaken federalism**. There is an urgent need for **greater transparency, judicial oversight, and time-bound decision-making** to ensure that the **Governor's role remains aligned with democratic principles**.

Delay in Grants Disbursal Under National Fellowship Scheme

Context: The Centre recently informed Parliament that **OBC scholars** under the **National Fellowship for OBC Students (NF-OBC)** have not received their grants since **June of the previous year**. Similarly, **Scheduled Caste (SC) scholars** under the **National Fellowship for Scheduled Caste Students (NFSC)** are facing **delays ranging from two to five months** in grant disbursal.



National Fellowship for Scheduled Caste (SC) Students (NFSC):

- **Launched in 2005-06**, this **Central Sector Scheme** aims to provide **higher education opportunities** to SC students for pursuing **M.Phil. and Ph.D. degrees** in **Sciences, Humanities, and Social Sciences**.
- **Funded by: Ministry of Social Justice & Empowerment** and implemented by the **National Scheduled Castes Finance & Development Corporation (NSFDC)**.
- **Eligibility:**
 - Must belong to the **SC category**.
 - Must have qualified **UGC-NET or Joint CSIR-UGC-NET**.
 - Enrolled in **regular, full-time M.Phil. or Ph.D. programs** at recognized institutions.
- **Number of Fellowships:**
 - **2,000 fellowships** per year.
 - **1,500** for **Humanities & Social Sciences**.
 - **500** for **Science streams**.

National Fellowship for Other Backward Classes (OBC) (NF-OBC):

- **Objective:** To enhance opportunities for **OBC students** to pursue **M.Phil. and Ph.D. degrees**.
- **Funded by: Ministry of Social Justice & Empowerment**, implemented by the **National Backward Classes Finance & Development Corporation (NBCFDC)**.
- **Eligibility:**
 - Must belong to the **OBC category**.
 - Must have qualified **UGC-NET or Joint CSIR-UGC-NET**.
 - Enrolled in **regular, full-time M.Phil. or Ph.D. programs** at recognized institutions.
- **Number of Fellowships:** **1,000 fellowships** per year.

National Fellowship Scheme for Scheduled Tribes (ST) (NF-ST):

- A **Central Sector Scheme** under the **Ministry of Tribal Affairs**, designed to provide **financial assistance** to **meritorious Scheduled Tribe (ST) students** for pursuing **M.Phil. or Ph.D.**
- **Eligibility:**
 - Must be an **ST student** admitted to a recognized institution.
 - **Total family income should not exceed ₹6 lakh per annum**.
 - The fellowship **continues until course completion**, subject to satisfactory performance.
- **Number of Fellowships:** **750** per year.
 - **Unused fellowships** are **carried forward** to the next academic year.
 - **No state/university-wise limit** on slots.

**Priority Beneficiaries:**

- **Persons with Disabilities (PWD)** – 3% of total slots.
- **Particularly Vulnerable Tribal Groups (PVTG)** – 50 slots.
- **Below Poverty Line (BPL)** students – 50 slots.
- **Female scholars** – 30% reservation.

Concerns Over Delays in Grant Disbursal:

- **Financial hardships** for scholars relying on fellowship funds for **research and living expenses**.
- **Disruptions in academic progress**, especially for students from marginalized backgrounds.
- **Lack of transparency** in fund allocation and disbursal.
- **Need for urgent intervention** by the government to streamline grant releases.

Way Forward:

- **Timely Disbursal Mechanism:** Ensure **automatic fund release** at fixed intervals.
- **Transparent Tracking System:** Implement a **real-time tracking** portal for scholars to monitor their payments.
- **Better Coordination:** Strengthen **coordination between UGC, NSFDC, and NBCFDC** for smoother grant processing.
- **Increased Funding:** Expand the **fellowship budget** to accommodate rising research demands.
- **Accountability Measures:** Establish a **grievance redressal system** for scholars facing delays.

Conclusion:

The **National Fellowship Schemes** play a crucial role in promoting **higher education among marginalized communities**. However, **delays in grant disbursal** create significant **financial and academic burdens**. The government must take **urgent steps** to ensure **timely, transparent, and efficient fund disbursement** to support scholars in their academic pursuits.

TOGETHER WE SCALE HEIGHTS

Meghalaya's Debate Over Article 371: A Push to Revive Rat-Hole Mining

Context: The Voice of the People Party (VPP) has proposed that Meghalaya be brought under Article 371, similar to Nagaland's Article 371A, to **bypass the ban on rat-hole coal mining**.

- **Rat-hole mining has been banned in Meghalaya since 2014** by the **National Green Tribunal (NGT)** due to its environmental and safety risks.
- VPP argues that **special constitutional status under Article 371** would allow Meghalaya to **regulate its own resources without central interference**.

**The Argument for Article 371 in Meghalaya:****Rat-Hole Mining Ban and Its Impact:**

- The NGT banned rat-hole mining in Meghalaya in 2014 due to severe **environmental damage and hazardous working conditions**.
- The **Supreme Court upheld the ban**, extending it to other northeastern states.

How Nagaland Avoids the Ban:[Download Our Application](#)



- Rat-hole mining continues in Nagaland despite environmental concerns because Article 371A prevents the NGT from intervening in the state's resource management.
- Meghalaya's Sixth Schedule already grants district councils power over land and forests, but central laws like the NGT ban still apply.

VPP's Stand:

- If Meghalaya is granted Article 371, it could override central laws and independently decide on coal mining policies.
- They believe this would boost economic growth and employment in the state.

Counterarguments Against Article 371 for Meghalaya:

Opposition from Political Leaders:

- Most political parties oppose the demand for Article 371, arguing that it clashes with the Sixth Schedule's existing autonomy.
- Meghalaya's Tourism Minister and United Democratic Party (UDP) leader stated that Article 371 and the Sixth Schedule cannot coexist.

Legal and Structural Conflicts:

- The Sixth Schedule already grants autonomous powers to Meghalaya's district councils on issues like land, forests, and social customs.
- Adding Article 371 could create legal confusion over which authority governs resource management.

Understanding Article 371: Special Provisions for Indian States

What is Article 371?

- Article 371 provides special provisions for certain states based on their unique socio-economic and political conditions.
- The provisions vary for each state, ensuring local governance over land, culture, and resources.

State-Wise Provisions Under Article 371:

State	Key Provisions
Maharashtra & Gujarat (Article 371)	Establishment of development boards to ensure resource distribution.
Nagaland (Article 371A)	Protection of land, resources, and customary laws . No parliamentary act on land ownership applies unless approved by the state legislature.
Assam (Article 371B)	Formation of a committee of elected representatives from tribal areas.
Manipur (Article 371C)	Creation of a Hill Areas Committee for tribal protection.
Andhra Pradesh & Telangana (Article 371D & 371E)	Ensures equitable distribution of resources and allows for a Central University in Andhra Pradesh.
Sikkim (Article 371F)	Special provisions to protect traditional laws and land ownership .
Mizoram (Article 371G)	Protection of Mizo customary laws and land rights .
Arunachal Pradesh (Article 371H)	Special provisions regarding law and order .
Goa (Article 371I)	Added in 1987 through the 56th Amendment Act .
Karnataka (Article 371J)	Special reservation in education and jobs for people from the Hyderabad-Karnataka region.

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The Sixth Schedule and Meghalaya's Autonomy:

What is the Sixth Schedule?

- The **Sixth Schedule** grants **special autonomy** to **tribal areas** in **northeastern states** like Meghalaya, Mizoram, Assam, and Tripura.
- **Autonomous District Councils (ADCs)** govern these regions, making laws on **land, forests, social customs, and village administration**.

Powers of Autonomous District Councils (ADCs):

- **Make laws** on **land, forests, and village administration**.
- **Regulate inheritance and social customs**.
- **Establish and manage schools, markets, roads, and dispensaries**.
- **Governance** by up to **30 members**, with **26 elected** and **4 nominated** by the governor.

Paragraph 12A of the Sixth Schedule:

- Allows **state laws** to **override ADC laws** in case of a conflict.

The Rat-Hole Mining Controversy:

What is Rat-Hole Mining?

- A **highly dangerous method** of **coal extraction** where workers dig **narrow tunnels** to extract coal.

Why Was It Banned?

- **Severe environmental damage**: Leads to **deforestation and groundwater contamination**.
- **Extremely unsafe working conditions**: Frequent **accidents and child labor exploitation**.
- The **NGT** banned it in **2014** due to its **hazards to miners and the environment**.

Illegal Mining Continues:

- Despite the ban, **rat-hole mining continues illegally** in parts of Meghalaya, leading to **legal battles and enforcement challenges**.

The Way Forward for Meghalaya:

Balancing Economic Growth with Environmental Safety:

- **Granting Meghalaya Article 371** could **bypass central regulations**, but it may **weaken environmental protections**.
- Instead, the **focus should be on legalizing and regulating coal mining** under strict **environmental and safety guidelines**.

Strengthening Regulation and Law Enforcement:

- **Meghalaya needs stronger enforcement** against **illegal rat-hole mining**.
- **Introducing scientific coal mining methods** could help **sustainably utilize resources** while ensuring **safety**.

Exploring Alternatives to Article 371:

- Instead of seeking **constitutional amendments**, Meghalaya could **push for specific mining regulations** under the **Sixth Schedule** to balance **autonomy and environmental responsibility**.

Conclusion:

The **debate over Article 371** in Meghalaya is driven by the desire to **revive rat-hole mining**, but it raises **legal, environmental, and governance challenges**. While **economic benefits are undeniable**, it is crucial to **balance development with environmental sustainability and worker safety**. Instead of **pursuing Article 371**, Meghalaya could **focus on regulated and eco-friendly coal mining solutions** within its existing **Sixth Schedule framework**.

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NITI Aayog's Policy Report on State Public Universities (SPUs)

Context: NITI Aayog has released a **comprehensive policy report** titled 'Expanding Quality Higher Education through States and State Public Universities'. This **first-of-its-kind** document focuses on **State Public Universities (SPUs)**, analyzing key aspects such as **quality, funding, governance, and employability** in higher education.



What Are State Public Universities (SPUs)?

An **SPU** is a university **established or incorporated by a Provincial Act or a State Act**. These institutions play a crucial role in **expanding access to higher education** across India.

Key Findings:

1. Higher Education Funding:

- **Highest Funding:** Maharashtra leads in higher education funding, followed by Bihar and Tamil Nadu.
- **Lowest Funding:** Sikkim, Arunachal Pradesh, and Nagaland have the lowest higher education budgets.

2. University Density:

- The **national average** university density is **0.8**.
- **Sikkim** has the **highest density** at **10.3**, followed by Arunachal Pradesh, Ladakh, Himachal Pradesh, Meghalaya, and Uttarakhand.
- Bihar, Uttar Pradesh, West Bengal, and Maharashtra have a university density **below the national average**.

3. Female Enrolment:

- Kerala, Chhattisgarh, and Himachal Pradesh have **higher female enrolment rates** than males.

Challenges in SPUs

1. **Infrastructure Deficiencies:** Lack of **modern and high-quality** infrastructure.
2. **Faculty Shortage:** Insufficient **teaching and administrative staff**.
3. **Limited R&D Expenditure:** Low investment in **research and innovation**.
4. **Low Enrolment in MTech & Ph.D.:** Hindering **advanced research and academic progress**.
5. **Outdated Curriculum:** Courses and syllabi are **not aligned with industry needs**.
6. **Funding Issues:**
 - Heavy reliance on **state grants and admission fees**.
 - **Delays in fund sanctioning** due to administrative bottlenecks.
 - Absence of a **structured bank loan framework** for SPUs.

Key Recommendations:

1. Increased Investment in Education & R&D:

- **Total education investment** (Centre + States) should be raised to **6% of GDP** as per NEP 2020.
- **R&D investment** (public + private) should be **2% of GDP** as per the Economic Survey 2017-18.

2. Establishing Centres of Excellence:

- SPU clusters should **identify 2-3 local issues** and establish **dedicated research centres** to solve them.

3. Specialized Financing Agency for SPUs:

- States should create a **Higher Education Financing Agency (HEFA)-like body** specifically for SPUs.

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Freedom UPSC with **Dhananjay Gautam**



- **HEFA**, a joint venture of the Centre and Canara Bank, was set up in **2017** to strengthen **infrastructure and research** in higher education institutions.

Conclusion:

The report provides **nearly 80 policy recommendations** to **strengthen the quality, governance, and financial sustainability** of SPUs. By implementing these suggestions, India can **enhance the higher education sector** and foster greater academic excellence.

Centre vs Delhi Government: Constitutional Conflict and Supreme Court Rulings

Context: The governance of **Delhi**, India's national capital, has been a **contentious issue** for years, fueling ongoing legal disputes between the **AAP-led Delhi Government** and the **BJP-led Central Government**. The central issue revolves around Delhi's **unique constitutional status**, which designates it as a **Union Territory (UT)** with a legislature.

This setup has led to significant **struggles over administrative control**, particularly concerning **bureaucratic appointments, law enforcement, and governance powers**. These conflicts have prompted multiple **Supreme Court (SC)** interventions and amendments to the existing governance laws.



Constitutional Status of Delhi:

Delhi's governance is defined by **Article 239AA** of the Indian Constitution, introduced through the **Sixty-Ninth Constitutional Amendment Act (1991)**. This article grants Delhi:

- A **Legislative Assembly** with powers to legislate on subjects from the **State List** and **Concurrent List**, except on matters like **police, public order, and land**.
- An **elected Chief Minister (CM)** and a **Council of Ministers** responsible for day-to-day administration.
- A **Lieutenant Governor (L-G)**, appointed by the **President of India**, who represents the Centre in Delhi.

This division of powers has frequently led to **jurisdictional conflicts, policy clashes, and administrative control disputes**.

Legal Battles Between Centre and Delhi Government:

The 2015 Notification and Initial Conflict:

When **AAP** returned to power in **Delhi in 2015**, the **Union Home Ministry** issued a notification giving the **L-G control** over **bureaucratic services, land, police, and public order**. The **Delhi Government** challenged this decision in the **High Court**, arguing that the **elected government** should have authority over services and administration.

Supreme Court Verdicts on Delhi's Powers:

2016 Delhi High Court Ruling:

The **Delhi HC** ruled in favor of the **Centre**, affirming that the **L-G held overriding powers** over Delhi. This ruling effectively curtailed the Delhi Government's autonomy.

2018 Supreme Court Judgment:

In a **landmark judgment**, a **five-judge Constitution Bench** ruled in favor of the Delhi Government. The Court held that:

- The **L-G must act** on the "aid and advice" of the **elected government**, except on matters related to **public order, land, and police**.
- The **Delhi Government** has **legislative and executive control** over all other subjects, including **administrative services**.

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**2023 Supreme Court Verdict:**

A **second Constitution Bench** reaffirmed the 2018 ruling, clarifying that:

- The **Delhi Government** has control over **administrative services**, except in matters related to **law enforcement** and **land**.
- The **Centre's argument** that no UT should have control over services was **rejected**.

Despite these **Supreme Court victories**, the **Central Government** introduced **amendments** to further limit Delhi's powers.

Central Government's Legislative Response:**Government of National Capital Territory of Delhi (Amendment) Act, 2023:**

In **May 2023**, the Centre passed an **amendment** to **override the Supreme Court's ruling**. This amendment:

- Extended the **L-G's power** over **appointments** and **transfers** of bureaucrats.
- Created a new authority, comprising the **Delhi CM**, **Chief Secretary**, and **Home Secretary**, where the **CM's authority can be vetoed** by bureaucrats.

The **Delhi Government** challenged this **amendment** in the **Supreme Court**, arguing that it **violates federal principles**.

Governance Crisis and Political Fallout:**Impact of Legal Battles on Delhi's Administration:**

The **legal battles** have caused significant **delays in policymaking** and **project implementation** in Delhi. The AAP has accused the Centre of **obstructing development programs** and **administrative reforms**, affecting the day-to-day governance.

Political Context and Future Implications:

With **BJP** expected to contest elections and potentially take power in Delhi in **2025**, the legal challenges might lose momentum. However, the **Centre's increasing control** over Delhi's administration could continue to **hamper AAP's ability to govern freely**, with implications for the future political landscape.

The **Supreme Court** is yet to give a final ruling on the **2023 amendment**, which will have a crucial impact on the **future balance of power** in Delhi.

Conclusion:

The **Centre vs Delhi Government conflict** is a **multi-layered issue** involving **constitutional, legal, and political dimensions** that has significantly shaped governance in the national capital. Despite **Supreme Court rulings** affirming **Delhi's autonomy**, the Centre continues to assert control through **legislative amendments**. This **legal and political struggle** continues, raising broader questions about **federalism** in India.

As this case progresses, it could set a **precedent** for the governance of other Union Territories with legislatures, such as **Puducherry** and **Jammu & Kashmir**.

Southern States Should Benchmark Against Global Standards: CEA V. Anantha Nageswaran

Context: Chief Economic Adviser (CEA) **V. Anantha Nageswaran** has emphasized that **Southern States** should **benchmark themselves against global standards** rather than just **comparing with other Indian states**. The **Southern region** leads in several **economic parameters**, but further improvements are needed to enhance **global competitiveness**.

**Contribution to India's Economy:**

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- Southern States contribute over 30% of India's GDP.
- Tamil Nadu and Karnataka are standout performers, with **high compounded annual growth rates** in Gross State Domestic Product (GSDP).
- The region's **annual growth rate in real terms** is 6.3%, compared to a little over 5% for the rest of India.

Per Capita GDP Growth:

- Southern States – Over 5%
- Rest of India – 4.2%

Labour Force and Economic Sectors Performance:

- Southern States outperform the rest of India in **Average Labour Force Participation Rate**.
- They have a **higher share of Gross Value Added (GVA)** across key economic sectors:
 - Real Estate
 - Agriculture
 - Manufacturing
 - Services

Key Statistics:

- 37.4% of India's **total factories** are in Southern States.
- 37% of **operational factories** are located here.
- 25.6% of **fixed capital investments** come from this region.

Scope for Improvement in Productivity:

Despite 33% of India's **manufacturing workforce** being in **South India**, its **output share is only 26%**. This indicates **lower productivity**, highlighting the need for:

- ✓ Technology adoption
- ✓ Process improvements
- ✓ Workforce upskilling

Skill Levels and Need for Upgradation:**CEA's Four-Tier Skill Classification:**

1. Basic Skills (Level 1)
2. Intermediate Skills (Level 2)
3. Associate & Professional Skills (Level 3)
4. Higher-Order Professional Skills (Level 4) (*medicine, engineering, geology, etc.*)

Observations:

Tamil Nadu & Other Southern States have a **high presence** of **Skill Level 2** (Intermediate skills). However, they **lag behind** in **Skill Levels 3 and 4** (Associate & Higher-Order Professional Skills).

Conclusion:

While **Southern States** are already **leading contributors** to India's economy, they **must now aim for global standards** in productivity and **high-skill workforce development**. **Future economic growth** in the region will depend on **enhanced skill levels**, adoption of **cutting-edge technologies**, and improvements in the **manufacturing sector**.

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Bills on Parliamentary Sitzings and POCSO Act, 2012: Key Reforms Proposed

Context: Recently, two Private Members' Bills were introduced in the Rajya Sabha, focusing on:

1. Mandating a minimum number of Parliamentary sittings.
2. Amending the Protection of Children from Sexual Offences (POCSO) Act, 2012.



These Bills aim to enhance parliamentary accountability and strengthen child protection laws.

1. Bill on Parliamentary Sitzings:

Objective:

- Proposes a minimum of 100-120 sittings per year in Parliament.
- Lost hours due to disruptions to be compensated in extended sessions.
- Aims to improve governance accountability and ensure effective legislative discussions.

Current Scenario of Parliamentary Sitzings:

- First Lok Sabha (1952-1957): 135 sittings per year (average).
- 17th Lok Sabha (2019-2024): Only 55 sittings per year (lowest in history).
- The General Purposes Committee (1955) and National Commission on Constitutional Review (2002) recommended a fixed calendar with 100-120 days of sittings.

Constitutional Provisions:

- Article 85 (Parliamentary Sessions):
 - The President summons Parliament as needed, ensuring a maximum gap of six months between sessions.
 - The President can also prorogue or dissolve the Lok Sabha.
- Article 174 (State Legislatures):
 - The Governor has similar powers for state assemblies, ensuring a six-month gap is not exceeded.

Why is the Reform Needed?

- Declining number of sittings reduces scrutiny over government decisions.
- Productivity suffers due to disruptions and early adjournments.
- A fixed parliamentary calendar can ensure effective legislative functioning.

2. Bill on Amending the POCSO Act, 2012:

Objective

- The Protection of Children from Sexual Offences (Amendment) Bill, 2024 aims to make the POCSO Act more victim-centric.
- Strengthens reporting mechanisms, victim support, and legal procedures.

Key Provisions of the Amendment:

- 24-Hour Reporting Rule: Police/Special Juvenile Police Units must present the child before the Child Welfare Committee and report the case to the Special Court within 24 hours.
- Enhanced Victim Support: Structured compensation procedures to ensure timely financial aid to victims.

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- **Training for Stakeholders:** Police, educational institutions, and child care personnel to receive mandatory training for better POCSO implementation.

Need for the Amendment:

- **Rising POCSO Cases:** 94% increase in cases since 2017, with over 2 lakh registered cases as of May 2024 (NCRB data).
- **Delayed Compensation:** Lack of structured procedures leads to long delays in victim compensation.
- **Shortage of Special Public Prosecutors:** Many cases suffer insensitivity and inefficiency due to lack of trained prosecutors.
- **Fear & Stigma:** Many cases remain unreported or delayed due to social stigma and lack of awareness.
- **Absence of "Support Persons":** 96% of cases lack designated support persons, who assist victims through legal procedures.
- **Legal Challenges for Consensual Cases (16-18 age group):** Minors engaging in consensual relationships face legal consequences under POCSO, including prolonged detention and bail denial.
- **Insufficient POCSO Courts:** Not all districts have designated POCSO courts, delaying justice.

What is a Private Member's Bill?

- A bill introduced by a Member of Parliament (MP) who is not a Minister.
- Less than 10% of Private Members' Bills become law, but they highlight crucial issues.

Click here to read more: [Private Members' Bill](#)

Overview of the POCSO Act, 2012:

- Aims to protect children (below 18 years) from sexual abuse and exploitation.
- Recognizes both boys and girls as victims of sexual crimes.
- **Maintains victim confidentiality:** No media disclosure of the child's identity.
- **Mandates mandatory reporting:** Anyone aware of child abuse must report it to authorities.

Conclusion:

The proposed reforms address critical gaps in governance and child protection:

- Mandating more parliamentary sittings can enhance legislative productivity and government accountability.
- Amending the POCSO Act ensures faster justice, better victim support, and improved enforcement.

These Bills highlight the need for structural changes in parliamentary functioning and child welfare laws to create a more effective and just system.

India's Immigration and Foreigners Bill, 2025

Context: The Indian government is set to introduce the Immigration and Foreigners Bill, 2025, during the ongoing Budget session of Parliament. This comprehensive legislation aims to modernize and consolidate India's immigration framework by replacing four outdated laws:

- The Passport (Entry into India) Act, 1920
- The Registration of Foreigners Act, 1939
- The Foreigners Act, 1946





- The Immigration (Carriers' Liability) Act, 2000

Key Features of the Bill:

1. Stricter Penalties for Unauthorized Entry and Document Fraud:

- Unauthorized entry into India without valid documents may result in imprisonment of up to five years and fines up to 5 lakh.
- Using forged travel documents could lead to imprisonment ranging from two to seven years and fines between 1 lakh and 10 lakh.

2. Obligations for Educational and Medical Institutions:

- Universities and educational institutions admitting foreign students are required to share their details with designated registration officers.
- Hospitals, nursing homes, and medical institutions providing lodging to foreigners must maintain and report records to authorities.

3. Enhanced Visa and Passport Regulations:

- The central government is empowered to regulate the entry, exit, and movement of foreign nationals within India.
- Foreigners overstaying their visas, violating visa conditions, or entering prohibited areas may face imprisonment of up to three years, fines up to ₹3 lakh, or both.

4. Liability of Carriers and Transport Operators:

- Carriers, including airlines and shipping companies, are responsible for ensuring passengers possess valid travel documents before boarding.
- Transporting foreigners without valid documents can result in fines up to ₹5 lakh. Failure to pay may lead to the seizure or detention of the transport vehicle.

Rationale for the New Legislation:

The existing immigration laws were enacted during the early to mid-20th century, primarily under wartime conditions, and have become outdated in addressing contemporary security challenges and global migration trends. The new Bill seeks to provide a unified and updated legal framework to effectively manage immigration in today's context.

Potential Challenges and Criticisms:

• Human Rights Concerns:

- Stricter deportation policies may adversely affect long-term foreign residents and asylum seekers.
- Human rights advocates may raise issues regarding due process and the treatment of deported individuals.

• Impact on Institutions:

- Educational and medical institutions might face challenges in complying with new reporting requirements, potentially leading to bureaucratic hurdles in admitting international students and medical tourists.

• Enforcement and Implementation:

- Effective implementation will require robust coordination among immigration officers, carriers, educational institutions, and security agencies.
- Ensuring transparency in enforcement is crucial to prevent harassment or wrongful detentions.

Conclusion:

The Immigration and Foreigners Bill, 2025, represents a significant overhaul of India's immigration laws, aiming to align them with current global standards and security needs. While it introduces stricter regulations and penalties to

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deter illegal immigration and document fraud, careful consideration must be given to potential human rights implications and the practical challenges of implementation.

Corruption Perceptions Index (CPI) 2024: Key Insights & India's Performance

Context: India ranked **96th out of 180 countries** in the **Corruption Perceptions Index (CPI) 2024**, highlighting persistent corruption challenges in the public sector.

What is the Corruption Perceptions Index (CPI)?

The **Corruption Perceptions Index (CPI)** is an annual ranking by **Transparency International** that assesses **perceived levels of public sector corruption** worldwide.



How is CPI Measured?

- The index scores countries on a scale of 0 to 100:
 - 0 = Highly Corrupt**
 - 100 = Very Clean**
- Rankings are based on expert assessments and surveys conducted by international organizations.

Why is CPI Important?

- It reflects **governance quality**, transparency, and the **effectiveness of anti-corruption measures**.
- Corruption **undermines democracy, fuels inequality, and weakens institutions**.
- The 2024 CPI particularly highlights **how corruption is hindering global climate action**.

Key Findings of CPI 2024:

1. Global Corruption Trends:

- 85% of the world's population** lives in countries with **CPI scores below 50**, indicating widespread corruption.
- Corruption is linked to **declining democracy, instability, and human rights violations**.

2. India's Performance:

- India's CPI score: 38 out of 100** (Dropped 1 point from 2023).
- India's Rank: 96 out of 180 countries**.
- This indicates **ongoing challenges in tackling public sector corruption**.

3. Least Corrupt Countries (Highest CPI Scores):

- Denmark**
- Finland**
- Singapore**

These countries have **strong institutions, transparency, and strict anti-corruption laws**.

4. Most Corrupt Countries (Lowest CPI Scores):

- South Sudan**
- Somalia**
- Venezuela**

These nations **struggle with weak governance, conflict, and lack of accountability**.

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How Corruption is Hindering Climate Action:

1. **Weakens Climate Policies:** Powerful corporate interests often manipulate policies to favor **profit over environmental protection**.
2. **Erodes Governance & Law Enforcement:** Poor governance leads to **weak implementation** of climate-related laws, reducing accountability.
3. **Misuse of Climate Funds:** Many climate-vulnerable countries **score below 50 on CPI**, indicating **high risks of fund misallocation**.
4. **Worsens Inequality:** Corrupt practices ensure that **marginalized communities** receive fewer benefits from climate policies and disaster relief efforts.
5. **Undermines Global Climate Negotiations:** Lobbying by fossil fuel companies and **lack of transparency** in negotiations delay **global climate progress**.

Recommendations for Strengthening Anti-Corruption Measures:

1. **Strengthen Anti-Corruption Policies:** Integrate anti-corruption safeguards into **climate finance and public policies**.
2. **Increase Transparency in Climate Action:** Implement lobbying regulations and **open records for climate finance** to ensure accountability.
3. **Improve Investigations & Protect Whistleblowers:** Strengthen enforcement agencies and **provide protection for environmental activists**.
4. **Promote Public Engagement in Climate Policy:** Ensure **affected communities** have a voice in **climate action planning and decision-making**.

Conclusion:

India's CPI rank of 96 reflects **persistent governance challenges**, requiring **urgent anti-corruption reforms**. As **corruption weakens climate action**, the **government must implement stricter transparency measures, improve accountability, and strengthen law enforcement**.

Meghalaya Woman Challenges Age Restriction Under ART Act

Context: Legal Challenge to the Assisted Reproductive Technology (Regulation) Act, 2021

A **woman from Meghalaya** has filed a legal challenge against the **Assisted Reproductive Technology (Regulation) Act, 2021**, which **restricts women over the age of 50** from undergoing assisted reproductive procedures. The case has drawn attention after the **Meghalaya High Court** criticized an **Assam-based fertility clinic** for failing to follow the court's directive to form a **medical board** to assess the petitioner's eligibility for assisted reproduction.



Overview of the ART Act, 2021:

The **Assisted Reproductive Technology (Regulation) Act, 2021** was introduced to **regulate and supervise ART clinics and banks** across India, ensuring that **ethical standards and safety protocols** are adhered to in the provision

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Freedom UPSC with **Dhananjay Gautam**



of ART services. ART includes a variety of techniques aimed at achieving pregnancy by handling **sperm** or **oocytes** outside the human body, followed by the transfer of the **gamete** or **embryo** into a woman's reproductive system.

Key procedures under ART include:

- **In-vitro fertilization (IVF)**
- **Gamete donation** (sperm or egg)
- **Gestational surrogacy**

The **National Assisted Reproductive Technology and Surrogacy Board** was established to:

- Advise the **central government** on ART-related policy matters
- **Monitor** the implementation of ART policies
- **Lay down a code of conduct** for ART clinics and banks

State-level boards coordinate the enforcement of these policies at the regional level. All ART clinics and banks must be **registered** under the **National ART and Surrogacy Registry**, which acts as a **centralized database** to track all ART clinics and banks across the country. Registration is contingent upon meeting **specific standards** of infrastructure, staffing, and diagnostic facilities.

Eligibility Criteria Under the ART Act:

The **ART Act** outlines strict eligibility criteria for individuals seeking ART services:

- **For Married Couples:**
 - The woman should be between **21 and 50 years** of age.
 - The man should be between **21 and 55 years** of age.
 - The couple must be **infertile**, defined as the inability to conceive after **one year** of unprotected intercourse or having a **proven medical condition** preventing conception.
- **For Unmarried Women:**
 - Women **over 21 years** can access ART services independently.
- **For Donors:**
 - **Female donors:** Age between **23 and 35 years**; can donate oocytes **only once** in their lifetime.
 - **Male donors:** Age between **21 and 45 years**; can donate sperm **up to seven times**.

Rights of Children Born Through ART:

Children born through ART procedures are recognized as **biological children** of the **commissioning couple** or the **woman** who initiated the procedure. These children are entitled to all the **rights and privileges** available to **natural children** under the law.

The **ART Act** also includes stringent **prohibitions**:

- **Sex selection**
- **Sale of human embryos or gametes**
- **Use of intermediaries** to obtain donors

Violations of these provisions are subject to **penalties**, including **fines** and **imprisonment**, depending on the severity of the offense.

Current Legal Challenge:



The ongoing case has raised concerns over the **age restrictions** imposed by the ART Act, especially its impact on women over 50. This legal challenge could set a significant precedent for the interpretation and future application of the **ART Act**, particularly concerning **age-related eligibility criteria**.

The **Assisted Reproductive Technology (Regulation) Act** aims to provide a more **regulated** and **ethical framework** for ART procedures in India, but this recent challenge highlights ongoing debates about **age restrictions** and **individual rights** in reproductive technology. As this case progresses, it will be essential to see whether **age-based restrictions** will be reconsidered or revised in future legislation.

Should Convicted Persons Be Allowed to Contest Elections?

Context: The **Supreme Court of India** is currently hearing petitions demanding a **lifetime ban** on convicted individuals from contesting elections. This debate raises critical questions about **legal provisions**, **judicial precedents**, and the broader implications of **criminalization in politics**.

Legal Provisions Under the Representation of the People Act, 1951:

Disqualification Based on Conviction:

- **Section 8(3):** A person convicted of a criminal offense and sentenced to **at least two years of imprisonment** is **disqualified** from contesting elections.
- This **disqualification period lasts for six years** after the person's release from prison.

Disqualification for Specific Offenses:

- **Section 8(1)** mandates automatic disqualification for certain serious crimes, irrespective of the sentence length. These include:
 - **Rape**
 - **Offenses under the Protection of Civil Rights Act** (Untouchability)
 - **Unlawful Activities (Prevention) Act (UAPA)**
 - **Prevention of Corruption Act**
- The **disqualification extends for six years beyond release from prison**.

Election Commission's Power to Remove Disqualification:

- **Section 11:** The **Election Commission (EC)** has the authority to **reduce or remove** the disqualification period.
- **Controversy:** In **2019**, the EC **reduced the disqualification** period of **Prem Singh Tamang**, allowing him to contest elections despite a **corruption conviction**.

Key Supreme Court Judgments on Decriminalization of Politics:

Association for Democratic Reforms (ADR) Case (2002):

- **Mandated candidates to disclose their criminal records** while filing nominations.
- Strengthened **voter awareness** and **transparency** in elections.

CEC vs. Jan Chaukidar (2013):

- The **Patna High Court** ruled that **undertrial prisoners** are **not eligible to contest elections** since they are not 'electors.'
- The **Supreme Court upheld** this ruling, but **Parliament later overturned it** through an amendment.

Lily Thomas Case (2013):

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- The Supreme Court **struck down Section 8(4)** of the RP Act, which previously allowed convicted legislators to **continue in office** if they filed an appeal.
- As a result, a **sitting legislator is now immediately disqualified** upon conviction.

Arguments For a Lifetime Ban on Convicted Politicians:

1. **Strengthening Electoral Integrity:**
 - Politics should be free from **criminal influence**.
 - Ensuring **clean governance** promotes **public trust in democracy**.
2. **Preventing Misuse of Power:**
 - Convicted individuals may use **political influence** to manipulate legal proceedings.
 - A **lifetime ban discourages the misuse of legal loopholes**.
3. **Global Best Practices:**
 - Many democracies impose strict disqualification rules on **convicted politicians**.
 - **India, as the world's largest democracy, should set a strong precedent**.

Arguments Against a Lifetime Ban on Convicted Politicians:

1. **Right to Rehabilitation:**
 - A **lifetime ban violates the fundamental right** to seek public office after serving a sentence.
 - Other professionals (doctors, lawyers, bureaucrats) **do not face lifetime bans** for convictions.
2. **Judicial Delays and Misuse:**
 - **False cases and politically motivated convictions** are common in India.
 - A lifetime ban could be misused to **eliminate political rivals**.
3. **Existing Laws Already Ensure Disqualification:**
 - **Current disqualification rules** (six-year ban after release) **strike a balance** between punishment and rehabilitation.

Conclusion: The Need for a Balanced Approach

The debate over whether convicted individuals should face a **lifetime ban from elections** is complex. While **preventing criminal elements from entering politics** is crucial, a **blanket lifetime ban may be excessive and prone to misuse**. A potential **middle path** could involve:

- **Stricter scrutiny of cases involving serious crimes like corruption and sexual offenses.**
- **Enhanced judicial safeguards to prevent misuse** of disqualification provisions.
- **Public accountability mechanisms** to ensure greater **transparency** in candidate selection.

As the Supreme Court deliberates on this issue, its verdict will shape the future of **ethical governance and electoral democracy in India**.



India's Obscenity Laws: Ranveer Allahbadia Case & Legal Perspectives

Context: The **Mumbai Police** have initiated an investigation into **YouTuber Ranveer Allahbadia**, comedian **Samay Raina**, and **Apoorva Makhija** for allegedly making obscene remarks on the YouTube show *India's Got Latent*. The case has sparked discussions on **obscenity laws**, **free speech**, and **digital content regulation** in India.



Obscenity Laws in India:

Section 294 – Punishment for Obscene Material:

- Prohibits the **sale, import, export, advertisement, or profit** from obscene content (books, paintings, electronic media, etc.).
- Defines obscene material as anything **lascivious, excessively sexual, or corrupting** to viewers.
- Punishment:** Up to **2 years imprisonment** and a fine of up to **5,000** (first offense).

Obscenity in Digital Spaces: Section 67 of the IT Act, 2000:

- Punishes** the **publishing or transmission** of obscene material online.
- Uses the **same obscenity definition** as Section 294.
- Punishment:** Up to **3 years imprisonment** and a fine of **5 lakh** (first offense).

Evolution of the Court's Understanding of Obscenity:

Early Rulings: The Hicklin Test

- Ranjit D Udeshi v. State of Maharashtra (1964):** The Supreme Court ruled that the novel *Lady Chatterley's Lover* was obscene.
- Based on the **Hicklin test** (UK, 1868), which judged material by whether it could "deprave and corrupt" vulnerable individuals.

International Shifts in Obscenity Laws:

- UK (1959):** Introduced the **Obscene Publications Act**, requiring works to be judged "as a whole."
- US (Roth v. United States, 1957):** Adopted the **community standards test**, assessing material based on contemporary social norms.

India's Shift to the Community Standards Test:

- Aveek Sarkar v. State of West Bengal (2014):** The Supreme Court ruled that **obscenity must be assessed in context**, rejecting the **Hicklin test**.
- Example: A **nude photograph** of Boris Becker and his fiancée was **not** considered obscene, as the content was judged based on **evolving community standards**.

Obscenity in Online Content: Court Rulings

Supreme Court Ruling on *College Romance* (March 2024):

- The court **quashed obscenity charges** against the makers of the web series *College Romance* under **Section 292 IPC** and **Section 67 IT Act**.
- Key Arguments:**
 - Obscenity ≠ Profanity:** Foul language alone does not constitute obscenity.
 - Context Matters:** Obscenity must **arouse sexual or lustful thoughts**, which the show did not.

Application of the Community Standards Test:

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- The **court ruled** that language reflecting **anger, frustration, or humor** is not inherently obscene.
- Set a **precedent for online content**, making it harder for authorities to misuse obscenity laws.

Ranveer Allahbadia Controversy: Legal Charges & Implications

The FIR Against Ranveer Allahbadia & Others:

- Mumbai Police have filed an **FIR against YouTuber Ranveer Allahbadia**, comedian **Samay Raina**, and **Apoorva Makhija**.
- The controversy stems from **alleged offensive remarks** made on *India's Got Latent*, targeting the **Indian family system and religious sentiments**.

Legal Provisions Invoked:

Section	Description	Punishment
Section 79	Insulting the modesty of a woman through words or gestures.	Up to 3 years imprisonment + fine.
Section 196	Promoting enmity between groups based on religion, race, etc.	Up to 3 years imprisonment , fine, or both.
Section 296	Publicly performing obscene acts, songs, or words.	Up to 3 months imprisonment , fine, or both.
Section 3(5)	If multiple people act with a common intent, all are equally liable.	Punishment based on the offense committed.

Key Allegations:

- **Demeaning Indian family values** and **offending religious sentiments**.
- **Inappropriate discussions on sex and parents** on a public platform.
- Complaints claim that the **show crossed ethical boundaries** of **free speech and responsible content creation**.

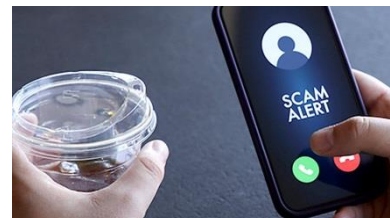
Conclusion: Balancing Free Speech & Obscenity Laws

The **Ranveer Allahbadia case** highlights the **complex intersection of free speech, morality, and obscenity laws** in India. While **obscenity laws** are necessary to regulate harmful content, they must not be misused to suppress artistic freedom and open discussions.

TRAI's New Rules to Tackle Spam Calls & Messages

Context: India's telecom regulator, **TRAI**, has introduced **new regulations** under the **Telecom Commercial Communications Customer Preference Regulations (TCCPR), 2018**, aimed at reducing **spam calls and messages**.

Leading telecom providers such as **Airtel, Jio, and Vi** must now **monitor call and SMS patterns in real time** to detect and report spammers. Any **failure to comply** will result in hefty **penalties ranging from 2 lakh for the first offense to 10 lakh for repeated violations**.



These updated regulations aim to **protect consumers** from intrusive spam communication and ensure a **more secure and transparent telecom network**.

How TRAI is Cracking Down on Spam Calls & Messages:

1. Faster Action Against Spam:

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- Consumers can now **report spam calls and messages more easily**.
- **Telecom operators must take action within 5 days**, a major improvement from the earlier 30-day timeframe.

2. Clear Identification of Spam Calls:

- Telemarketers **can no longer use normal 10-digit numbers** for promotional calls.
- Instead, calls will be categorized as:
 - **140 series** – Reserved for promotional calls.
 - **1600 series** – Dedicated to transactional and service-related calls (already in effect).

3. Opt-Out Option for Promotional Messages:

- Users can now easily **opt out of promotional messages** through telecom providers.
- However, they will have the flexibility to **opt back in whenever they choose**.

4. Stricter Monitoring of Spam Activity:

- Telecom operators will **analyze call and SMS patterns** in real time based on:
 - **High call volumes**
 - **Short call durations**
 - **Unusual incoming-to-outgoing call ratios**
- This monitoring will help **identify and block spammers more effectively**.

5. Stronger Verification & Harsher Penalties:

- Telemarketers must now undergo **physical verification, biometric authentication, and link their mobile number to their identity**.
- **Repeat violators will have all their telecom resources permanently blocked**.
- Telecom companies are required to **maintain detailed records of spam complaints and sender details** to ensure **quick and effective action**.

Spam Calls: A Growing Problem in India

Millions of Indians **face relentless spam calls every day**, especially from **banking, insurance, and financial service providers**. Despite multiple crackdowns, the problem has continued to **worsen over time**.

A LocalCircles survey (Feb 2023) of 12,000 respondents found that:

- **60%** receive **three or more spam calls daily**.
- **30%** get **one to two spam calls every day**.
- **36%** receive **three to five spam calls daily**.
- **21%** report receiving **six to ten unwanted calls each day**.
- **3%** are bombarded with **over ten spam calls daily**.

With telecom operators sometimes playing a role in **the rising spam call surge**, TRAI's **new stringent measures aim to bring relief to millions of frustrated consumers**.

President's Rule Imposed in Manipur, 11th Time in State's History

Context: The President of India has issued a **proclamation imposing President's Rule in Manipur**, placing the state assembly under **suspended animation**. This marks the **11th instance** of President's Rule in the state, with the **last imposition occurring in 2001-02**.

What is President's Rule?

Constitutional Provision: Article 356:

Under **Article 356 of the Indian Constitution**, the President can impose central rule in a state if:

- The **Governor's report** indicates that the **state government is unable to function as per constitutional provisions**.
- The **President is satisfied** that the state's governance **cannot be carried out in accordance with the Constitution**.

Duration & Parliamentary Approval:

- As per **Article 356(3)**, **President's Rule remains in effect for two months** unless approved by **both Houses of Parliament** through a **simple majority**.
- If approved, it can be **extended up to six months**.
- The maximum duration is **three years**, but **Parliament must approve an extension every six months**.

How Can It Be Revoked?

- **President's Rule can be revoked** by the President through a **subsequent proclamation**, restoring normal governance in the state.

What Happens When President's Rule is Imposed?

- The **President takes over the functions of the State Government** and assumes the **powers of the Governor**.
- The **state legislature's powers are transferred to Parliament**.
- The **functioning of the High Court remains unaffected**.

Key Judicial Ruling: S.R. Bommai vs Union of India (1994):

- The **Supreme Court ruled** that **President's Rule under Article 356 is subject to judicial review**.
- The **President cannot dissolve a state legislative assembly immediately**—this can only happen **after parliamentary approval** of the proclamation.
- Until Parliament grants approval, the **state assembly remains suspended, not dissolved**.

Significance of the Latest Imposition in Manipur:

With **political instability in Manipur**, the central government has once again invoked **Article 356**, taking direct control of the state's governance. The move raises **questions about governance, constitutional mechanisms, and the future political landscape of Manipur**.

All eyes are now on the **Parliament's decision** on whether to extend or revoke **President's Rule** in the state.



Union Government Releases Report on Panchayat Devolution Status

Context: The Union Government has released a report titled 'Status of Devolution to Panchayats in States – An Indicative Evidence-Based Ranking', offering a detailed assessment of how effectively Panchayats function under the 73rd Constitutional Amendment.

This report provides **key insights** into the **progress of devolution**, highlighting areas of improvement and major challenges.

Key Findings of the Report:

Panchayat Devolution Index:

The report ranks States and Union Territories based on six key dimensions of devolution:

1. Framework
 2. Functions
 3. Finances
 4. Functionaries
 5. Capacity Enhancement
 6. Accountability
- Overall devolution has improved from 39.9% in 2013-14 to 43.9% in 2021-22.
 - Top 3 States in Devolution:
 - Karnataka
 - Kerala
 - Tamil Nadu

Capacity Building Improvements:

- Capacity enhancement for Panchayats has increased from 44% to 54.6%, driven by initiatives like the Rashtriya Gram Swaraj Abhiyan (RGSA).

Challenges Hindering Effective Devolution:

1. Election Management Issues:

- State Election Commissions (SECs) are sometimes forced to consult state governments on election dates, leading to delays and potential political interference.

2. Weak Implementation of District Planning Committees:

- District Planning Committees (DPCs) are constitutionally mandated under Article 243ZD, yet detailed grassroots-level planning is rarely undertaken in most states.

3. Panchayats Overlooked in Governance:

- Multiple parallel bodies operate in areas meant for Panchayats under the Eleventh Schedule, weakening their constitutional authority.

Key Recommendations for Strengthening Panchayats:

1. Empowering State Election Commissions (SECs):

- Grant full autonomy to SECs, ensuring they can independently handle election schedules, delimitation, and seat reservations, without state government interference.





2. Strengthening Panchayat Governance:

- Establish **structured district planning frameworks**, ensuring Panchayats work in **alignment with state and national policies**.

3. Direct Fund Allocation to Panchayats:

- Ensure **all funds for subjects listed in the Eleventh Schedule** are transferred **directly to Panchayats**, rather than being diverted through **parallel bodies**.

The Way Forward:

The findings of the report emphasize the progress made in empowering Panchayats but also highlight **critical gaps in governance and autonomy**.

With **proper implementation of the recommendations**, Panchayats can be **strengthened to play a central role in local governance**, ensuring **effective grassroots democracy and development** across India.

Draft Advocates (Amendment) Bill, 2025: Key Highlights and Implications

Context: The Government of India is set to introduce amendments to the **Advocates Act, 1961**, aiming to **modernize and strengthen the legal framework** governing the legal profession in the country.

About the Bill:

- The **Advocates Act, 1961**, originally enacted to **regulate the legal profession**, ensures **client protection** and maintains **disciplinary standards** through the **Bar Council of India (BCI)** and **State Bar Councils**.
- While **law firms** in India are already governed as **corporate entities**, **foreign lawyers** have not been previously recognized under the Act.
- The **Department of Legal Affairs** has prepared the **Advocates (Amendment) Bill, 2025**, along with a **comparative statement** outlining existing provisions and proposed changes.
- A major highlight of the bill is that it **opens the doors for foreign law firms and lawyers** to operate in India.



Key Features of the Bill:

1. Strengthening the Role of the Bar Council of India (BCI):

- The **BCI will have expanded regulatory powers**, including overseeing **law firms operating across multiple states**.
- The **central government** will have the **authority to override BCI regulations** if they conflict with government policies.

2. Framework for Foreign Law Firms:

- The amendments propose a **structured regulatory framework** for **foreign law firms** looking to enter the Indian market.
- This move aims to **align India's legal profession with global best practices** and facilitate **cross-border legal collaboration**.

3. Government's Increased Role in the BCI:

- The **central government will be empowered to nominate up to three members** to the **Bar Council of India**.
- These members will join existing officials like the **Attorney General and Solicitor General**.



- **Section 49B** grants the **central government** the right to **issue directives** to the BCI for effective implementation of the Act.

4. Regulation of Strikes and Boycotts by Lawyers:

- **Section 35A** prohibits lawyers from **going on strike or boycotting court proceedings** if it **disrupts judicial functions**.
- Lawyers may, however, engage in **symbolic protests or one-day strikes**, provided they **do not affect clients' rights**.

5. Transfer of Bar Council Registration:

- Advocates wishing to **transfer their registration from one state bar council to another** will be required to **pay a prescribed fee** and obtain **BCI approval**.

6. Disqualification for Advocates with Serious Convictions:

- Advocates **convicted of offenses** carrying a **minimum sentence of three years** will be **removed from the state roll**, subject to **confirmation by the High Court or Supreme Court**.

7. Expanded Definitions in Legal Profession:

- The definition of a **law graduate** now includes individuals obtaining **law degrees from institutions recognized by the BCI**.
- The term "**legal practitioner**" is broadened to **include corporate lawyers and lawyers working with foreign law firms**.

8. Stricter Punishment for Unauthorized Legal Practice:

- **Practicing law without authorization** will now attract **harsher penalties**.
- The punishment has been **increased from six months to one year of imprisonment** and/or a **fine of up to 2 lakh**.

Conclusion:

The **Advocates (Amendment) Bill, 2025** is a **significant step** in modernizing India's legal profession. By **introducing regulatory changes, expanding definitions, and allowing foreign legal entities**, the government aims to **make India's legal system more robust, transparent, and globally competitive**.

Vice-President Questions CJI's Role in Executive Appointments

Context: Vice-President **Jagdeep Dhankhar** has raised concerns over the **involvement of the Chief Justice of India (CJI)** in executive appointments, particularly in the selection of the **CBI Director**. He questioned the **legal basis** for this practice and stressed the importance of maintaining the **separation of powers** in India's democratic framework.



Understanding Separation of Powers:

The **separation of powers** is a fundamental principle that ensures the division of government functions into three distinct branches:

- **Executive** – Implements laws
- **Legislature** – Makes laws
- **Judiciary** – Interprets laws



This principle establishes a system of **checks and balances** to prevent any single branch from becoming too powerful or interfering with the others. The **Indian Constitution** upholds this doctrine to ensure **democratic governance and the rule of law**.

Separation of Powers in Practice:

While the doctrine is fundamental, in India, it is not **absolute** but rather ensures **coordination** between the branches. Some areas where this overlap is evident include:

- **Judicial Appointments** – The **Collegium System** allows judicial appointments by the **Executive**, in consultation with the **Judiciary**.
- **Legislative-Executive Overlap** – The **President's power to issue ordinances** gives the **Executive** a role in lawmaking.

Challenges to Separation of Powers:

Despite its importance, certain issues pose challenges to this principle:

Judicial Activism:

At times, the **Judiciary intervenes** in matters traditionally under the **Executive or Legislature**, such as governance policies and environmental decisions, raising concerns about **judicial overreach**.

Executive Influence on the Judiciary:

The **Executive** may attempt to **influence judicial appointments** or **interfere in judicial matters**, as seen in debates over the **Collegium system**.

Key Constitutional Provisions:

- **Article 50** – Directs the **State** to ensure the separation of the **Judiciary from the Executive**.
- **Articles 74 & 163** – Courts **cannot question the advice** given by the **Council of Ministers** to the **President or Governor**.
- **Articles 122 & 212** – Courts **cannot challenge the validity** of **Parliamentary and Legislative proceedings**.
- **Articles 121 & 211** – Parliament and State Legislatures **cannot discuss the judicial conduct** of Supreme Court and High Court judges unless for impeachment.
- **Article 361** – Provides **immunity** to the **President and Governors** from legal accountability for their official actions.

Appointment of CBI Director:

The **Lokpal Act (2014)** established a committee for appointing the **CBI Director**, comprising:

- **Prime Minister (Chairperson)**
- **Leader of the Opposition or Leader of the largest opposition party**
- **Chief Justice of India or a Supreme Court Judge** nominated by the CJI

The Vice-President's remarks bring renewed attention to the **delicate balance** between the **Judiciary and Executive**, sparking debate over the **separation of powers** in India's governance system.

Marital Rape in India: Legal and Social Debate

Context: In the **Gorakhnath Sharma vs. State of Chhattisgarh (2019)** case, the **Chhattisgarh High Court (HC)** ruled that a husband **cannot be charged with rape or unnatural sex** with his wife if she is **above 15 years of age**, regardless of consent.

The court's decision was based on **Exception 2 under Section 375 of the IPC**, which grants husbands **immunity from rape charges** unless the wife is **under 15 years old**.



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Understanding Marital Rape:

Definition:

Marital rape refers to **forced sex or sexual assault** within a marriage, a form of **intimate partner violence**. Unlike many other countries, it is **not a criminal offense in India**.

However, if a couple is **married but living separately**, the **husband can be convicted of rape** if his wife **does not consent** to sexual intercourse.

Legal Provisions in India:

- **Section 375 (2) of IPC:** States that **sexual intercourse between a husband and wife is not considered rape** if the wife is **15 years or older**.
- **Bharatiya Nyaya Sanhita (BNS):** Retains the **exemption for husbands**, but **raises the age of consent to 18**, aligning with the **SC's ruling in Independent Thought vs. Union of India (2017)**.
- **Domestic Violence Act, 2005:** While **marital rape is not criminalized**, a woman can seek **legal protection** against **sexual abuse, humiliation, or violation of dignity** under this act.

Key Judicial Rulings on Marital Rape:

Independent Thought vs. Union of India (2017):

- The **Supreme Court struck down Exception 2 of Section 375 IPC** (Section 63 of BNS) for **wives aged 15-18**, declaring **sexual intercourse with minor wives as rape**.
- The ruling deemed this exception **arbitrary and unconstitutional**, violating **Articles 14 (equality), 15 (non-discrimination), and 21 (right to life and dignity)**.
- It upheld that the **POCSO Act, 2012**, which criminalizes **sexual intercourse with minors**, prevails over the IPC, making **child marriage no defense for rape**.

KS Puttaswamy Case (2017):

- Established **sexual autonomy** as an integral part of **privacy rights**.

Other Recent High Court Rulings:

- **Bombay High Court (2023):** Declared **consensual sex with a minor wife as rape**, rejecting **consent as a valid defense**.
- **Madhya Pradesh High Court (2024):** Ruled that **unnatural sex with a wife does not constitute rape**, stating that the **wife's consent is irrelevant** in such cases.

Judicial Rulings on Unnatural Sex:

Navtej Singh Johar Case (2018): The **Supreme Court decriminalized consensual homosexuality** by partially striking down **Section 377 IPC**.

Government's Position on Marital Rape:

The **Ministry of Home Affairs** informed the **Supreme Court** that while a **husband cannot force his wife** into sexual relations, labeling it as **rape is too harsh and disproportionate**.

Arguments For and Against Criminalizing Marital Rape:

Arguments Supporting Criminalization:

1. **Violation of Autonomy:** Every individual has the **right to refuse sex**, even in marriage.
2. **Supreme Court's Stand:** The **Independent Thought case (2017)** recognized **marital rape for minors**, reinforcing the principle of **consent**.
3. **Equality Before Law:** Exempting husbands from rape laws **violates constitutional rights** under **Articles 14, 15, and 21**.



4. **POCSO & Child Protection:** If **non-consensual sex with minors is a crime**, the same standard should apply to married adults.

Arguments Against Criminalization:

1. **Threat to Marriage:** Criminalizing **marital rape may destabilize relationships** and lead to **misuse of laws**.
2. **Existing Laws Are Sufficient:** **Domestic violence laws** already offer **protection from sexual harassment** within marriage.
3. **Risk of Misuse:** There is a **possibility of false allegations** in **divorce and child custody cases**.
4. **Social & Cultural Norms:** In many societies, marriage is traditionally linked to **sexual relations**, making legal reforms complex.
5. **Legislative Decision:** The government argues that **courts should not interfere**, as **marital rape laws should be decided by the legislature**.

Marital Rape Laws Across the World:

- **Criminalized in 77 countries**, recognized under **general sexual assault laws** in 74 nations, and **decriminalized or given immunity** in 34 nations.
- **Illegal in 50 U.S. states**, as well as in **Canada, the UK, Australia, New Zealand, Israel, France, Sweden, Denmark, Norway, and several others**.
- The **UK removed the marital rape exception in 1991**, despite the **IPC being originally based on British law**.

What Can Be Done to Address Marital Rape?

Jaya Jaitley Committee Recommendations:

- **Increase the legal marriage age for women from 18 to 21**, promoting **gender equality** and **reducing non-consensual sex risks**.

Legislative Reforms:

- Amend the **BNS to remove marital rape immunity** and legally recognize **spousal consent**.

Alternative Legal Frameworks:

- Expand the **Domestic Violence Act, 2005**, explicitly **including marital sexual violence** with stronger **civil remedies** such as **restraining orders and compensation**.

Adopting Global Best Practices:

- India can **study legal frameworks** from **the UK, Canada, and Australia** to craft **culturally adaptive marital rape laws** while balancing **human rights with socio-cultural realities**.

Conclusion:

The **criminalization of marital rape** remains a **complex issue**, balancing **individual rights, legal equality, and cultural traditions**. While **many countries** have recognized **spousal consent as essential**, **India still provides legal immunity to husbands**.

With **growing judicial emphasis** on **autonomy and dignity**, the debate continues. Whether through **legislative action or judicial intervention**, legal clarity is essential to protect **the fundamental rights of women** while addressing **societal concerns**.



New Chief Election Commissioner Appointed

Context: Prime Minister **Narendra Modi**, Home Minister **Amit Shah**, and Leader of Opposition **Rahul Gandhi** recently met to appoint **Gyanesh Kumar** as the **Chief Election Commissioner (CEC)** of India.

Election Commission of India (ECI):

- The **Election Commission (EC)** is an **autonomous constitutional authority** that oversees elections in India.
- It conducts elections for the **Lok Sabha, Rajya Sabha, State Assemblies, President, and Vice President**.
- The commission consists of **one Chief Election Commissioner (CEC)** and **two Election Commissioners (ECs)**.
- While all three commissioners have **equal power**, the **CEC is the first among equals**, similar to the **Chief Justice of India**.



Appointment of the CEC: Then vs Now:

Earlier:

- There was **no specific law** for appointing the **CEC and ECs**.
- Appointments were made by the **President on the advice of the Prime Minister**.
- The **senior-most EC** was usually promoted as the next CEC.

Now (Under the 2023 Law):

- The **Chief Election Commissioner and Other Election Commissioners (Appointment, Conditions of Service and Term of Office) Act, 2023** now governs appointments.
- **Selection Process:**
 - The **President** appoints the CEC based on the recommendation of a **Selection Committee**.
 - The **Selection Committee** includes: **Prime Minister**
 - **A Union Cabinet Minister**
 - **Leader of Opposition/Largest Opposition Party Leader in Lok Sabha**
 - A **Search Committee**, led by the **Cabinet Secretary**, prepares a **panel of candidates** for selection.
 - Candidates must have **served at least as a Secretary to the Central Government**.

Changes in Salary & Service Conditions:

- Under the **1991 Act**, the CEC & ECs received a salary equal to a **Supreme Court Judge**.
- Under the **2023 Act**, their salary is now equivalent to that of a **Cabinet Secretary**.

This reform aims to ensure **greater transparency and fairness** in the **appointment of election commissioners**, shaping the future of **India's democratic process**.

Understanding President's Rule: Function, Grounds, and Impact

Context: President's Rule, also referred to as **State Emergency**, is a provision in the Indian Constitution under **Article 356**, where the Union government takes over the administration of a state due to the **failure of constitutional machinery**. This typically occurs when a state government fails to function according to the Constitution, often due to political instability or unrest.

President's rule



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The Imposition of President's Rule in Manipur:

On **February 13, 2025**, following the resignation of **Manipur Chief Minister N. Biren Singh**, the **Union government** invoked **President's Rule** in **Manipur**. The **Ministry of Home Affairs** issued a notification stating that President **Droupadi Murmu** was satisfied that a situation had arisen in which **Manipur's government could not function** in accordance with the Constitution.

The immediate reason for the imposition of President's Rule is the **ethnic violence** between the **Meitei** and **Kuki-Zo communities**, which has resulted in **over 250 deaths** and displaced more than **60,000 people**. The crisis stemmed from the Meitei demand for **Scheduled Tribe (ST) status**, opposed by the Kuki-Zo community, leading to political deadlock following the Chief Minister's resignation.

Constitutional Provisions for Emergencies:

The **Indian Constitution** provides for emergency provisions under **Part XVIII**, which are aimed at safeguarding India's sovereignty, unity, and security in exceptional situations. There are three types of emergencies:

1. **National Emergency** (Article 352)
2. **State Emergency** (Article 356) – President's Rule
3. **Financial Emergency** (Article 360)

President's Rule Under Article 356: Grounds and Procedure:

The grounds for imposing President's Rule under **Article 356** arise when a state's **constitutional machinery fails**, due to either **non-performance** or **malperformance** of the state government. Here's how it functions:

Procedure for Imposition:

- The **President** issues a **proclamation** based on the **Governor's report** or other sources, stating that the state government cannot function according to the Constitution.
- **Executive powers** of the state are transferred to the **Union Government**, and legislative powers are handed over to **Parliament**.
- **High Court powers** remain unaffected during this period.

Relation to Articles 355 & 365:

- **Article 355** mandates the Union to protect states from external aggression and internal disturbances.
- **Article 365** allows the President to declare a constitutional emergency if a state **disobeys Union directives**.

Duration and Parliamentary Approval:

- **Initial Duration:** The proclamation must be approved by **both Houses of Parliament** within two months by a **simple majority**; otherwise, it automatically ceases to operate.
- **Extension:** After approval, President's Rule can last for up to **six months**, extendable in **six-month increments** with continued parliamentary approval.
- **Maximum Duration:** It can last for up to **three years** if:
 - A **National Emergency** is in force, or
 - The **Election Commission** certifies that state elections cannot be conducted.
- **Revocation:** The President has the authority to **revoke** President's Rule at any time through a subsequent proclamation.

Distinction Between President's Rule and National Emergency:

Though both are **emergency provisions**, **President's Rule** and **National Emergency** differ significantly:

Feature	President's Rule (Article 356)	National Emergency (Article 352)
Grounds	Breakdown of constitutional machinery in a state	War, external aggression, or armed rebellion
Duration	Max. 3 years	No fixed limit
Parliamentary Approval	Simple majority	Special majority
Effect on State Government	State executive dismissed, legislature dissolved or suspended	State government continues functioning
Effect on Fundamental Rights	No impact	Article 19 suspended; other rights may be suspended
Judicial Review	Subject to judicial review	Subject to judicial review

Historical Usage of President's Rule in India:

President's Rule has been invoked **134 times** across **29 states and Union Territories** since its inclusion in the Constitution. Some key facts include:

- **First Instance:** Imposed in **Punjab** in **1951**.
- **Most Frequent States:** **Manipur** and **Uttar Pradesh**, each having seen President's Rule imposed 10 times before 2025, with Manipur now having 11 instances.
- **Longest Duration:** The longest tenure of President's Rule was in **Jammu & Kashmir**, lasting **4,668 days** (over 12 years).

The Supreme Court's Stand on President's Rule:

In the landmark case **S.R. Bommai vs. Union of India (1994)**, the **Supreme Court** laid down important principles regarding President's Rule:

- **Article 356 should be a last resort** and should not be used for **political reasons**.
- The **Centre** must first issue a **warning** and seek an explanation from the state before imposing President's Rule.
- The **President's power** under Article 356 is **conditional** and subject to **judicial review**.
- The President cannot dissolve a state assembly **without parliamentary approval**, and any invocation must be due to a **constitutional breakdown**.

This ruling emphasizes that **states** are not merely **appendages of the Centre** and that President's Rule should be applied only when absolutely necessary to restore constitutional governance.

Conclusion:

President's Rule is a crucial mechanism to ensure that **constitutional machinery** in a state continues functioning properly. However, it must be invoked judiciously, with due consideration of the **constitutional provisions** and the **judicial review** process. The recent imposition in **Manipur** highlights the importance of this provision in times of crisis, particularly when a state is unable to function effectively due to political or social unrest.

Supreme Court Issues Key Directives on Remission of Sentences

Context: In the case of **Re Policy Strategy for Grant of Bail**, the **Supreme Court (SC)** has issued crucial directives regarding the power of the **appropriate government** to **remit** (reduce or waive) a convict's sentence, either partially or entirely.

The ruling emphasizes the government's obligation to ensure a **fair and transparent remission process** for eligible prisoners.



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Legal Framework Governing Remission:

The authority to grant remission is governed by:

- **Section 432 of the Code of Criminal Procedure (CrPC)**
- **Section 473 of the Bharatiya Nagarik Suraksha Sanhita (BNSS)**

These provisions empower the **appropriate government** to decide on **sentence reductions** based on legal guidelines.

Key Supreme Court Directives:

1. Mandatory Consideration for Remission:

- **States and Union Territories (UTs)** that have an existing **remission policy** must consider eligible convicts for remission, even if they have **not applied** for it.
- **States/UTs without a remission policy** must **formulate one** within two months.

2. Conditions for Granting Remission:

- The **criteria for remission** must be **reasonable, specific, and feasible**.
- Authorities must consider the **nature of the crime** and **public safety concerns** before granting remission.

3. Revocation of Remission:

- If remission is revoked, the government must **record valid reasons** and provide the convict with an **opportunity to respond**.

What is Remission?

Definition:

Remission refers to the **reduction or mitigation** of a convict's **sentence duration** without altering the **nature of the sentence** itself.

Constitutional Provisions for Remission:

- **Article 72:** Grants the **President of India** the power to **pardon, commute, or remit** sentences for offenses under Union laws.
- **Article 161:** Grants similar **remission powers to the Governor** for offenses under **state laws**.

Important Supreme Court Judgments on Remission:

1. Mafabhai Motibhai Sagar Case (2024):

- A **permanent remission order** cannot be **withdrawn or canceled** unless the convict is **given a fair opportunity to be heard**.

2. Mahender Singh Case (2007):

- **Convicts do not have an absolute right to remission**, but they are **legally entitled to be considered** for it.

3. Kehar Singh Case (1988):

- **Denying prisoners the opportunity for remission** goes against the **principle of rehabilitation**.

Significance of the SC's Directions:

The **Supreme Court's ruling** reinforces the **importance of transparency, fairness, and due process** in granting remission. By ensuring that remission is **not arbitrary** and that **all eligible convicts are considered**, the decision strengthens **rehabilitation-focused justice** while balancing **public safety concerns**.

Central Pollution Control Board (CPCB): Role, Functions & Latest Updates

Context: The Central Pollution Control Board (CPCB) has recently submitted a report to the National Green Tribunal (NGT), highlighting alarming findings regarding river water pollution in Prayagraj, Uttar Pradesh, during the ongoing Maha Kumbh Mela. The report underscores the need for urgent pollution control measures to ensure the cleanliness of river water during the grand religious gathering.



About the Central Pollution Control Board (CPCB):

The CPCB is a statutory body established in September 1974 under the Water (Prevention and Control of Pollution) Act, 1974. Later, it was also given powers and responsibilities under the Air (Prevention and Control of Pollution) Act, 1981.

Key Responsibilities of CPCB:

- It acts as a technical advisory body to the Ministry of Environment, Forests, and Climate Change under the Environment (Protection) Act, 1986.
- It plays a crucial role in monitoring, controlling, and preventing air and water pollution across India.
- It coordinates with State Pollution Control Boards (SPCBs) and provides guidance and conflict resolution in pollution-related matters.
- It has also delegated its powers and functions regarding pollution control in Union Territories to the respective regional administrations.

Key Functions of CPCB:

1. Water Pollution Control:

- Ensuring the cleanliness of streams, wells, and water bodies by controlling and preventing water pollution.
- Setting standards for effluent discharge from industries and municipalities.
- Preparing manuals and guidelines for the treatment and disposal of sewage and industrial effluents.

2. Air Pollution Control:

- Monitoring and improving air quality across India.
- Setting National Ambient Air Quality Standards (NAAQS) to regulate pollution levels.
- Laying down standards for emissions from various industrial sectors, vehicles, and power plants.

3. Policy and Advisory Role:

- Advising the Central Government on environmental policies and pollution control measures.
- Coordinating the efforts of State Pollution Control Boards and assisting in technical and legal matters.

Development of Environmental Standards by CPCB:

The CPCB is responsible for formulating and updating environmental standards to regulate pollution. Some of its key areas of standard development include:

1. Air and Water Quality Standards:

- National Ambient Air Quality Standards (NAAQS).
- Water Quality Criteria for different sources such as rivers, lakes, and groundwater.

2. Industry-Specific Emission and Discharge Standards:

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- Regulations on industrial emissions and discharge of pollutants under the Environment Protection Rules, 1986.
- Minimal National Standards (MINAS) for various industries, specifying limits for effluent discharge, air emissions, noise levels, and solid waste disposal.

3. Waste Management Standards:

- Guidelines for the treatment and disposal of biomedical waste through incineration.
- Standards for emission and noise levels for diesel generators, LPG, and CNG generator sets.

Conclusion:

The CPCB plays a pivotal role in ensuring environmental sustainability by regulating air and water pollution, setting standards, and guiding policy decisions. The recent findings on river water pollution at Prayagraj highlight the urgent need for stricter pollution control measures. Strengthening the CPCB's monitoring and enforcement mechanisms will be crucial for achieving cleaner air, water, and a healthier environment for future generations.

CCI Releases Draft Regulations on Cost of Production

Context: The Competition Commission of India (CCI) has issued draft regulations aimed at refining the methodology for determining the cost of production in cases involving allegations of predatory pricing. These regulations seek to ensure a more transparent and effective approach to identifying anti-competitive pricing strategies.



What is Predatory Pricing?

Predatory pricing refers to the practice where businesses sell goods or services below the cost of production with the intent to eliminate competition from the market. Once rivals are forced out, the company may raise prices, leading to a monopolistic or dominant position.

Other Forms of Anti-Competitive Practices:

Apart from predatory pricing, businesses may engage in several other unfair trade practices to restrict competition:

- **Price Fixing** – Competitors collude to set prices at an artificially high level rather than competing fairly.
- **Patent Misuse** – Using patents to block market competition, such as acquiring patents just to file lawsuits against rivals.
- **Collusive Bidding** – Companies coordinate bids in government or large corporate tenders to manipulate contract outcomes.
- **Tying and Bundling** – Requiring customers to purchase one product only if they buy another, leveraging market power.
 - Example: **Microsoft Office**, where products like **MS Word** and **MS Excel** are bundled together.

India's Governance Framework for Fair Competition:

Key Legislations:

- **Competition Act, 2002** – The primary law regulating anti-competitive practices, abuse of dominance, and mergers.
- **Consumer Protection Act, 2019** – Protects consumer interests against unfair trade practices.
- **Intellectual Property Laws** –
 - **Patents Act, 1970** – Governs patent rights to prevent misuse.



- Copyright Act, 1957 – Ensures fair use and prevents monopolization of creative works.

Regulatory Institutions:

- Competition Commission of India (CCI) – The primary body enforcing anti-trust laws.
- Sectoral Regulators:
 - Telecom Regulatory Authority of India (TRAI) – Regulates telecommunications sector.
 - Securities and Exchange Board of India (SEBI) – Ensures fair practices in financial markets.
 - Insurance Regulatory and Development Authority of India (IRDAI) – Oversees the insurance industry.

Conclusion:

The CCI's draft regulations on cost of production are a step towards ensuring fair competition and preventing monopolistic practices. By strengthening enforcement mechanisms and upholding consumer interests, India is fostering a competitive and dynamic market ecosystem.

SC Ruling on Remission: States Must Consider Early Release Automatically

Context: The Supreme Court of India has ruled that states must automatically review the premature release of eligible prisoners under their remission policies, even if the convicts do not apply for it.

- Some categories of convicts are exempt from this benefit.
- The power to grant remission is vested in state governments under the Bharatiya Nyaya Suraksha Sanhita, 2023 (BNSS) and the Code of Criminal Procedure, 1973 (CrPC).
- This decision came as part of the suo motu case *In Re: Policy Strategy for Grant of Bail* (2021), addressing prison overcrowding.
- The ruling marks a shift from previous Supreme Court judgments (2013) that required prisoners to apply for remission.



Understanding Remission Laws in India:

What is Remission?

Remission refers to the reduction of a convict's sentence, allowing for their early release under specific conditions.

Legal Provisions Governing Remission:

- Section 473 of BNSS (formerly Section 432 of CrPC) grants state governments the authority to remit a prisoner's sentence at any time, with or without conditions.
- If the convict violates conditions, the remission can be revoked, and they may be re-arrested without a warrant.

State vs. Constitutional Remission Powers:

- State Governments exercise remission powers under BNSS and CrPC.
- The President and Governors also hold remission powers under Articles 72 and 161 of the Constitution.

Restrictions on Remission:

- Section 475 of BNSS (formerly Section 433A of CrPC) mandates that life convicts sentenced for crimes punishable by death must serve at least 14 years in prison before becoming eligible for remission.



Supreme Court's Ruling on Remission:

Past Judgments on Remission:

The SC examined two key 2013 judgments:

1. **Sangeet & Anr. v. State of Haryana (2013)**: Held that remission **cannot be granted suo motu** and required a **formal application from the convict**.
2. **Mohinder Singh v. State of Punjab (2013)**: Reaffirmed that **courts cannot grant remission on their own initiative**.

Major Shift in Supreme Court's Stance:

- The Court recognized that many **state prison manuals require prison authorities to initiate remission proceedings**.
- The **2013 rulings did not consider the structured remission policies** that exist in various states.

Why Did the Supreme Court Change Its View?

- The **Sangeet judgment aimed to prevent mass or discretionary releases** during festivals or special occasions.
- However, the SC now acknowledges that when **states have clear remission policies, failing to consider remission automatically would be discriminatory**.

States' Obligation to Consider Remission:

- The SC **directed states to review remission eligibility automatically** to ensure fairness.
- Ignoring this duty **violates Article 14 (Right to Equality)** of the Constitution.

Additional Directives Issued by the Supreme Court:

1. **Mandatory Remission Policies**: States must draft a comprehensive remission policy within two months if they do not already have one.

2. Conditions for Granting Remission:

- Following **Mafabhai Motibhai Sagar v. State of Gujarat (2024)**, the SC laid out key considerations:
 - **Nature of the crime, criminal history, and public safety concerns**.
 - **Focus on rehabilitation** while preventing the recurrence of crime.
 - **Conditions must be reasonable**—not overly harsh or impractical.
 - **Clear guidelines** to avoid ambiguity in remission decisions.

3. Protection Against Arbitrary Revocation:

- **Minor violations** should **not** automatically lead to **remission cancellation**.
- **Convicts must be given prior notice** explaining the reasons for cancellation.
- **They should have an opportunity to respond** before a final decision is made.

Prison Overcrowding in India: The Bigger Issue:

Alarming Statistics (NCRB Data, 2022):

- **Total prison inmates: 5,73,220**
- **Prison capacity: 4,36,266**
- **Occupancy rate: 131.4%** (indicating severe overcrowding).

Undertrial Prisoners: The Majority:

- **75.8% of inmates are undertrials**, awaiting a **final verdict**.

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- While the **new remission guidelines** may help **reduce overcrowding**, the **huge number of undertrials** remains a serious concern.

Increase in Premature Releases:

As per the **Prison Statistics in India Report (2022)**:

- 2020: 2,321 prisoners released prematurely.**
- 2021: 2,350 prisoners released.**
- 2022: 5,035 prisoners released (significant rise).**
- However, there is **no official data on the total number of prisoners who have benefitted from remission policies over the years.**

Conclusion:

The **Supreme Court's ruling** marks a **progressive shift** in India's remission policy, ensuring that **eligible convicts** are **considered for early release without needing to apply**. This decision **reinforces principles of fairness and rehabilitation** while **helping to ease India's prison overcrowding crisis**. With states now mandated to adopt clear remission policies, this reform could lead to a **more humane and efficient criminal justice system**.

India Sees Over 30% Drop in Suicide Rates from 1990 to 2021

Context: A recent **Lancet study**, based on data from the **Global Burden of Diseases, Injuries, and Risk Factors Study (GBD) 2021**, highlights concerning global suicide trends.

- On average, one person dies by suicide every 43 seconds worldwide**—a stark reminder of the mental health crisis.



India's Suicide Rate Shows a Significant Decline:

Key Findings for India:

- Suicide death rate has dropped from 18.9 per lakh population in 1990 to 13 per lakh in 2021**—a remarkable 30% decline.
- The decline has been **more significant among women** than men.

Gender-Specific Trends:

- For Women:** Suicide rate decreased from **16.8 per lakh (1990) to 10.3 per lakh (2021)**.
- For Men:** Declined from **20.9 per lakh (1990) to 15.7 per lakh (2021)**.

Who Are the Most Vulnerable?

- Educated women** recorded the **highest suicide rates in 2020**.
- Family problems** emerged as the **leading cause** of suicides among women.

What Helped Reduce Suicide Rates in India?

1. Decriminalization of Suicide:

- The **Mental Healthcare Act, 2017**, removed the **criminal status of attempted suicide**, ensuring that individuals receive **care instead of punishment**.
- The new **Bharatiya Nyaya Sanhita (BNS)** does not include any equivalent of **Section 309 of the IPC**, which earlier **criminalized suicide attempts**.

2. National Suicide Prevention Strategy (2022):

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- Aims to **reduce suicide mortality by 10% by 2030**.
- Focuses on **mental health awareness, early intervention, and crisis support**.

3. Global and National Mental Health Initiatives:

- **WHO's Mental Health Action Plan (2013–2030)** recognizes **mental health as a key factor in overall well-being**.
- **India's National Mental Health Policy (2014)** promotes **better access to mental health care**.
- **Sustainable Development Goal (SDG) Target 3.4** emphasizes **mental health promotion and suicide prevention**.

4. Helplines and Support Systems:

- **Manodarpan and KIRAN toll-free helplines offer 24/7 mental health support**.
- Increased focus on **mental health education, awareness campaigns, and workplace support programs**.

Conclusion:

India's **30% decline in suicide rates** is a **positive step forward**, driven by **progressive policies, decriminalization, and mental health initiatives**. However, **vulnerable groups, especially educated women**, still need **stronger support systems**. With continued **policy efforts, awareness, and better access to mental health care**, India can further **reduce suicide rates and build a mentally healthier society**.

Incorporating Sexual Equality into School Curriculums

Context: The **Supreme Court** has recently emphasized the need to include **sexual equality** in school syllabuses. Alongside **moral and ethical training**, students should be educated on **respectful behavior towards women**, fostering a more **equitable and just society**.

Why is Sexual Equality Important?

Breaking Patriarchal Norms:

- India continues to struggle with **deep-rooted gender biases** that restrict opportunities for women across various sectors.

Boosting Economic Growth:

- The **gender gap in education and employment** negatively impacts economic development.

Bridging Educational Disparities:

- According to **NFHS-5**, while **70.3% of females** are literate, the literacy rate among **males is 84.7%**, highlighting the urgent need for gender-inclusive education.

Encouraging Women's Workforce Participation:

- Only **37% of Indian women (aged 15 and above)** participate in the labor force, compared to **73% of men**, showing a stark imbalance in employment opportunities.

Upholding Constitutional Rights:

Articles **14, 15, and 21** of the **Indian Constitution** guarantee **gender equality**, and embedding it in education aligns with these fundamental rights.

Preventing Gender-Based Violence:

- Early education on **gender equality** can help curb **harassment, discrimination, and violence against women**, fostering a **safer and more inclusive society**.





Challenges to Achieving Sexual Equality:

Traditional Patriarchal Mindset:

- **Societal norms and cultural biases** continue to reinforce gender stereotypes, limiting opportunities for women.

Gaps in Gender-Sensitive Education:

- Many schools **lack gender-inclusive curricula and teacher training**, making it difficult to impart effective gender equality education.

Workplace Inequalities:

Women still face **pay gaps, lack of leadership representation, and gendered career restrictions**, hampering their professional growth.

Rising Cases of Gender-Based Violence:

- Despite legal protections, **sexual harassment, domestic abuse, and crimes against women** remain widespread concerns.

Influence of Digital Media:

The **objectification of women in media** and the surge in **cyber abuse** contribute to gender discrimination and reinforce harmful stereotypes.

Global Efforts Toward Gender Equality:

United Nations Sustainable Development Goal 5:

- Aims to **achieve gender equality and empower all women and girls** globally.

Beijing Declaration and Platform for Action (1995):

- An international commitment by the **United Nations** to promote **gender equality and women's rights**.
- Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW)
- Encourages governments worldwide to adopt **legal protections and policy reforms** against gender-based discrimination.

India's Initiatives to Promote Gender Equality:

Beti Bachao Beti Padhao (BBBP):

- Encourages the **education and empowerment** of the girl child to challenge **gender biases**.

National Education Policy (NEP) 2020:

- Recognizes **gender inclusion** as a top priority and promotes **gender sensitization programs**.

Nirbhaya Fund:

- Supports **safety and security initiatives** aimed at protecting women from violence.

Digital Literacy Program for Women:

A part of **Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)**, this initiative helps women access **e-governance services** and participate in the **digital economy**.

One Stop Centre Scheme (Sakhi Centres):

- Provides comprehensive **support for women facing violence**, including **police assistance, medical aid, legal counseling, psycho-social support, and temporary shelter**.

Final Thoughts:



Integrating **sexual equality education** into school curricula is a **powerful step toward social progress**. A well-structured, **gender-sensitization program** can transform **mindsets**, leading India toward a **more inclusive, equitable, and respectful society**.

Three-Language Policy Dispute: Tamil Nadu vs NEP 2020

Context: The **Union Government** has withheld **2,152 crore** in **Samagra Shiksha** funds from Tamil Nadu due to the state's refusal to implement the **National Education Policy (NEP) 2020**. While Tamil Nadu is open to the **PM SHRI scheme**, it firmly opposes the **three-language formula**, continuing to uphold its **longstanding two-language policy**.



The Centre insists on compliance, arguing for **constitutional alignment**, while Tamil Nadu has **rejected the mandate**, calling it an act of **coercion and overreach**.

Understanding the Three-Language Formula in NEP 2020:

What Does NEP 2020 Say About Languages?

The **Three-Language Formula** has been part of India's education system since the **1968 NEP**. However, unlike previous versions, **NEP 2020 provides flexibility** in language selection instead of mandating Hindi.

Key Features of the Language Policy in NEP 2020:

- **State and Student Choice** – Schools and students can **choose their languages**, with at least **two being Indian languages**.
- **No Mandatory Hindi** – Unlike previous policies, NEP 2020 **does not enforce Hindi learning**.
- **Bilingual Education** – The policy promotes **teaching in the mother tongue or home language** alongside English.
- **Sanskrit as an Option** – Sanskrit is **emphasized** but remains **optional** under the framework.

Tamil Nadu's Strong Opposition:

Decades-Long Resistance to Hindi Imposition:

Tamil Nadu has consistently opposed any **attempts to enforce Hindi**. The resistance dates back to **1937**, when the **Justice Party** opposed the introduction of **compulsory Hindi** in schools under **Rajaji's government**. The **policy was withdrawn** after intense protests that led to **the deaths of two activists, Thalamuthu and Natarajan**.

1965 Anti-Hindi Agitation: A Turning Point:

In **1965**, widespread protests erupted in Tamil Nadu against the **move to make Hindi the sole official language**. The unrest led to **70 deaths** and was one of the most significant language-related agitations in Indian history.

The Dravidian Movement and the Two-Language Policy:

- In **1968**, Chief Minister **C.N. Annadurai** led the **DMK government** in passing a resolution rejecting the **three-language formula**.
- Tamil Nadu **officially adopted the two-language policy** – **Tamil and English** – which has remained unchanged since.
- Successive governments, regardless of political affiliations, have **firmly opposed Hindi instruction** in state-run schools.

Recent Opposition & Policy Revisions:

- In **2019**, Tamil Nadu's opposition forced the Centre to **remove the compulsory Hindi provision** from the **draft NEP 2020**, originally proposed by the **Kasturirangan Committee**.
- The state continues to **strongly resist** any effort to introduce Hindi **through national education policies**.

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Concerns Over Imposing Hindi:

Why Tamil Nadu Sees the Three-Language Policy as Hindi Imposition:

- **Fear of Hindi Becoming the Default Third Language** – Due to a shortage of **teachers for other Indian languages**, Hindi could become the **default choice**, even if it's not mandatory.
- **Centre's Push for Hindi in Non-Hindi States** – In 2019, the government allocated **50 crore to recruit Hindi teachers** in non-Hindi-speaking states, reinforcing suspicions of **linguistic favoritism**.
- **Neglect of South Indian Languages in North Indian Schools** – While Hindi is promoted **nationwide**, there is **no similar initiative** to encourage **Tamil, Telugu, Kannada, or Malayalam** in North Indian schools or Kendriya Vidyalayas.

Finding a Middle Ground:

What's the Best Way Forward?

Constructive Dialogue – A **collaborative discussion** between the Centre and Tamil Nadu is crucial to resolving the issue.

- **Recognizing Tamil Nadu's Success** – The **two-language policy** has been **effective** in ensuring **high enrolment rates and low dropout rates**.
- **Balancing Federalism and Education Policy** – Education is in the **Concurrent List**, meaning **both the Centre and States should work together** instead of imposing policies unilaterally.
- **Unlinking Educational Reforms from Funding** – The **Samagra Shiksha funds** should not be used as a **bargaining tool**, as they are essential for **quality education in the state**.

Tamil Nadu remains **unwavering in its stance** on the **two-language system**, viewing the three-language formula as an **unnecessary disruption**. Instead of enforcing a **one-size-fits-all policy**, the Centre must **engage in meaningful negotiations** that respect **regional linguistic identities** while maintaining **national educational goals**.

Article 101(4) of the Indian Constitution: Ensuring Parliamentary Accountability

Context: Amritpal Singh, currently **detained under the National Security Act (NSA)**, has petitioned the **Punjab and Haryana High Court** seeking permission to attend the ongoing **Parliament session**. His request stems from concerns over possible **disqualification** under **Article 101(4) of the Indian Constitution** due to prolonged absence from the **Lok Sabha**.



Understanding Article 101(4) of the Indian Constitution:

Article **101(4)** outlines the conditions under which a **Member of Parliament (MP)** may lose their seat due to **continued absence** from legislative proceedings.

Key Provisions of Article 101(4):

- If an **MP** is absent from the House for **60 consecutive days** without approval, their seat may be declared **vacant**.
- The **counting of days** excludes periods when **Parliament is not in session**.
- The decision regarding **disqualification** is made by the **Speaker (Lok Sabha)** or **Chairman (Rajya Sabha)**.

Why is Article 101(4) Important?

This provision plays a crucial role in maintaining **parliamentary discipline** and ensuring that elected representatives **actively participate** in legislative functions.

Objectives of Article 101(4):

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- Encourages MPs to **fulfill their legislative duties**.
- Prevents **neglect of parliamentary responsibilities**.
- Strengthens **democratic accountability** and **representation**.

Exceptions and Special Considerations:

Leave of Absence for Valid Reasons:

MPs can request **permission for absence** due to **illness, legal detention, or unavoidable circumstances**. If granted, they **retain their seat** despite their absence.

Judicial Intervention in Special Cases:

In situations where an **MP is detained**, the courts may step in to **facilitate attendance** if deemed necessary, balancing **legal proceedings** with **parliamentary rights**.

Final Thoughts:

Article **101(4)** upholds the **integrity of parliamentary democracy** by ensuring that **elected leaders** remain **actively engaged** in governance. However, it also provides **flexibility** for legitimate absences, ensuring a **fair and balanced approach** to parliamentary participation.

Internet Shutdowns in India: Balancing Security and Freedom

Context: A recent report by the **advocacy group 'Access Now'** highlights that **India recorded the second-highest number of internet shutdowns in 2024**, accounting for **28% of global disruptions**.

Global and National Trends in Internet Shutdowns:

- ✓ **Global Scenario:** A total of **296 internet shutdowns** occurred worldwide in 2024.
- ✓ **India's Position:** With **84 shutdowns**, India was second only to **Myanmar**, which had **one more disruption**.
- ✓ **Comparative Decline:** India saw **fewer shutdowns** in 2024 compared to the previous year. **Affected Regions: 16 States and Union Territories** experienced disruptions.
- ✓ **Most Shutdowns:**
 - **Manipur** – 21 shutdowns
 - **Haryana** – 12 shutdowns
 - **Jammu & Kashmir** – 12 shutdowns
- ✓ **Primary Reasons:**
 - **41 shutdowns** were imposed due to **protests**.
 - **23 shutdowns** were linked to **communal violence**.



Legal Framework Governing Internet Shutdowns:

1. Grounds for Imposing Shutdowns:

- The **Indian Telegraph Act** allows the **temporary suspension of internet services** in cases of "**public emergency**" or "**public safety**."
- However, the law **lacks a clear definition** of what qualifies as an **emergency or safety concern**.

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**2. Earlier Use of Section 144 of CrPC:**

- Before 2017, authorities imposed internet shutdowns under **Section 144 of the Code of Criminal Procedure (CrPC)**.
- **Section 144** grants powers to the **police and District Magistrate** to prevent **unlawful gatherings** and restrict specific activities.

3. Introduction of Suspension Rules (2017):

- In **2017**, the government introduced the **Temporary Suspension of Telecom Services (Public Emergency or Public Safety) Rules**.
- These **rules set guidelines** for **imposing shutdowns** and require a **review by an advisory board within five days**.

4. Landmark Case: Anuradha Bhasin v. Union of India (2020): The Supreme Court ruled that indefinite internet shutdowns are **unconstitutional**.**Key Takeaways from the Verdict:**

- **Internet access is a fundamental right** under Article 19.
- **Shutdowns must be temporary, not indefinite**.
- The **government must publish orders** imposing restrictions under **Section 144**.
- Any shutdown order is **subject to judicial review**.

Arguments in Favor of Internet Shutdowns:

- **National Security:** Helps curb **misinformation**, **prevent unlawful activities**, and **neutralize security threats**.
- **Temporary and Targeted:** Shutdowns are used as a **short-term measure**, not a **permanent restriction**.
- **Preventing Unrest and Violence:** Helps prevent **riots, protests, or organized unrest**.
- **Combating Fake News:** Stops the **spread of misinformation** and **rumors** during crises.

Arguments Against Internet Shutdowns:

- **Violation of Freedom of Expression:** Restricts the **right to speech and information**, guaranteed by the Constitution.
- **Negative Impact on Global Reputation:** Frequent shutdowns affect **India's image**, discouraging **foreign investors**.
- **Human Rights Concerns:** Hinders access to **information, free speech, and peaceful assembly**.
- **Economic Disruptions:** Affects the **digital economy**, causing **financial losses**.
- **Educational Setbacks:** Interrupts **online learning**, affecting **students** across the country.
- **Lack of Transparency:** Governments must **clearly communicate** the **reasons and duration** of internet restrictions.

Conclusion:

In a **democracy**, restricting internet access should be **justified and transparent**. **Indiscriminate shutdowns** not only affect **social and economic activities** but are often **ineffective** in addressing security concerns. India needs a **more accountable and balanced approach** to **internet governance**, ensuring both **public safety and fundamental rights** are upheld.

India's Social Protection Coverage Doubles to 49%: ILO Report

Context: According to the ILO's World Social Protection Report 2024-26, the proportion of India's population covered by at least one social protection benefit (excluding healthcare) has risen from 24% in 2021 to 49% in 2024. This marks a significant milestone in India's efforts to strengthen social security and economic resilience.

What is Social Protection?

Social protection refers to **benefits provided to individuals** based on the **risks they face throughout their life**—such as **unemployment, disability, old age, and economic hardships**. It also supports those suffering from **poverty and social exclusion**.

Why is Social Protection Important?

- **Building an Inclusive Society** – Ensures **security for children, women, the elderly, and persons with disabilities**.
- **Tackling Climate Change and Social Inequality** – Helps combat **poverty, inequality, and social exclusion**, making societies more resilient to climate and economic shocks.
- **Promoting Sustainable Economic Growth** – Encourages **transition to greener jobs and sustainable economic practices**, fostering long-term stability.

Challenges in India's Social Protection System:

- **Limited Coverage for Informal Workers** – A vast segment of India's **informal workforce** remains outside the scope of **comprehensive social security programs**.
- **Gender Disparity in Benefits** – Only **26% of Indian women** are covered by at least one **social protection scheme**, compared to **39% of men**.
- **Low Public Spending on Social Protection** – India allocates just **5% of its GDP** to social protection (excluding healthcare), significantly below the **global average of 13%**.
- **Impact of Automation & AI** – According to **McKinsey**, automation and **artificial intelligence (AI)** could **disrupt around 12 million jobs in India by 2030**, making **social protection** even more crucial.

The Road Ahead: Strengthening Social Protection in India:

- **Expanding Coverage for Informal Workers** – Strengthening **unemployment insurance and pension schemes** to extend coverage to **informal sector workers**.
- **Bridging the Gender Gap** – Enhancing **maternity benefits, pension access, and financial security programs** for women.
- **Better Data & Monitoring** – Improving **data collection and tracking systems** to ensure **social benefits reach the right beneficiaries**.
- **Reskilling for the AI Era** – Implementing **workforce upskilling initiatives** to help workers **adapt to automation and emerging job sectors**.

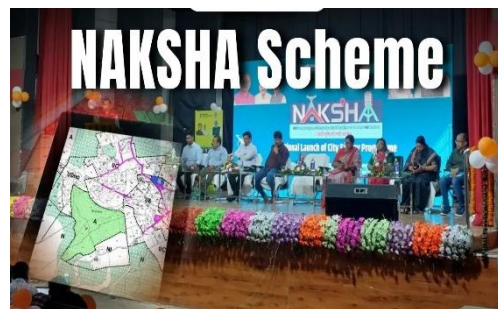
With **rising social protection coverage**, India is taking **significant steps towards a more inclusive and resilient economy**, but **further reforms** are essential to **achieve universal social security**.





NAKSHA Scheme: Revolutionizing Urban Land Records

Context: The **NAKSHA** (National Geospatial Knowledge-based Land Survey of Urban Habitations) scheme is an ambitious project aimed at modernizing urban land records in India. Launched under the **Digital India Land Records Modernization Programme (DILRMP)**, this initiative strives to improve transparency in land ownership and transactions, helping to streamline urban governance. The **Department of Land Resources (DoLR)**, Ministry of Rural Development, is spearheading the implementation of this scheme.



NAKSHA Scheme: Scope, Funding, and Implementation:

Mapping Urban Areas for Better Governance:

The **NAKSHA** initiative focuses on mapping **towns and cities** across India, ensuring improved **land governance**. In its initial phase, it has been introduced as a pilot project across **152 urban local bodies** in **26 states**. It targets cities with a **land area less than 35 sq km** and a **population under 2 lakh**, and is set to be completed within a year. The pilot phase will serve as a model for expanding the project to cover more urban areas.

100% Centrally Funded:

NAKSHA is a **100% centrally funded** project, with an aim to gradually expand its coverage. The government's plan includes covering **4,142.63 sq km** in the initial phase, with future expansion to **4,912 urban local bodies** across the country.

Objectives and Benefits of NAKSHA:

A Comprehensive Geospatial Database:

NAKSHA will establish a **comprehensive geospatial database** for urban land records, integrating **aerial surveys** and **field data** with **Geographical Information Systems (GIS)** technology. The key objectives of the scheme are to:

- **Enhance land governance** and simplify **property record management**.
- Support **efficient urban planning** by improving data accuracy.
- Facilitate **faster property transactions**, ensuring smoother and transparent dealings.
- Improve decision-making, leading to better urban development policies.

Addressing Urban Land Record Challenges:

Urban Land Record Update Needs:

While rural land records have seen significant improvements, many cities still struggle with **outdated** or **unstructured land records**. Except for a few states like **Tamil Nadu, Maharashtra, Gujarat, and Goa**, many urban areas still lack proper land maps. This creates inefficiencies in **governance** and **taxation**. The **NAKSHA** initiative seeks to fill these gaps, addressing the historical challenges of urban land record maintenance.

Government Support and Budget Announcements:

The **NAKSHA scheme** was first proposed in the **Union Budget 2024**, which highlighted the importance of **GIS mapping** for urban land records. The government also focused on:

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- **Digitization of urban land records.**
- Introducing an **IT-based system** for property administration and **tax management**.
- Strengthening the **financial position of urban local bodies**. The initiative was reaffirmed in **Budget 2025**, where emphasis was placed on urban reforms and the launch of the **National Geospatial Mission** under **PM Gati Shakti**.

How the NAKSHA Survey Will Be Conducted:

Innovative Use of Drone Technology:

One of the highlights of the NAKSHA scheme is its use of **drone technology** for precise aerial surveys. The drones are equipped with **high-resolution cameras**:

- **Simple cameras** for general imagery.
- **Oblique angle cameras** with **LiDAR sensors**, offering **5 cm resolution**—much sharper than satellite imagery. These drones will capture detailed images that are then processed to create accurate maps and land records.

Three-Stage Survey Process:

1. Drone Survey & Data Collection:

- Aerial drones capture detailed images of the survey area.
- The collected data is processed to create visual land records.

2. Field Survey & Data Verification:

- Ground surveys will be conducted to verify the property **tax, ownership, and registration records**.
- Based on this, **2D/3D models** are created, and a draft of the **land ownership** details is published.

3. Public Review & Finalization:

- A public review process is held where **claims and objections** are considered.
- Grievances are addressed, and the final **land maps** are published.

Conclusion: The Future of Urban Land Records:

The **NAKSHA** initiative is a transformative step towards modernizing **urban land records**, making them more **accurate, transparent, and efficient**. By leveraging **geospatial data** and cutting-edge **survey technology**, NAKSHA will enhance **urban planning**, streamline **property transactions**, and improve governance. As the project progresses, it promises to bring about significant changes in how land records are managed, benefiting urban dwellers and municipal authorities alike.

Madras High Court's Ruling on Night Arrests of Women: Understanding BNSS & CrPC Provisions

Context: The **Madras High Court** has recently addressed the issue of **nighttime arrests of women**, ruling that the restriction on such arrests under the **Bharatiya Nagarik Suraksha Sanhita (BNSS), 2023**, is **directory, not mandatory**. This decision has sparked discussions on the balance between **women's rights, law enforcement duties, and public safety**.

BNSS Nighttime Arrest of Women: Latest Developments:

The **Madurai Bench** of the **Madras High Court** examined the validity of an **arrest made at 8 PM**, initially ruling it a violation of **Section 46(4) of the CrPC**. However, a **larger bench** later clarified that

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the restriction on night arrests is **not absolute**, meaning that while safeguards exist, violations do not automatically render an arrest illegal.

Key Safeguards for Arresting Women at Night:

1. **Restrictions on Arrest Timing:** As per **Section 43(5) of BNSS** (earlier **Section 46(4) of CrPC**), a **woman cannot be arrested between sunset and sunrise**, except under **exceptional circumstances**.
2. **Magistrate's Permission Requirement:** In **exceptional cases**, a **woman police officer** must obtain **prior written approval** from the **jurisdictional magistrate** before making an arrest.
3. **Protection Against Physical Contact:** The **arresting officer must not touch the woman**, except in cases where the **arrest is made by a woman police officer** or **circumstances require it**.
4. **Ambiguity in 'Exceptional Circumstances':** While the provision is meant to ensure **women's safety**, it **does not clearly define what qualifies as an exceptional case**, leading to **uncertainty** in its application.

Madras High Court's Ruling on Section 46(4) of CrPC:

1. **The Provision is Directory, Not Mandatory:** The **Court observed** that **Section 46(4) does not specify penalties for non-compliance**, suggesting that it is a **guideline rather than a strict rule**.
2. **Public Duty of Police Officers:** Law enforcement officers perform a **public duty**, and **rigid adherence** to procedural restrictions should **not hinder their ability to act swiftly** in serious cases.
3. **Practical Challenges in Heinous Cases:**
 - **In cases of grave crimes committed by women at night**, immediate arrest may be necessary.
 - If a **magistrate is unavailable**, **delayed action could allow the accused to escape**, which may pose a **risk to public safety**.

Historical Background of Section 46(4) of CrPC:

135th Law Commission Report (1989):

- Recommended that **women should not be arrested between sunset and sunrise**.
- In urgent cases, an **arrest report** with reasons had to be **submitted to a superior officer and the magistrate**.

154th Law Commission Report (1996):

- Reaffirmed the **135th report's recommendations** regarding **night arrests of women**.

Incorporation into CrPC (2005):

- Based on these recommendations, **Section 46(4)** was added to the **Criminal Procedure Code (CrPC)** to **enhance safeguards for women**.

Supreme Court's Perspective on Night Arrests of Women:

- The **Nagpur Bench of the Bombay High Court** had ruled that **no woman should be detained without a lady constable and never after sunset or before sunrise**.
- The **Supreme Court** later noted that **strict adherence** to this rule **could create practical difficulties** in certain situations.

Impact of the Madras High Court Ruling:

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Freedom UPSC with **Dhananjay Gautam**

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1. The Rule is Not Absolute:

- The Court clarified that the restriction under **Section 46(4) of CrPC/43(5) of BNSS** is **not an absolute prohibition**.

2. Justification Required for Non-Compliance:

- Failure to comply** with the rule **does not make an arrest automatically illegal**. However, the **police must provide a valid reason** for any **deviation from the procedure**.

3. Need for Clear Guidelines:

- The Court directed **police authorities** to establish **clear guidelines** defining what constitutes "**exceptional circumstances**" to ensure the **provision is not misused**.

Conclusion:

The **Madras High Court's ruling on night arrests of women** seeks to balance **women's legal protections** with **practical law enforcement needs**. While the **BNSS and CrPC provisions offer safeguards**, they are **not absolute**, meaning that **law enforcement agencies must justify any deviation from the standard procedure**. The ruling also highlights the **need for clearer guidelines** to ensure that **women's rights and public safety** are both upheld effectively.

Rise in Women's Workforce Participation: Insights from the Time Use Survey 2024

Context: The **Ministry of Statistics and Programme Implementation (MoSPI)** has released the **Time Use Survey (TUS) 2024**, offering valuable insights into how Indians allocate their time across work, caregiving, and leisure activities. This is the **second all-India survey**, following the first one conducted in **2019**.

A significant takeaway from the latest survey is the **increase in women's participation in employment-related activities**, marking a shift from **unpaid domestic work to paid employment**. This change reflects **evolving labor market dynamics, economic progress, and social transformation** in India.



Key Findings of the Time Use Survey 2024:

Increase in Workforce Participation:

- Women's engagement in **employment-related activities** has grown from **21.8% in 2019 to 25% in 2024**.
- For men, the participation rate increased from **70.9% to 75%**.
- Although the **gender gap remains considerable**, the upward trend for women signifies a positive economic shift.

Decline in Time Spent on Unpaid Domestic Work:

- Women spent **305 minutes per day** on unpaid domestic work in 2024, down from **315 minutes in 2019**, reflecting a gradual transition to paid employment.
- In contrast, **men spent only 88 minutes per day** on domestic chores, highlighting the **persistent gender imbalance in household responsibilities**.

Women's Role in Caregiving:

- 41% of women (aged 15-59) engaged in caregiving**, compared to only **21.4% of men** in the same age group.
- Women spent an average of **137 minutes per day** on caregiving, almost **double the 75 minutes** spent by men.



- Despite the increase in paid work participation, **women continue to bear a disproportionate caregiving burden.**

Impact of Changing Work Dynamics:

Economic Benefits:

The **shift of women from unpaid domestic duties to paid jobs** brings several economic advantages:

- **Higher Household Incomes** – More earning members contribute to financial stability.
- **Boost to Economic Growth** – Increased female labor force participation enhances national productivity.
- **Labor Formalization** – More women in paid jobs mean **better social security and workplace protections.**

Social and Policy Implications:

While progress is evident, **gender disparities persist**, necessitating:

- **Skill Development Programs** to help women secure higher-paying jobs.
- **Flexible Work Policies**, including **remote work** and **part-time options**, to balance professional and domestic responsibilities.
- **Government Support Measures**, such as **maternity benefits**, **affordable childcare**, and **financial incentives** to encourage women's workforce participation.

Leisure and Cultural Activities:

- On average, individuals aged **6 and above** spent **171 minutes daily** on leisure, cultural, and mass-media activities.
- **Men (177 minutes)** spent **slightly more time than women (164 minutes)** on these activities, reflecting the **gendered division of time use.**

Education and Self-Care Trends:

- **89.3% of children (aged 6-14)** participated in educational activities, spending **413 minutes per day on studies.**
- Across all age groups, individuals dedicated **708 minutes daily to self-care and personal maintenance.**

Future Outlook and Recommendations:

1. Strengthening Skill Training:

- Expanding **vocational training programs** for women in **IT, healthcare, and entrepreneurship.**

2. Creating More Job Opportunities:

- Encouraging industries to hire more women through **affirmative action and policy incentives.**

3. Enhancing Social Security Benefits:

- Strengthening **maternity benefits, pension schemes, and workplace protections** for female workers.

4. Workplace Inclusivity Initiatives:

- Promoting **gender-sensitive policies** in both urban and rural employment sectors to ensure **equal opportunities.**

Conclusion:

The **Time Use Survey 2024** highlights a **positive shift toward greater female workforce participation** in India. However, **gender disparities in employment, domestic work, and caregiving remain significant.** Strategic policy interventions, skill development, and supportive work environments are essential to **empower more women to transition from unpaid labor to meaningful employment.**



A continued **focus on gender equity** will not only enhance **economic growth** but also contribute to **India's social progress** and overall development.

CBSE to Introduce Biannual Board Exams from 2025-26

Context: The Central Board of Secondary Education (CBSE) has proposed a **new draft policy** to conduct **Class 10 board exams twice a year**, starting from the **academic session 2025-26**. This initiative is aligned with the **National Education Policy (NEP) 2020**, aiming to provide students with an **opportunity to enhance their performance** and **reduce academic stress**.



Key Highlights of the Proposed Policy:

1. Exam Schedule and Structure:

- The **first board exam** will take place from **February 17 to March 6**.
- The **second board exam** is scheduled from **May 5 to 20**.
- The policy has been **released for public feedback**, inviting opinions from **schools, teachers, parents, and students**.

2. National Education Policy (NEP) 2020 Influence:

- The **NEP 2020** recommends **multiple opportunities** for students to **enhance their scores** instead of relying on a **single exam attempt**.
- This system aims to **reduce exam pressure**, allowing students to perform **at their best**.

Implementation Plan:

- The **biannual exam system** will be introduced for both **Class 10 and Class 12** board exams.
- The first board exam will begin on the **first Tuesday after February 15, 2026**.
- The **improvement exam** (second attempt) will take place in **July 2026**.

Students' Choice and Result Mechanism:

1. Flexibility for Students:

- Students can **choose to appear for the second exam** if they wish to **improve their scores**.
- If a student is **satisfied with their first attempt**, they can **opt-out** of the second exam.

2. Result Calculation and Marksheet Details:

- The **first attempt score** will be available on **DigiLocker** for **Class 11 admissions** if a student decides not to take the second exam.
- The final **mark sheet and pass certificate** will include:
 - **Marks obtained in the first exam.**
 - **Marks obtained in the second exam** (if attempted).
 - **Marks from internal assessments and practicals.**
- The **higher of the two scores** will be considered for the final result.

Conclusion:

The **proposed policy** is a **student-friendly reform**, aiming to **reduce academic stress** and provide **multiple chances for better performance**. CBSE will finalize the policy **after reviewing feedback** from all stakeholders, ensuring a **well-structured and effective implementation**.

Delimitation in India: Impact on Southern States & Parliamentary Representation

Context: Union Home Minister **Amit Shah** assured that **southern states will not lose parliamentary seats** after delimitation, addressing concerns raised by states like **Tamil Nadu and Kerala**.

The **North-South population divide** has been a major issue, as **population growth in the North has been significantly higher** than in the South. If delimitation were solely based on **population data**, northern states would **gain** more seats, while southern states could **lose political influence**.

Delimitation, which **redraws constituency boundaries**, was initially set for **2026** but has been **delayed due to the postponed Census**. India has conducted **four rounds of delimitation** in **1952, 1963, 1973, and 2002**.

Why is Delimitation Necessary?

Delimitation is a constitutional requirement conducted after each **Census** to ensure fair representation in **Parliament and state Assemblies**.

- **Article 82 of the Constitution** mandates the **adjustment of Lok Sabha seats** after every Census based on population changes.
- **Article 81** sets a limit of **550 Lok Sabha seats** (530 from **states** and 20 from **Union Territories**).
- The **seat-to-population ratio must remain uniform**, ensuring equal representation across constituencies.

History of Delimitation in India:

Pre-1976:

- After the **1951, 1961, and 1971** Censuses, seats in **Lok Sabha, Rajya Sabha, and state Assemblies** were **reallocated** to reflect population changes.

42nd Amendment (1976):

- During the **Emergency**, Parliament **froze the total number of Lok Sabha seats** until 2001 to **protect representation of states that controlled population growth**.

2001 Delimitation:

- **Constituency boundaries were redrawn**, but the **number of seats remained unchanged** due to opposition from **southern states**.

Impact of Delimitation on Lok Sabha Seats & Elections:

The **allocation of seats** will depend on the **base average population** set by the future **Delimitation Commission**.

Potential Increase in Lok Sabha Strength:

- In **1977**, each MP represented **10.11 lakh people**. If this ratio is maintained, the **Lok Sabha strength** could **rise to 1,400 seats** based on **2025 population projections**.
- **UP (including Uttarakhand)** could see its seats **triple from 85 to 250**, while **Bihar (including Jharkhand)** could grow from **25 to 82**.
- **Tamil Nadu (39 to 76) and Kerala (20 to 36)** would see **only moderate increases**.

However, the **new Parliament building** has **only 888 seats**, making this formula unlikely.

Impact on Elections:

- **Southern regional parties** fear that **population-based delimitation** will favor **North India-based parties**, shifting the balance of power.

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- The **increase in seats for northern states** could lead to a **political disadvantage for southern states** in Parliament.

Why Are Southern States Concerned?

- **Southern states fear a loss in parliamentary representation**, which could **weaken their national political influence**.
- **Tamil Nadu CM M.K. Stalin** has called an **all-party meeting on March 5** to discuss **delimitation concerns**.
- He warned that **Tamil Nadu could lose seats** due to its **success in population control**, making it a **victim of its own development**.

Conclusion:

Delimitation remains a **sensitive and politically charged issue** in India. While **equal representation is essential**, it must be **balanced** to ensure that **states that have effectively controlled population growth** are **not unfairly penalized**. The final decision on delimitation will **shape India's political future**, influencing governance and policy-making for years to come.

Time Use Survey 2024: Key Findings and Insights

Context: The **Ministry of Statistics and Programme Implementation** has recently released the **Time Use Survey (TUS) 2024**, marking the **second all-India survey** of its kind.

What is the Time Use Survey (TUS)?

The **Time Use Survey** helps in measuring the **time spent by individuals** on various daily activities.



Objectives of the Survey:

- To assess the **participation of men, women, and other groups** in both **paid and unpaid activities**.
- To gather insights into **unpaid caregiving, volunteer work, and domestic services**.
- To analyze the **time spent on learning, socializing, leisure, and self-care activities**.

Conducted by: National Statistics Office (NSO):

Nodal Ministry: Ministry of Statistics & Programme Implementation:

Key Findings of Time Use Survey 2024:

Survey Duration: January – December 2024:

Major Indicators:

1. Participation Rate:

- **Definition:** The percentage of individuals engaging in a specific activity during the day.

2. Average Time Spent per Participant:

- This measures the **average time spent** by individuals who participated in a specific activity.

3. Average Time Spent per Person:

- This accounts for **all individuals**, whether they participated in an activity or not, **distributing the total 1440 minutes of a day** across different tasks.

Key Trends and Changes in 2024:

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**Rising Employment Participation:**

- **75% of men and 25% of women** (aged 15-59) were involved in **employment and related activities** in 2024.
- In 2019, this participation was **70.9% for men and 21.8% for women**.

Shift from Unpaid to Paid Work:

- **Women aged 15-59** spent **305 minutes on unpaid domestic services** in 2024, compared to **315 minutes in 2019**, indicating a shift towards **paid activities**.

Caregiving Responsibilities:

- **41% of women (15-59 years)** participated in **caregiving for household members**, compared to **21.4% of men** in the same age group.
- **Women spent 140 minutes per day** on caregiving, while **men spent only 74 minutes**.
- This highlights the **continued gender disparity in caregiving roles** within Indian households.

Household Production in Rural Areas:

- **24.6% of the rural population (aged 15-59)** engaged in **producing goods for their own use**, spending an average of **121 minutes daily**.

Learning Among Children:

- **89.3% of children (6-14 years)** participated in **learning activities**, dedicating an average of **413 minutes daily** to their education.

Increase in Leisure Activities:

- **People aged 6 years and above** spent **11% of their daily time** on **cultural, leisure, media, and sports activities** in 2024, compared to **9.9% in 2019**.

Time Spent on Self-Care and Maintenance:

- Individuals aged 6 years and above devoted **708 minutes per day** to **self-care and maintenance**.
- **Women spent 706 minutes**, while **men spent 710 minutes**, showing a **balanced focus on personal well-being**.

Conclusion:

The **Time Use Survey 2024** provides valuable insights into **changing work patterns, gender roles, and daily routines in India**. The data reveals **rising employment participation, a gradual shift of women from unpaid to paid work, and a steady increase in leisure activities**. Understanding these trends will help shape **better policies for labor, gender equality, and social welfare** in the future.

Gallantry Awards for Indian Coast Guard Personnel

Context: The Defence Minister recently conferred **Gallantry, Distinguished Service, and Meritorious Service Medals** to the **Indian Coast Guard (ICG)** personnel in recognition of their **exceptional service and bravery**.

Gallantry Awards: Recognizing Heroism:

Gallantry Awards are bestowed upon **armed forces personnel, other security forces, and civilians** for acts of **valor and bravery**. These awards are traditionally announced on **Republic Day (January 26)** and **Independence Day (August 15)**.

Order of Precedence for Gallantry Awards:

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1. **Param Vir Chakra** – India's highest military honor for valor in battle.
2. **Ashoka Chakra** – The highest peacetime gallantry award.
3. **Maha Vir Chakra** – The second-highest war-time gallantry award.
4. **Kirti Chakra** – The second-highest peacetime gallantry award.
5. **Vir Chakra** – The third-highest wartime gallantry award.
6. **Shaurya Chakra** – The third-highest peacetime gallantry award.

Indian Coast Guard (ICG): Guardians of Maritime Security:

About the ICG:

The **Indian Coast Guard (ICG)** is a **maritime security force** tasked with enforcing **maritime laws** and ensuring **coastal defense**. It functions under the **Ministry of Defence**.

- **Established: 1st February 1977**
- **Independent Armed Force Status: 18th August 1978** (after the enactment of the **Coast Guard Act, 1978**)

Why was the ICG Formed?

- In **1972**, the **United Nations Convention on the Law of the Sea (UNCLOS)** granted **Exclusive Economic Zones (EEZs)** to coastal states.
- In response, **India enacted the Maritime Zones of India Act, 1976**, claiming **2.01 million sq km** of ocean territory.
- This vast maritime region required **policing and surveillance**, leading to the formation of the **Indian Coast Guard**.

Jurisdiction of the ICG:

The ICG operates across India's maritime zones, ensuring **law enforcement and security**:

- **Territorial Waters: Up to 12 nautical miles (nm)**
- **Contiguous Zone: Up to 24 nm**
- **Exclusive Economic Zone (EEZ): Up to 200 nm**

ICG's Global Standing:

The **Indian Coast Guard** is the **4th largest Coast Guard in the world**, reflecting **India's strong maritime defense capabilities**.

Conclusion:

The recognition of **ICG personnel** with **Gallantry and Service Awards** highlights their **courage, dedication, and commitment** to safeguarding **India's maritime borders**. Their role remains **crucial in ensuring national security, enforcing maritime laws, and protecting India's vast oceanic territory**.

40-Million-Year-Old Whale Fossil Stolen in Meghalaya

Context: A rare whale fossil, estimated to be **35 to 40 million years old**, has been **stolen** from **Tolegre village** in the **South Garo Hills district** of Meghalaya. This fossil is believed to belong to an **extinct ancestor** of modern whales, possibly **Rodhocetus** or **Ambulocetus**, offering crucial insights into **whale evolution** and the ancient past of the region.



Discovery and Significance:

- The **fossil was discovered** in **May 2023** by a team of explorers.
- The **Geological Survey of India (GSI)** confirmed its **authenticity and age**.
- This fossil holds immense importance as it provides evidence of the **evolutionary transition** of whales from land to sea, contributing to the understanding of **Earth's prehistoric life**.

Understanding Fossils:

Fossils are the **preserved remains or traces of ancient organisms**, offering invaluable information about the **history of life on Earth**.

Types of Fossils:

1. **Body Fossils** – Direct remains of organisms, such as **bones, shells, and leaves**.
2. **Trace Fossils** – Indirect evidence of life, including **footprints, burrows, and feces**.
3. **Chemical Fossils** – Organic compounds left by ancient organisms, preserved in rocks.

Formation of Fossils:

Fossils form through different processes, including:

- **Permineralization** – Minerals in groundwater replace the organic material of bones or shells.
- **Replacement** – Original material is completely replaced by minerals.
- **Impression** – Organism leaves an imprint in soft sediments that later harden into rock.
- **Preservation in Amber** – Small organisms like **insects** get trapped in tree resin, which solidifies over time.

Importance of Fossils:

- **Evolutionary Evidence** – Fossils reveal how species have changed over time.
- **Understanding Geological History** – Help scientists **date rocks** and reconstruct past environments.
- **Paleontology** – The study of fossils aids in reconstructing **ancient ecosystems**.

Additional Aspects of Fossil Study:

- **Fossil Dating** – Techniques like **radiometric dating** and **stratigraphy** help determine fossil age.
- **Index Fossils** – Fossils of species that existed for a short period and were widespread, useful for dating rock layers.
- **Fossil Record** – The collection of all discovered fossils, creating a timeline of life's evolution.

Whales: Evolution and Modern Significance

Whales belong to the order Cetacea and are classified into two suborders:

Types of Whales:

1. **Odontocetes (Toothed Whales)** – Includes **dolphins, porpoises, sperm whales, and killer whales (orcas)**. They use **echolocation** for hunting.

2. **Mysticetes (Baleen Whales)** – Have **baleen plates** instead of teeth to filter-feed on small marine organisms like krill. Examples include **blue whales, humpback whales, and fin whales**.

Key Features of Whales:

- **Largest Animals** – The **blue whale** is the largest animal ever to exist.
- **Marine Mammals** – They breathe air, give birth to live young, and nurse their offspring with milk.

Threats to Whales:

Whales face several dangers, including:

- **Whaling** – Although commercial whaling has declined, **illegal hunting** still threatens whale populations.
- **Habitat Loss** – **Pollution, climate change, and coastal development** disrupt whale habitats.
- **Entanglement** – Whales often get **caught in fishing nets**, leading to injuries or death.
- **Climate Change** – Affects **ocean temperatures and food availability**, altering migration patterns.
- **Noise Pollution** – Increased **human activities like shipping and sonar** interfere with whale communication and navigation.

Conservation Efforts:

Several organizations and initiatives work to protect whale populations:

- **International Whaling Commission (IWC)** – Established in **1946**, regulates **whaling** and promotes conservation.
- **CITES** – Many whale species are **protected under the Convention on International Trade in Endangered Species**.
- **Marine Protected Areas (MPAs)** – Designated zones in oceans to **safeguard whale habitats** from human activities.

The Need for Fossil Conservation:

- Fossil sites must be **protected** to preserve **natural heritage**.
- They provide **invaluable insights** into Earth's history, helping scientists and researchers **understand past life forms**.
- **Education and awareness** play a key role in preventing the **illegal trade** of fossils.

The **theft of the ancient whale fossil** from Meghalaya is a significant loss to science and highlights the need for **better conservation efforts** to protect such irreplaceable discoveries.

National Critical Mineral Mission (NCMM)

Context: The **Union Cabinet** has approved the launch of the **National Critical Mineral Mission (NCMM)** with an estimated expenditure of **16,300 crore**. This mission aims to accelerate the regulatory approval process for **critical mineral mining projects** in India.

Mission Objectives:

The **NCMM** is designed to cover the entire **value chain** of critical minerals, including:

- **Exploration**
- **Mining**
- **Beneficiation**



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- Processing
- Recovery from end-of-life products

Key Features:

- Establishment of **mineral processing parks** to support the **recycling of critical minerals**.
- Encouraging **research in critical mineral technologies** by setting up a **Centre of Excellence on Critical Minerals**.
- Development of a **strategic stockpile** of critical minerals within the country.
- Promoting Indian **PSUs and private sector companies** to acquire **critical mineral assets abroad** and strengthen trade with **resource-rich nations**.

What Are Critical Minerals?

Critical minerals are essential for **economic development and national security**. They are crucial for technological advancements in various industries, including:

- **High-tech electronics**
- **Telecommunications**
- **Transportation**
- **Defense sector**

Challenges in Supply Chain:

Due to the **limited availability** and **geographical concentration** of these minerals, supply chain vulnerabilities have emerged. This necessitates the development of **value chains** for minerals critical to India's growth.

Applications of Critical Minerals:

1. **Clean Energy Technologies:**
 - Zero-emission vehicles
 - Wind turbines
 - Solar panels
2. **Advanced Manufacturing:**
 - Batteries (Cadmium, Cobalt, Lithium)
 - Semiconductors (Gallium, Indium, Selenium)
 - Permanent magnets and ceramics
3. **Defense & Electronics:**
 - New-age technologies (Beryllium, Titanium, Tungsten, Tantalum)
 - Medical devices and cancer treatment (Platinum Group Metals - PGMs)

India's List of Critical Minerals:

India has identified **30 critical minerals**, including: **Antimony, Beryllium, Bismuth, Cobalt, Copper, Gallium, Germanium, Graphite, Hafnium, Indium, Lithium, Molybdenum, Niobium, Nickel, Phosphorous, Potash, Rare Earth Elements (REE), Rhenium, Silicon, Strontium, Tantalum, Tellurium, Tin, Titanium, Tungsten, Vanadium, Zirconium, Selenium, and Cadmium**.

Global Collaboration: Minerals Security Partnership (MSP):

India is a member of the **Minerals Security Partnership (MSP)**, which includes **23 global partners** such as the **US, EU, Japan, Australia, Canada, and others**. This partnership aims to facilitate **public and private investments** in critical mineral supply chains worldwide.

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India's Initiatives to Secure Critical Minerals:

1. **Mines and Minerals (Development and Regulation) Act, 1957:** Amended in **2023** to promote **exploration and mining** of critical minerals.
2. **Geological Survey of India (GSI):**
 - Conducted **368 exploration projects** in the past three years.
 - **195 projects** currently underway in **FY 2024-25**.
 - Plans for **227 new projects** in **FY 2025-26**.
3. **KABIL (Khanij Bidesh India Ltd.):** A joint venture under the **Ministry of Mines**, acquiring **15,703 hectares** in **Argentina's Catamarca province** for **Lithium exploration**.
4. **Custom Duty Reforms:** The **Union Budget 2024-25** eliminated **custom duties** on most **critical minerals**, encouraging the **establishment of processing facilities** in India.

Future Roadmap:

India is actively collaborating with **resource-rich countries** to secure its mineral supply:

- **Tanzania – Niobium, Graphite**
- **Zimbabwe – Lithium**
- **Congo & Zambia – Copper, Cobalt**

With India's commitment to **energy transition** and achieving **net-zero emissions by 2070**, securing a **steady supply of critical minerals** will be pivotal for **sustainable economic growth** and **technological advancement**.

Climate Crisis Fuels Intensifying Marine Heatwaves Across the Globe

Context: In **January 2025**, a devastating **marine heatwave (MHW)** in **Western Australia** led to the mass death of **over 30,000 fish**. This alarming event highlights the **increasing frequency and severity** of oceanic heat anomalies, driven primarily by **climate change**.

What Are Marine Heatwaves?

Marine heatwaves are **prolonged periods of abnormally high sea surface temperatures**, significantly impacting **marine ecosystems** and **weather patterns** worldwide.



Key Characteristics of Marine Heatwaves:

- Defined as ocean temperatures **rising 3-4°C above the average** for **at least five days**.
- Can persist for **weeks, months, or even years**.
- **Climate change is the primary driver**, with oceans absorbing **90% of excess heat** from global warming.
- These events have become **more intense, frequent, and long-lasting** over recent decades.

Global Presence of Marine Heatwaves:

Marine heatwaves have been reported in **major oceanic regions**, including:

- **North Pacific & North Atlantic**
- **Mediterranean & Caribbean Sea**
- **Indian Ocean & Western Australian waters**

Wider Environmental Consequences:

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- **Extreme weather events:** MHWs contribute to the formation of **tropical storms, hurricanes, and cyclones**.
- **Disruptions in the water cycle:** Increased **flooding, droughts, and wildfires** are linked to shifts caused by marine heatwaves.

Rising Trends in the Indian Ocean:

The **Indian Ocean**, once considered less vulnerable, is now experiencing **marine heatwaves annually**.

Key Trends (1982-2018):

- **Western Indian Ocean:** A **1.5-fold increase** in marine heatwave events per decade.
- **Bay of Bengal:** A **0.5-fold rise** per decade.

These trends **directly impact** the **Indian monsoon**, fisheries, and biodiversity.

How Marine Heatwaves Impact India and the World:

1. Disrupting Monsoon Patterns:

- **Western Indian Ocean & Bay of Bengal heatwaves** alter **atmospheric circulation**, affecting monsoon rainfall.
- **Central India** experiences **reduced rainfall**, while **southern India** sees **intensified downpours**.

2. Economic Losses for Coastal Communities:

- **Fisheries & Aquaculture:** Reduced **productivity** of key species like **lobster, snow crab, and scallops** impacts fisheries.
- **Tourism Industry:** Marine biodiversity loss affects **coastal tourism and livelihoods**.

3. Threat to Marine Biodiversity:

- **Mass mortality of marine species**, forcing migration and **disrupting food chains**.
- **Kelp forests and coral reefs**, essential ecosystems, face **irreversible damage**.
- **Coral bleaching** weakens reefs, **reducing reproductive abilities** and making them **more susceptible to disease**.
- **Compounded threats:** Ocean acidification, overfishing, and pollution **exacerbate** MHW damage.

Strategies to Combat Marine Heatwaves:

1. Mitigating Ocean Warming:

- **Reduce greenhouse gas emissions** by cutting reliance on **fossil fuels** and adhering to **Paris Agreement goals**.
- **Invest in renewable energy** to slow the pace of oceanic warming.

2. Strengthening Marine Ecosystem Protection:

- Implement **marine protected areas (MPAs)** to safeguard vulnerable species.
- Enforce **sustainable fishing regulations** and **catch management policies** to prevent economic losses.

3. Enhancing Research & Monitoring:

- **Expand global research networks** like the **Marine Heatwave International Group**.
- **Build advanced monitoring systems** to predict and mitigate the impacts of future MHWs.

4. Promoting Nature-Based Solutions:

- Apply the **IUCN Global Standard for Nature-based Solutions** to restore damaged marine ecosystems.

Way Forward:

To combat the growing threat of **marine heatwaves**, **governments, scientists, and stakeholders** must work together to:

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- Develop long-term conservation policies to protect oceans.
- Raise awareness among policymakers, businesses, and coastal communities.
- Enforce stricter environmental regulations to minimize damage to marine biodiversity.

The climate crisis is accelerating, and with it, marine heatwaves are becoming a new normal. Immediate action is crucial to preserve marine ecosystems, sustain coastal economies, and safeguard global climate stability.

India Crosses 100 GW Solar Power Capacity – A Historic Milestone

Context: India has achieved a monumental milestone by surpassing 100 gigawatts (GW) of installed solar power capacity. This marks a major step in India's journey towards a clean and sustainable energy future.

Unprecedented Growth in Solar Power:

- 35x growth in a decade – From 2.82 GW in 2014 to 100 GW in 2025.
- As of January 31, 2025, India's total solar capacity stands at 100.33 GW, with:
 - 84.10 GW under implementation
 - 47.49 GW under tendering
- Rooftop solar boom – A 53% increase in 2024, with 4.59 GW of new capacity added.
- Top solar states – Rajasthan, Gujarat, Tamil Nadu, Maharashtra, and Madhya Pradesh.
- Massive expansion in solar manufacturing – From 2 GW in 2014 to 60 GW in 2024, aiming for 100 GW by 2030.



Why Solar Energy is a Game-Changer for India?

1. Energy Security:

- Reduces reliance on fossil fuels and imports.
- Helps India achieve self-sufficiency in power generation.

2. Environmental Benefits:

- Cuts greenhouse gas emissions, making India a leader in clean energy solutions.
- A key tool in combating climate change.

3. Economic Growth & Job Creation:

- Millions of new jobs in installation, maintenance, and manufacturing.
- Boosts India's economy by strengthening the renewable energy sector.

4. Cost-Effectiveness:

- Solar energy is now cheaper than conventional electricity sources.
- Lower electricity bills for consumers and industries.

5. Rural Electrification:

- Brings power to remote and off-grid villages.
- Improves the quality of life for millions.

Government Initiatives Driving Solar Growth:

1. National Solar Mission (NSM) (2010): Target: 280 GW of solar capacity by 2030.
2. PM SuryaGhar Muft Bijli Yojana : Empowers homes with free rooftop solar power.

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3. **PM-KUSUM Scheme** : Supports **solar-powered irrigation pumps** for farmers.
4. **Solar Parks Scheme** : Aims to develop **large-scale solar parks** across India.
5. **Production-Linked Incentive (PLI) Scheme** : Encourages **domestic solar panel manufacturing**, reducing imports.
6. **Net Metering Policy** : Allows consumers to **sell surplus solar power** to the grid.
7. **International Solar Alliance (ISA)**: A **global solar energy initiative led by India** to promote renewable collaboration.

Challenges Hindering Solar Expansion:

1. **Land Acquisition**: Finding **land** for large-scale projects is a **major hurdle**.
2. **Grid Integration**: Ensuring **power stability** while handling **intermittent solar energy** is a challenge.
3. **Financial Constraints**: More **investment needed in infrastructure & technology**.
4. **Energy Storage Solutions**: **Affordable storage technology** is crucial for **uninterrupted power supply**.

The Road Ahead – A Brighter Future for Solar in India:

With the **right policies, technological advancements, and financial support**, India is on track to become a **global solar powerhouse**. The **next big goal – 280 GW by 2030** – will require **sustained efforts, innovation, and investment**.

India's **solar revolution has just begun**, and the future looks **brighter than ever**.

Supreme Court Calls for Nationwide Survey of Sacred Groves

Context: The **Supreme Court of India** has directed the **Ministry of Environment, Forest and Climate Change (MoEF&CC)** to conduct a **nationwide survey** of **sacred groves** to ensure their protection and conservation.



Key Directives by the Supreme Court:

- Sacred groves should be **classified as 'forests'** and officially notified as **'community reserves'** under the **Wildlife Protection Act (WLPA) 1972**.
- Each state government must form a **'Community Reserve Management Committee'** to oversee the **preservation and sustainable management** of sacred groves.

What Are Sacred Groves?

Sacred groves are **forest patches or tree clusters** that hold **religious, cultural, and ecological significance**, traditionally protected by **local communities**.

- They are known by **different names across India**, such as:
 - **Devarakadu** (Karnataka)
 - **Kavu** (Kerala)
 - **Sarna** (Madhya Pradesh)
 - **Oran** (Rajasthan)
 - **Devrai** (Maharashtra)
 - **Umanglai** (Manipur)
 - **Law Kyntang/Law Lyngdoh** (Meghalaya)



- Devan/Deobhumi (Uttarakhand)

Importance of Sacred Groves:

- **Biodiversity Hotspots** – Home to rare and endangered species.
- **Climate Regulation** – Help in carbon sequestration and maintaining microclimates.
- **Water Conservation** – Preserve natural springs and aquifers.
- **Livelihood Support** – Sustain traditional herbal medicine practices.
- **Cultural Heritage** – Represent deep-rooted spiritual traditions.
- **Environmental Awareness** – Encourage local conservation practices.

What Are Community Reserves?

The concept of **community reserves** was introduced through the **Wildlife Protection (Amendment) Act, 2002**, to recognize and protect **community-managed ecosystems**.

Key Features of Community Reserves:

- They are designated on **private or community-owned lands** where local communities actively participate in **habitat conservation**.
- Any **land-use changes** require **approval** from the **reserve management committee** and the **state government**.
- The **Chief Wildlife Warden** has the overall **authority for managing the reserve**.

Potential Conflict: WLPA vs. FRA

The **Forest Rights Act (FRA), 2006**, was enacted to **recognize and protect the rights of forest-dwelling communities** over forests, including **sacred groves**.

- By classifying **sacred groves** as **community reserves** under **WLPA**, the **Supreme Court's directive** may **contradict** the **FRA's objective** of recognizing traditional community rights.

T.N. Godavarman v. Union of India (1996): A Landmark Case

The **Supreme Court's interpretation** of **Section 2** of the **Forest (Conservation) Act, 1980**, in this case, established that **'forest land'** includes:

1. Areas that qualify as **'forests'** in the **dictionary sense**.
2. Any area **recorded as forest** in **government records**, regardless of ownership.

Way Forward: A Balanced Conservation Approach

- **Inclusive Policy Formulation** – The **MoEF&CC** should create a **Sacred Grove Conservation Policy** in **collaboration with local communities**, ensuring alignment with the **FRA**.
- **Co-Management Model** – Instead of handing **full control to the Forest Department**, a **joint governance framework** between **Gram Sabhas** and **forest officials** should be explored.
- **Legal Harmonization** – Clear legal **reconciliation between the WLPA and FRA** is essential to **avoid conflicts** and **protect community rights**.
- **Scientific Mapping with Traditional Knowledge** – **Satellite technology** should be combined with **local knowledge** to **identify and manage sacred groves effectively**.

A Step Towards Conservation with Community Involvement:

The **Supreme Court's directive** aims to **preserve India's sacred groves**, but it is **crucial to balance environmental conservation** with the **rights of local communities**. A **cooperative and inclusive approach** will ensure that these **sacred forests** continue to thrive for future generations.

South Coast Railway (SCoR) Zone: A Game Changer for Andhra Pradesh

Context: The Union Cabinet has approved the formation of the South Coast Railway (SCoR) Zone, marking it as India's 18th railway zone under the Andhra Pradesh Reorganisation Act, 2014.

- Prime Minister Narendra Modi laid the foundation stone for the new zone's headquarters in Visakhapatnam in January.
- The reorganization involves splitting the Waltair Railway Division, with one section renamed Visakhapatnam Railway Division under SCoR, while the remaining part will be integrated into the Rayagada Division under the East Coast Railway (ECoR).



Why Was the South Coast Railway (SCoR) Zone Created?

Mandate Under Andhra Pradesh Reorganisation Act, 2014:

- Item 8 of Schedule 13 (Infrastructure) of the Act required Indian Railways to assess the feasibility of a new railway zone to cater to Andhra Pradesh's growing needs.

Strategic & Economic Importance:

- The Central Government announced the creation of SCoR in February 2019 to enhance railway efficiency and manage increasing passenger and freight traffic.
- Key Benefits of the New Zone:
 - Strengthening industrial and agricultural growth.
 - Improving logistics support for major ports like Visakhapatnam and Krishnapatnam.
 - Boosting tourism to cultural and spiritual hubs like Tirupati.

Political Factors:

- The demand for a separate railway zone had been pending since Andhra Pradesh's bifurcation in 2014.
- The decision was expedited after the Telugu Desam Party (TDP), an ally of the ruling BJP-led NDA government, came to power in Andhra Pradesh in 2024.

Divisions Under the South Coast Railway (SCoR) Zone:

Regional Coverage:

- The new zone will primarily cover Andhra Pradesh, with portions of Telangana and Tamil Nadu.

Key Railway Divisions Under SCoR:

- Vijayawada Division (from South Central Railway)
- Guntur Division (from South Central Railway)
- Visakhapatnam Division (formerly part of Waltair Division)

Major Routes Under Visakhapatnam Division (SCoR):

The Visakhapatnam Division will span approximately 410 km, covering important railway sections such as:

- Palasa-Visakhapatnam-Duvvada
- Kureru-Vizianagaram
- Naupada Jn.-Paralakhemundi
- Bobbili Jn.-Salur
- Simhachalam North-Duvvada bypass
- Vadalapudi-Duvvada
- Visakhapatnam Steel Plant-Jaggayapalem

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**Rayagada Division Under East Coast Railway (ECoR):**

- The remaining **680 km of Waltair Division** will be reorganized into the **Rayagada Division**, headquartered in **Odisha**.
- **Important Routes Under Rayagada Division:**
 - Kottavalasa–Bacheli
 - Kunderu–Theruvali Jn.
 - Singapur Rd.–Koraput Jn.
 - Paralakhemundi–Gunpur

Why is the Waltair Division Important?**A Powerhouse for Freight Revenue:**

- Waltair Division is a major contributor to Indian Railways' earnings, driven by freight transport from Odisha and Chhattisgarh's mining and steel industries.

Freight Performance of East Coast Railway (ECoR):

- In **FY 2023-24**, ECoR achieved a record-breaking freight loading of **250 million tonnes**, surpassing its previous record.
- **Division-wise freight contribution:**
 - Khurda Road Division – 156.17 million tonnes
 - Waltair Division – 74.66 million tonnes
 - Sambalpur Division – 19.20 million tonnes
- ECoR became the first railway zone to surpass 200 million tonnes of freight loading for five consecutive years.

Political Opposition from Odisha:

- Odisha's political leaders have opposed the reorganization, arguing that shifting a major revenue-generating part of ECoR to SCoR could negatively impact the state's economy.
- The ECoR headquarters is based in Bhubaneswar, and this reorganization could lead to revenue losses for Odisha's railway network.

The Road Ahead: What SCoR Means for India:

- Improved connectivity and railway efficiency in Andhra Pradesh.
- Boost to trade, tourism, and industrial development.
- Stronger logistics infrastructure for major ports and freight corridors.
- Possible political challenges as Odisha seeks to retain its economic stronghold.

The **South Coast Railway Zone** is a landmark step towards regional development, ensuring better railway infrastructure and economic growth for Andhra Pradesh while reshaping the freight and passenger landscape of Indian Railways.

India Ranks Sixth in Global Climate Risk Index

Context: A recent **Climate Risk Index (CRI)** report has revealed that **India ranks sixth** among the **top 10 countries** most affected by extreme weather events over the last **three decades (1993-2023)**.

This ranking highlights the **increasing vulnerability** of India to climate-related disasters, including **floods, heatwaves, and cyclones**.

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What is the Climate Risk Index?

- Introduced in 2006, the **Climate Risk Index (CRI)** is one of the **longest-running annual reports** assessing the impact of **climate-related extreme weather events** on different nations.
- The index evaluates **realized risks**, ranking countries based on the **economic and human toll**, including:
 - **Fatalities**
 - **Injuries and affected populations**
 - **Homelessness and financial damage**
- The **rankings are based on data** from the **International Disaster Database (EM-DAT)** and **economic statistics** from the **International Monetary Fund (IMF)**.
- The **CRI is published by Germanwatch**, a **Bonn- and Berlin-based independent development, environment, and human rights organization**.

Key Findings of the Report:

- **India remains among the 10 most affected nations** due to extreme weather between **1993 and 2023**.
- The country accounted for **10% of global fatalities** caused by climate disasters and **4.3% of worldwide financial losses** (in dollar terms).
- **India ranked sixth in the Climate Risk Index 2025**, reinforcing its position as one of the most climate-vulnerable nations.
- The **top five most affected countries** ahead of India in the rankings include:
 1. **Dominica**
 2. **China**
 3. **Honduras**
 4. **Myanmar**
 5. **Italy**

Climate Disasters and Their Impact on India:

- India has suffered from **more than 400 extreme weather events** over the last three decades.
- These events caused **financial losses of \$180 billion** and resulted in **at least 80,000 deaths**.
- Major climate-related disasters include:
 - **Severe floods** in **1993, 1998, and 2013**.
 - **Devastating heatwaves** in **2002, 2003, and 2015**.
 - **Frequent and intense cyclones** along the **coasts**.

The Growing Climate Crisis:

The **latest Climate Risk Index report** reinforces the urgent need for **climate resilience strategies, disaster preparedness, and sustainable policies** in India.

As **extreme weather events become more frequent**, India must focus on **strengthening climate adaptation measures, improving early warning systems, and promoting sustainable development** to mitigate the devastating impacts of climate change.

Delhi Earthquake: Understanding Causes, Impact, and Seismic Risk

Context: On **17th February**, before dawn, **Delhi** experienced a magnitude **4.0 earthquake**, the strongest seismic activity originating within the city in the past five years. This event has sparked discussions about the **seismic risk** of the city, highlighting both the causes and potential for future earthquakes.



Seismic Activity in Delhi: A Vulnerable Region:

Delhi is situated in an area that is **seismically active**, making it **vulnerable** to earthquakes. The city is categorized under **Zone 4** in India's **earthquake hazard map**, which is the second-highest risk category. According to the **MSK scale**, areas in Zone 4 can experience **MSK-8 intensity**, indicating possible **structural damage**. In the past five years, Delhi has experienced numerous **small earthquakes** (magnitude 2-3), mostly unnoticed by residents but picked up by **seismometers**. Although minor tremors are common, stronger quakes are relatively rare in this region.

The Aravalli-Delhi Fold Belt: A Key Factor in Earthquake Activity:

Delhi lies within the **Aravalli-Delhi Fold Belt**, a geological structure that stretches from **Rajasthan** to **Haryana** and **Delhi**. This belt has experienced significant geological transformations over millions of years, leading to **folded rock formations**. **Geological stresses** in this region can occasionally trigger **mild earthquakes**.

Unlike other seismic zones like the **Himalayan region**, which is more prone to massive earthquakes due to the **subduction** of tectonic plates, the **Aravalli-Delhi Fold Belt** experiences earthquakes from **pre-existing geological faults**, with much slower tectonic activity today.

A Sound That Shook Delhi: What Was That Noise?

Several residents reported hearing a peculiar **sound** during the earthquake. While earthquakes often produce **ultrasonic frequencies**, certain large tremors can create audible sounds due to **vibrations** from buildings and underground structures. These sounds are often mistaken for the quake itself, but they are usually the result of **shaking** caused by the seismic activity.

Is a Major Earthquake Likely in Delhi?

Although there have been **historical records** of significant earthquakes in the Delhi region, experts believe that the likelihood of a **major earthquake** originating in the city is **low**. Historical earthquakes that affected Delhi include:

- **1720:** A **powerful earthquake** reported to have affected the city.
- **1803:** A large earthquake near **Srinagar-Devprayag** in Uttarakhand, which allegedly damaged the **Qutub Minar**.

Despite this, Delhi's **tectonic setup** does not show signs of significant stress build-up required for a high-magnitude quake. However, Delhi remains vulnerable to strong earthquakes originating from the **Himalayan region**, especially considering the city's **dense population** and the growing number of **high-rise buildings**.

Conclusion: Be Prepared, Stay Vigilant:

The recent earthquake in Delhi has once again raised awareness about the **seismic risk** the city faces. While the possibility of a **massive earthquake** in Delhi is unlikely, the city remains at risk from moderate tremors.

Understanding Delhi's **seismic history** and **geological structure** is vital for **disaster preparedness** and **mitigation**. Both **authorities** and **residents** should ensure that buildings and infrastructure are designed to be **earthquake-resistant**, minimizing the risks in the event of a stronger quake in the future.

**Key Takeaways:**

- **Delhi** is in **Zone 4**, facing a moderate risk of **earthquakes**.
- The **Aravalli-Delhi Fold Belt** is a source of minor quakes, with **pre-existing faults**.
- The possibility of a **major earthquake** in Delhi is **low**, but **Himalayan earthquakes** pose a significant threat.
- **Disaster preparedness** and **earthquake-resistant infrastructure** are crucial for minimizing risks.

India's Upcoming Greenhouse Gas Inventory Submission to the UN

Context: India is in the **final stages** of preparing its **first-ever Biennial Transparency Report (BTR)**, fulfilling its commitment under the **2015 Paris Agreement** on climate change.

What is the Biennial Transparency Report (BTR)?

The **Biennial Transparency Report (BTR)** is a comprehensive document that presents a nation's **greenhouse gas (GHG) emissions inventory**, **sector-wise emissions sources**, and **mitigation strategies**.

**Key Features of the BTR:**

- Aims to **enhance transparency and accountability** in climate action.
- Follows a **standardized reporting format** set by the **United Nations Framework Convention on Climate Change (UNFCCC)**.
- Unlike previous reports such as **National Communications** and **Biennial Update Reports (BURs)**, the **BTR undergoes an external review** by **independent UNFCCC experts**.
- Initially required only from **developed nations**, but the **2015 Paris Agreement** extended this requirement to **all countries**.
- As per **COP 21 (2015)**, nations had to submit their **first BTR by December 2024**, but several countries, including **India**, **missed the deadline**.
- The process accelerated at **COP 2024 in Baku, Azerbaijan**, where nations began following the UNFCCC's prescribed format.

India's Emissions Data and Projections:

- The **BTR will provide emissions data up to 2022**.
- India's **last BUR (2020)** reported a **7.93% decline in GHG emissions from 2019**, primarily due to the **economic slowdown caused by COVID-19**.
- The **upcoming BTR is expected to show an increase in emissions**, reflecting **economic recovery**, which aligns with **global trends**.
- Despite this increase, **India's share in global emissions remains between 4% and 5%**.
- In **per capita terms**, India's emissions **remain less than one-third of the global average**.

What are Biennial Update Reports (BURs)?

BURs are reports submitted by **developing countries** to the **UNFCCC** as part of their commitment under the **Paris Agreement** and **Cancún Agreements**.

Purpose of BURs:

- Provide **updates on GHG inventories**.
- Outline **mitigation actions and their impact**.

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- Highlight **financial, technical, and capacity-building** needs.
- Developing countries are required to **submit BURs every two years**.
- These reports undergo **International Consultation and Analysis (ICA)** to ensure **transparency and credibility**.

Significance of India's BTR Submission:

India's **first-ever BTR** marks a **crucial step** in its commitment to **climate accountability and global cooperation**. While emissions may rise due to **economic growth**, India remains dedicated to **sustainable development**, maintaining a **relatively low per capita emissions footprint** compared to global standards.

Peatlands: The Overlooked Guardians of Carbon Storage

Context: A recent study has raised alarms over the **severe lack of protection** for **peatlands**, warning that their continued degradation could **threaten global climate goals**.

Understanding Peatlands:

Peatlands are **unique wetland ecosystems** that consist of **partially decomposed organic matter**, accumulated over **thousands of years**.



Key Features:

- In **cooler climates**, peatland vegetation mainly consists of **Sphagnum mosses, sedges, and shrubs**, which play a major role in peat formation.
- In **warmer climates**, **graminoids (grass-like plants)** and **woody vegetation** contribute most to the organic matter.

Global Distribution of Peatlands:

- Peatlands exist across **all climatic zones and continents**, covering approximately **4.23 million km²**, which accounts for **2.84% of the Earth's land surface**.
- The countries with the **largest peatland areas** include:
 - **Canada, Russia, Indonesia, the United States, Brazil, Democratic Republic of the Congo, China, Peru, Finland, and the Republic of the Congo.**
- The **top five peatland-rich nations** contain **70% of the world's peatlands**.

A Massive Carbon Storehouse:

- Peatlands **hold around 600 billion tonnes of carbon**, **more than all the forests in the world combined**.
- However, **only 17% of peatlands are currently protected** worldwide:
 - **Boreal peatlands: 11% protected**
 - **Temperate and tropical peatlands: 27% protected**

Major Threats to Peatlands:

1. **Agriculture and Forestry** – Large-scale **farming and logging operations** drain peatlands, **releasing carbon** into the atmosphere.
2. **Mining and Infrastructure Projects** – **Peat extraction** for fuel and horticulture **destroys** these fragile ecosystems.
3. **Climate Change** – Rising temperatures and unpredictable rainfall patterns **worsen degradation**, increasing the risk of **wildfires and carbon emissions**.

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**Conservation Efforts:****Role of Indigenous Communities:**

- **Indigenous territories** account for **27% of global peatlands**.
- Traditional conservation practices have played a **crucial role in peatland protection**.

Global Initiatives for Peatland Protection:

- **The Brazzaville Declaration (2018)** – Signed in the **Republic of the Congo**, this agreement aims to **preserve and manage the Congo Basin peatlands**, home to the **world's largest tropical peatland complex**.
- **Global Peatlands Initiative (GPI)** – Led by **UNEP**, this initiative promotes **peatland conservation on a global scale**.
- **Ramsar Sites** – These **wetland conservation areas** account for **20% of protected peatlands globally** and **40% of those in the tropics**.

The Way Forward:**1. Strengthening Legal Protections:**

- Countries should **integrate peatland conservation into national laws** and enforce **Ramsar site protections**.
- **Peatland conservation should be included in:**
 - **Nationally Determined Contributions (NDCs)** under the **Paris Agreement**.
 - **Action plans** under the **Kunming-Montreal Global Biodiversity Framework**.

2. Supporting Indigenous Stewardship:

- **Recognizing and empowering indigenous communities** will **greatly enhance peatland protection**.

Conclusion:

Peatlands are **indispensable carbon reservoirs** and **vital for climate stability**. Despite their **immense ecological importance**, they remain **underprotected and at risk**. **Urgent global action, stronger legal frameworks, and sustainable management** are essential to **safeguard these critical ecosystems** for the future.

Global Sea Ice Cover Plunges to Record Low

Context: As per the **US National Snow and Ice Data Center (NSIDC)**, the combined **Arctic and Antarctic sea ice extent** hit a historic low of **15.76 million sq km** in **February 2025**.

Understanding Sea Ice:

- **Sea ice** refers to the **floating ice** that forms in **polar regions**.
- It **expands in winter** and **melts in summer**, but some portions remain throughout the year.
- **Sea ice** differs from **icebergs, glaciers, ice sheets, and ice shelves**, which originate on land.
- It plays a **vital role in regulating global temperatures** by **reflecting sunlight** and **preventing oceanic heat from warming the atmosphere**.

**Why is Global Sea Ice Shrinking?****1. Rising Global Temperatures:**

- The **Arctic** is **warming four times faster** than the global average.

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- Warmer ocean temperatures delay freezing and accelerate melting.
- The ice-albedo feedback effect worsens the situation:
 - Less ice → More exposed dark ocean → Higher heat absorption → Faster melting.

2. Shifts in Wind Patterns and Storms:

- Arctic storms have broken apart ice in the **Barents Sea** (near Norway & Russia) and the **Bering Sea** (between Alaska & Russia).
- Antarctic sea ice, being surrounded by ocean rather than land, is **thinner and more mobile**, making it even more vulnerable.

Consequences of Declining Sea Ice Cover:

1. **Intensified Climate Change:** Less ice → More ocean exposure → Greater heat absorption → Faster temperature rise.
2. **Disruption of Ocean Currents:** Melting ice releases freshwater, slowing down global ocean circulation, impacting weather patterns worldwide.
3. **Rising Sea Levels:** While sea ice itself does not raise sea levels, its disappearance exposes glaciers and ice sheets to warmer waters, accelerating land ice melt and sea level rise.
4. **Collapse of Marine Ecosystems:** Krill, seals, and polar bears rely on sea ice for survival. Its decline threatens food chains and disrupts entire marine ecosystems.

The Way Forward:

1. **Strengthening Climate Commitments:** Countries must adhere to Paris Agreement targets to limit global temperature rise to 1.5°C.
2. **Expanding Scientific Monitoring:** More satellite data and polar expeditions are needed to track sea ice changes effectively.
3. **Enhancing International Protection of Polar Regions:** Stronger marine conservation agreements and biodiversity protection policies are crucial.
4. **Regulating Human Activities in Polar Regions:** Industrial operations, fishing, and resource exploitation in the Arctic and Antarctic must be strictly controlled.

Conclusion:

The record decline in sea ice serves as a **critical warning** about the **accelerating impact of climate change**. Without **immediate global intervention**, we risk **crossing irreversible climate tipping points**, threatening the planet's **climate stability, marine life, and human livelihoods**.

Powering a Sustainable Future: Embracing Clean Energy Solutions

Context: The widespread use of **coal-based electricity generation** has long been a major contributor to **air pollution**, posing severe threats to both **human and animal health**.

Recent research from the **Stanford Doerr School of Sustainability** highlights that **nitrogen dioxide and ozone emissions** from **coal-fired power plants** have led to a **10% reduction** in **wheat and rice yields** in **India**—a loss equivalent to nearly **six years of average yield growth**.



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The Environmental Toll of Coal-Based Power:

Coal-fired power plants have been a part of **India's energy landscape since 1920**, starting with the **first plant in Hyderabad under the Nizam's rule**. Today, **India's Ministry of Coal** estimates that the country has enough reserves to last for the next **120 years**. However, coal dependency comes at a heavy price, causing:

- ✓ **Severe air pollution**, leading to respiratory diseases and environmental damage.
- ✓ **Reduction in agricultural productivity**, impacting food security.
- ✓ **Degradation of ecosystems**, harming biodiversity and water resources.

Exploring Sustainable Alternatives:

1. Wind Energy – Harnessing the Power of the Wind:

- Wind turbines convert **wind energy** into **electricity**.
- **India's nine windiest states** generate a total of **50 GW** of wind power.
- The country ranks as the **fourth-largest wind energy producer globally**.
- **Private sector investments** play a crucial role in boosting wind power capacity.

2. Solar Energy – Capturing the Sun's Potential:

- **Solar panels** absorb sunlight and transform it into **electricity**.
- Widely used in **rooftop installations** and **large solar farms**.
- The **Central and State governments** offer **subsidies**, making solar power more affordable and accessible.

3. Hydroelectric Power – Energy from Flowing Water:

- **Dams** store and control **river water** to generate **electricity**.
- These projects also help in **irrigation**, ensuring water availability for **agriculture**.
- **India's top five hydroelectric dams** generate an impressive **50 GW** of power.

4. Osmotic Power – The Energy of River and Sea:

- Uses the **osmotic pressure difference** when **river water meets seawater**.
- Research from the **University of Sydney and Penn State** confirms its **feasibility**.
- With a **7,500 km coastline**, India has significant potential to harness **osmotic energy**.

5. Nuclear Power – A Reliable Energy Source:

- **Nuclear reactors** generate electricity through **nuclear fission**.
- **India currently operates eight nuclear power plants**, producing **3.5 GW** of electricity.
- Used primarily for **peaceful energy production**, ensuring **energy security**.

Conclusion:

The transition from **coal-based power** to **clean energy sources** is crucial for reducing **pollution**, improving **public health**, and preserving **the environment**.

India has access to multiple **sustainable alternatives**, including **wind, solar, hydroelectric, osmotic, and nuclear power**, which can collectively meet the country's growing energy demands. Encouraging **investment and innovation** in these sectors is essential to building a **clean, green, and sustainable future** for generations to come.



India to Announce Emission Intensity Targets by Month-End

Context: The Union government is gearing up to unveil **emission intensity targets** for **nine key industrial sectors** by the **end of February 2025**. This marks a **major milestone** in India's journey towards launching a **carbon credit trading scheme**, which will help industries transition towards a **low-carbon economy**.



Implementation Timeline:

- Industries will be given **one year** to align with the new **compliance measures**.
- Carbon credit trading** is expected to commence by **October 2026**.

Background: India's Carbon Credit Trading Scheme

The **Bureau of Energy Efficiency (BEE)**, under the **Union Ministry of Power**, announced India's **carbon credit trading system** in **June 2023**.

- March 2024:** Follow-up regulations made **compliance mandatory** for certain industries.
- Current Status:** **Emission intensity targets** are yet to be defined, delaying the **generation and trading of carbon credits**.

Objective: Why Is India Introducing Carbon Credit Trading?

The initiative aims to:

- Reduce, remove, or prevent greenhouse gas (GHG) emissions.**
- Encourage industries to improve efficiency** rather than impose absolute emission cuts.
- Create a financial incentive** for businesses to adopt **cleaner technologies**.
- The scheme operates on a **carbon credit certificate trading system**, ensuring that **industries can monetize their sustainability efforts**.

How Does India's Carbon Credit System Compare Globally?

European Model (Absolute Cap-and-Trade System):

- Each **carbon credit** represents **one tonne of CO₂ prevented** from being released.
- Industries with emission limits** can buy or sell credits based on their compliance levels.

Indian Model (Efficiency-Based Approach):

- Industries are **not required to reduce overall emissions** but must **improve efficiency**.
- Emission intensity targets** focus on **reducing emissions per unit of production**.
- Example: A **steel plant** can **burn less coal** or **reuse heat** to manufacture the same amount of steel more efficiently.

Emission Intensity Targets: Key Sectors Affected:

The **emission intensity targets** will apply to **nine major industrial sectors**:

- Iron & Steel**
- Aluminium**
- Chlor-Alkali**
- Cement**
- Fertilizers**

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- Pulp & Paper
- Petrochemicals
- Petroleum Refineries
- Textiles

Additionally, India is also exploring **voluntary carbon offset markets**, such as **afforestation projects**, which may begin **trading later this year**.

India's Climate Commitment: A 2030 Goal

India is on a mission to **cut its emissions intensity by 45% from 2005 levels by 2030**. The **upcoming emission intensity targets** will be a **crucial step** in achieving this ambitious goal while supporting industries in making a **smoother transition to sustainability**.

By introducing this **market-driven approach**, India is positioning itself as a **global leader in carbon efficiency**, balancing **economic growth** with **environmental responsibility**.





Mental Well-Being: A Key Driver of Economic Growth

Context: The **Economic Survey 2024-25** underscores the vital link between **mental health** and **India's economic future**, emphasizing its role in **workplace productivity**, **economic growth**, and **overall national well-being**. The report highlights how **mental well-being** influences **efficiency**, **lifestyle choices**, and **the country's progress**.



Understanding Mental Well-Being: The survey defines **mental well-being** as a **multidimensional** concept, encompassing:

- **Emotional Health** – Managing **stress and emotions** effectively.
- **Social Health** – Building **supportive relationships and communities**.
- **Cognitive Health** – Enhancing **focus, decision-making, and problem-solving abilities**.
- **Physical Health** – Maintaining **overall fitness through a balanced lifestyle**.

Rising Mental Health Challenges Among Youth:

The survey highlights an **alarming rise in mental health issues** among India's youth due to:

- **Excessive Internet & Social Media Use** – Contributes to **anxiety, sleep disorders, and attention deficits**.
- **Weak Family Engagement** – Lack of **social support** negatively impacts emotional stability.
- **Toxic Work Environments & Long Hours** – Leads to **burnout, stress, and declining productivity**.
- **Unhealthy Lifestyles** – Consumption of **ultra-processed foods and physical inactivity** worsens both **mental and physical health**.

Mental Health & Economic Growth:

- **Hostile workplaces and long desk hours** negatively impact **mental well-being**, slowing down **economic progress**.
- According to the **World Health Organization (WHO)**, **mental health disorders** could cost India a **staggering \$1.03 trillion** between **2012 and 2030**.
- India's **demographic dividend** depends on **skilled, educated, physically fit, and mentally strong youth**.

Recommendations for Improvement:

- Creating a **positive work culture** to support mental well-being.
- Implementing **family and school-based interventions** to promote **healthier lifestyles**.
- Encouraging **outdoor activities, social bonding, and family interactions** to **reduce internet addiction** and **boost mental health**.

India's Mental Health Landscape:

- **First Recognition** – The **Economic Survey 2023-24** marked the **first official acknowledgment** of **mental health's significance** in policy-making.
- **National Mental Health Survey (NMHS) 2015-16 Findings:** **10.6% of Indian adults** suffer from mental disorders.
 - **Treatment gap ranges between 70%-92%**, highlighting inadequate access to mental healthcare.
 - **Higher prevalence in urban metros (13.5%)** compared to rural areas (6.9%).
- **Shortage of Psychiatrists** – As per WHO, a minimum of **3 psychiatrists per 1 lakh population** is needed. India, however, has only **0.75 psychiatrists per 1 lakh people**.

Key Government Initiatives:

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**1. Mental Healthcare Act, 2017:**

- Decriminalized suicide attempts, aligning with WHO guidelines.
- Introduced "advanced directives", allowing individuals to choose their treatment course.
- Restricted Electro-Convulsive Therapy (ECT), banning its use on minors.
- Tackled mental health stigma in society.

2. Rights of Persons with Disabilities Act, 2017: Recognizes mental illness as a disability, ensuring better rights and entitlements.**3. Kiran Helpline:** Suicide prevention initiative providing immediate support and crisis intervention.**4. District Mental Health Programme (DMHP):** Operates in 767 districts, offering stress management, suicide prevention, and counseling services.**5. National Tele Mental Health Programme (NTMHP):** Launched in 2022, ensuring mental health services through 53 Tele MANAS Cells across 36 states/UTs.**6. Expansion of Mental Health Infrastructure:** Strengthening mental health education and services in medical colleges and hospitals.**Conclusion:**

Mental health is a **cornerstone of individual and national development**. For a **prosperous and productive India**, governments, businesses, and society must **prioritize mental healthcare, improve access to services, and eliminate stigma**. With progressive **policies and programs**, India is steadily bridging **mental health treatment gaps** and fostering a **healthier future**.

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12. Expansion of Mental Health Infrastructure: Strengthening **mental health education and services** in **medical colleges and hospitals**.

**Conclusion:**

Mental health is a **cornerstone of individual and national development**. For a **prosperous and productive India**, governments, businesses, and society must **prioritize mental healthcare, improve access to services, and eliminate stigma**. With progressive **policies and programs**, India is steadily bridging **mental health treatment gaps** and fostering a **healthier future**.

Faster Sanctioning of Homes for Tribes Under PM-JANMAN

Context: The **Ministry of Tribal Affairs** has streamlined the process for **approving homes for Particularly Vulnerable Tribal Groups (PVTGs)** under the **PM-JANMAN package**. Earlier, delays caused by the **PM-GatiShakti portal's data verification process** prevented timely approvals. Now, a **faster mechanism** has been introduced to ensure **speedier home sanctions**.

**Revised Process for Sanctioning Homes:**

- The **Tribal Affairs Ministry** coordinated with the **Rural Development Ministry** and **State/UT governments** to resolve delays.
- **Housing units can now be sanctioned via the PM-AWAS portal**, bypassing some procedural delays.
- Data will still be updated on the **PM-GatiShakti portal** to maintain transparency.

What is PM-JANMAN?

The **Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM-JANMAN)** was launched on **November 15, 2023**, during **Janjatiya Gaurav Diwas**. It is a **flagship initiative** focused on the **holistic development** of **PVTGs across 18 states and the Andaman & Nicobar Islands**.

Key Objectives of PM-JANMAN:

- **Infrastructure Development** – Ensuring **pucca houses, clean drinking water, sanitation, roads, and telecom connectivity** for PVTG communities.
- **Social Welfare** – Improving **access to education, healthcare, and nutrition services**.
- **Economic Empowerment** – Creating **sustainable livelihood opportunities** tailored to PVTG needs.

Implementation Strategy:

- **Inter-Ministerial Convergence** – Involves **nine central ministries** to execute **11 key interventions**.
- **Scheme Integration** – Aligns existing government schemes with **PVTG-specific requirements**, modifying guidelines where needed.
- **Budget Focus** – A **major share of funding** is allocated to **housing and road development**.

Progress & Achievements:

- **lakh PM-AWAS homes** were planned for PVTGs

As of November 2024:

- **3.3 lakh homes** were sanctioned.
- Following new reforms, an **additional 1 lakh homes** were approved.
- **Total homes sanctioned** now exceed **4 lakh**.
- **80,000 homes** have already been completed.

Other Sanctions Under PM-JANMAN:

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- **190+ hostels** approved for PVTG students.
- **600 mobile medical units** sanctioned for healthcare access.
- **850+ multipurpose community centers** approved.
- **Mobile towers in 2,100 habitations** to improve connectivity.
- **Over 2,000 Anganwadi Centres** cleared for early childhood development.

Conclusion:

The PM-JANMAN initiative is a **game-changer for PVTGs**, ensuring **faster approvals and better living conditions**. By **simplifying bureaucratic hurdles and enhancing infrastructure**, the government is **empowering tribal communities** and **accelerating their development**.

Himachal Pradesh's Pilot Project for Controlled Cannabis Cultivation

Context: The **Himachal Pradesh government** has approved a **pilot project** for the **regulated cultivation of cannabis**, aiming to unlock its **medicinal and industrial potential**. This initiative positions Himachal Pradesh as the **fourth Indian state** to permit cannabis cultivation, following **Uttarakhand, Madhya Pradesh, and Jammu & Kashmir**.



Why This Initiative?

Background & Legal Framework:

- Cannabis grows **naturally** across Himachal Pradesh, yet its cultivation was banned under the **Narcotic Drugs and Psychotropic Substances (NDPS) Act, 1985**.
- Recent **amendments** to the NDPS Act now allow states to regulate cannabis cultivation for **medicinal and industrial** applications under strict **licensing and regulatory conditions**.
- The project aims to **identify suitable cannabis strains** with a focus on **non-narcotic uses** like **textiles, paper, food, cosmetics, and biofuel**.

Global Cannabis Market & Himachal Pradesh's Potential

Cannabis: A Trillion-Dollar Industry

- Countries such as **Canada, the USA, France, Italy, China, Australia, and Denmark** lead in **hemp cultivation** and the manufacture of cannabis-based products.
- Cannabis has been dubbed a "**Trillion-Dollar Crop**" due to its **wide-ranging applications** across multiple industries.
- With over **25,000 known industrial applications**, Himachal Pradesh aims to **tap into this lucrative market** while ensuring **strict regulatory compliance**.

Industrial & Medicinal Potential of Cannabis:

Understanding Cannabis Sativa L. (Industrial Hemp):

- Cannabis contains over **100 cannabinoids**, of which **Tetrahydrocannabinol (THC)** and **Cannabidiol (CBD)** are the most significant.
- **THC is psychoactive**, while **CBD is non-psychoactive** and offers multiple **therapeutic benefits**.

Applications Based on THC Content:

1. **Industrial Use (THC < 0.3%):**
 - Used in **textiles, paper, biofuel, cosmetics, food supplements, and animal feed**.

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2. Medicinal Use (THC > 0.3%):

- THC is used for treating **chronic diseases** such as **Multiple Sclerosis, Crohn's disease, Alzheimer's, cancer, and chronic pain**.
- CBD has shown **potential therapeutic effects** in treating **psychosis, epilepsy, inflammation, and neurodegenerative diseases**.

Legality of Cannabis in India:

Key Legal Provisions:

1. International Conventions:

- India follows the **Single Convention on Narcotic Drugs (1961)**, which classifies cannabis alongside **hard drugs like heroin**.

2. Indian Constitutional & Legal Framework:

- **Article 47** (Directive Principles of State Policy) advises against **harmful drugs and intoxicants**.
- **NDPS Act, 1985** prohibits cannabis cultivation and use.
- **Section 14 of the NDPS Act** allows the **government** to permit **cannabis cultivation** for **horticultural and industrial purposes**.
- **Bhang**, made from cannabis leaves, is **not prohibited** under the NDPS Act and falls under **state jurisdiction**.

Controlled Cultivation & Economic Benefits:

Ensuring Responsible Cultivation:

- Only **low-THC hemp varieties** (<0.3% THC) will be cultivated to prevent **misuse**.
- The **focus** will be on **industrial and medicinal** applications rather than recreational use.
- Hemp's **stalks, leaves, and seeds** will be processed into **textiles, food, cosmetics, paper, and biofuel**.

Economic & Revenue Impact:

- The project is expected to **generate an annual income of 500 crore** for Himachal Pradesh.
- Aligns with global trends, where **countries like the US, Canada, and Germany** have successfully leveraged **regulated cannabis cultivation** for **economic growth**.

Challenges & Roadblocks:

Regulatory & Implementation Concerns:

1. Ensuring Compliance:

- Strict **quality control measures** must be implemented to **prevent illegal diversion**.

2. Market & Infrastructure Development:

- Need for **strong supply chains** to support cannabis-based industries.

3. Public Perception & Awareness:

- Overcoming **societal stigma** and raising **awareness about the non-narcotic uses** of cannabis.

Conclusion: A Step Toward Innovation & Economic Growth

Himachal Pradesh's **controlled cannabis cultivation initiative** marks a **progressive shift** toward **harnessing the economic, medicinal, and industrial potential** of cannabis. If implemented **effectively and responsibly**, it could position the state as a **leader in the global cannabis industry**, driving **economic growth, job creation, and industrial development** while ensuring **strict regulatory oversight**.



RBI's Liquidity Boost: Key Measures to Stabilize the Banking System

Context: The Reserve Bank of India (RBI) has announced **enhanced liquidity measures** to address the **liquidity crunch** in the **banking system**. These steps aim to **inject liquidity**, counter **rupee depreciation**, and stabilize **monetary conditions**.

Key Liquidity Measures by RBI:

1. USD/INR Swap Auction:

- RBI will conduct a **six-month USD/INR buy/sell swap auction** worth **\$5 billion** on **January 31, 2025**.
- Under this, banks will **sell US dollars** to RBI in exchange for **rupee liquidity**, which will be **reversed after six months** with a **premium**.

2. Open Market Operations (OMO) Purchases:

- The RBI will conduct **Open Market Operation (OMO) purchases** of **Government Securities (G-Secs)** worth **60,000 crore**.
- This will happen in **three tranches** of **20,000 crore** each on **January 30, February 13, and February 20, 2025**.

3. Variable Rate Repo (VRR) Auction:

- A **56-day Variable Rate Repo (VRR) auction** for **50,000 crore** will be conducted.
- This marks the **first time** RBI is conducting such a **long-tenor VRR auction**.

Why These Measures?

Addressing the Liquidity Deficit:

- These steps will **inject approximately 1.50 lakh crore** into the banking system between **January 30 and February 20, 2025**.
- The **liquidity shortfall** is due to:
 - Rupee depreciation**
 - Limited government spending**
 - Tax outflows**
- The current **liquidity deficit** is estimated at **3 lakh crore**, necessitating **immediate intervention**.

Challenges in Liquidity Management:

- Government Over-Borrowing**
 - Excessive **government borrowing** and **investing surplus cash** can disrupt **liquidity balance**.
- Weak Cash Management**
 - Poor cash flow planning** can lead to **prolonged liquidity imbalances**, affecting RBI's ability to manage debt and monetary policy.

The Way Forward:

Stronger Coordination Between RBI & Government

- A **coordinated fiscal approach** is crucial to **prevent liquidity shocks**.

Flexible & Agile Liquidity Management

- RBI remains **committed to dynamic liquidity management** to ensure **financial stability**.

Market Monitoring & Policy Adjustments

- RBI will **continuously monitor** liquidity trends and take **further action if needed** to maintain **orderly market conditions**.



Conclusion:

The RBI's proactive liquidity measures highlight its commitment to stabilizing the financial system. By ensuring adequate liquidity, these steps will support economic stability, counter liquidity shortages, and strengthen financial markets.

Health Insurance Coverage for 1 Crore Gig Workers

Context: The Union Finance Minister has announced that gig workers will now be eligible for healthcare benefits under the Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (PMJAY) scheme. This move aims to provide essential medical coverage to workers engaged in the growing gig economy.



Key Highlights of the Announcement:

- The overall health budget has seen an increase of over 9,000 crore this year.
- The funds will be utilized for health infrastructure development, expansion of the Ayushman Bharat scheme, and allocations for All India Institute of Medical Sciences (AIIMS) Delhi.
- The PMJAY scheme offers health coverage of ₹5 lakh per family per year for secondary and tertiary care across public and private hospitals.
- However, it remains unclear whether the families of gig workers will also be covered under the scheme.

Current Health Insurance Coverage in India (NITI Aayog Report):

- Only 10% of Indians have purchased private health insurance.
- Nearly 60% of the population is covered by government-funded health schemes.
- Around 400 million people (30%) still lack any form of health insurance, leaving them vulnerable to medical expenses.

Who Are Gig Workers?

Gig workers are individuals engaged in non-traditional, flexible, and temporary employment. Unlike regular full-time employees, they work as freelancers or independent contractors, earning income through short-term contracts or on-demand services.

The term "gig" is borrowed from the music industry, where artists book one-time performances or short-term engagements. The gig economy thrives on digital platforms that connect freelancers with customers for services like:

- Ride-hailing (e.g., Uber, Ola)
- Food delivery (e.g., Zomato, Swiggy)
- Freelance work (e.g., Fiverr, Upwork)
- Holiday rentals (e.g., Airbnb)

The Growth of India's Gig Economy:

- In 2020, approximately 7.7 million workers were engaged in gig-based employment.
- By 2029-30, the number is expected to increase to 23.5 million, making up 4.1% of India's total workforce.
- The gig workforce comprises 47% medium-skilled, 22% high-skilled, and 31% low-skilled jobs.
- The sector is projected to contribute 1.25% to India's GDP by 2030, with the potential to create 90 million jobs in the long run.



Why Are Gig Workers on the Rise?

1. **Post-Pandemic Surge** – The **COVID-19 pandemic** accelerated gig work as people sought flexible employment while homebound consumers relied on delivery services.
2. **Work-from-Anywhere Flexibility** – Gig work allows individuals to **choose their own work hours** without being tied to an office.
3. **Technological Advancements** – **Smartphones and high-speed internet** have made remote and freelance work more accessible.
4. **Cost-Effective for Businesses** – Small companies that cannot afford **full-time employees** often hire freelancers for **short-term projects**.
5. **Employer Benefits** – Companies save money by **not providing health insurance, provident funds, or bonuses**, making gig workers a more economical option.

Challenges Faced by Gig Workers:

- **Lack of Work-Life Balance** – The **unstructured nature** of gig jobs can disrupt **personal life**, sleep schedules, and mental health.
- **Reduction in Full-Time Jobs** – As companies **replace permanent employees** with gig workers, job security is threatened.
- **No Employment Benefits** – Unlike regular employees, gig workers **do not receive health insurance, paid leave, or retirement benefits**.
- **Uncertain Income** – Gig workers face **income instability**, as work availability is **inconsistent**.

Government Initiatives for Gig Workers:

1. Code on Social Security, 2020:

- The **Indian government** introduced this code to ensure **social security benefits** for gig and platform workers.
- It covers **life and disability insurance, accident protection, health benefits, maternity benefits, and retirement security**.
- However, these provisions **have not yet been implemented**.

2. e-Shram Portal (2021):

- Launched to create a **comprehensive national database** of **unorganized workers**, including gig workers.
- Allows self-registration across **400 occupations**, ensuring easier access to **welfare schemes**.

Conclusion:

Unlike traditional employees, **gig workers lack employer-backed health coverage**, making them highly vulnerable to **unexpected medical expenses**. Many of them struggle to afford private health insurance, and **catastrophic healthcare costs** could push them into financial distress.

Providing **government-backed health insurance** through **PMJAY** is a crucial step in ensuring **financial security** and **better healthcare access** for gig workers. However, **clearer guidelines** are needed regarding whether **families of gig workers** will also benefit. As India's **gig economy expands**, ensuring the **well-being and social security** of gig workers will be essential for sustainable growth.

100% FDI in India's Insurance Sector: A Game-Changer

Context: Finance Minister **Nirmala Sitharaman** has announced the **increase in Foreign Direct Investment (FDI) limit in the insurance sector to 100%**, up from the previous cap of **74%**. This move aims to **attract more foreign investment**, boost the sector, and improve financial security for Indian citizens.

Global Perspective on FDI in Insurance:

Several **major economies** have already allowed **100% FDI** in their insurance sectors, including:

- **Canada**
- **Brazil**
- **Australia**
- **China**



Aligning **India** with these global standards is expected to **make the Indian insurance market more attractive to foreign investors** and **foster competition and innovation**.

Transformation of India's Insurance Sector

India's **insurance industry** has come a long way from being **dominated by the Life Insurance Corporation (LIC)** to a dynamic market with multiple players.

Key Factors Driving the Transformation:

- **Economic growth** leading to higher disposable incomes.
- **Technological advancements** enabling digital insurance platforms.
- **Changing demographics** with a younger, financially aware population.
- **Increased consumer awareness**, especially post-COVID-19, about financial security.

The insurance industry continues to play a **crucial role in India's economic stability** and development.

A Historical Perspective on Insurance in India:

Did you know? The **concept of insurance in India** dates back to **ancient times!**

- References to **insurance-like practices** can be found in **Manusmriti**, **Yagnavalkya's Dharmashastra**, and **Kautilya's Arthashastra**.
- These texts discuss **pooling resources** to provide **financial aid during calamities** like **fires, floods, epidemics, and famines**.
- Early forms of **marine trade loans and carrier contracts** were used to **mitigate trade and transport risks**.

Current Insurance Penetration in India:

Despite **steady growth**, **insurance penetration in India** remains **below the global average**:

- **India's insurance penetration** dropped from **4% in FY23** to **3.7% in FY24**, despite a **7.7% increase in total premiums** (₹11.2 lakh crore).
- **Life insurance penetration** fell from **3% in FY23** to **2.8% in FY24**.
- **Non-life insurance penetration** remains at **1%**.
- **Global average insurance penetration** is **7%**, highlighting the **huge growth potential** in India.

Why Is Insurance Penetration Low in India?

- **Limited awareness** about the benefits of insurance.

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- **Economic constraints** preventing people from purchasing policies.
- **Preference for traditional financial practices**, such as gold and fixed deposits.

Conditions for 100% FDI in Insurance:

- The **increased FDI limit** will only apply to **companies that invest the entire premium amount in India**.
- The **Insurance Regulatory and Development Authority of India (IRDAI)** will **continue to regulate the sector**, ensuring compliance with Indian laws and protecting policyholders.
- The government is reviewing and **simplifying foreign investment regulations** to encourage more participation.

Impact of 100% FDI on the Insurance Industry:

Since **2000**, India's insurance sector has **already attracted ₹82,847 crore in FDI**, boosting the market's expansion.

Potential Benefits:

- The sector is expected to **grow at a rate of 7.1% annually** over the next five years.
- **Increased foreign capital** will help **reduce insurance under-penetration** in India.
- Adoption of **global best practices** will lead to **better products and services**.
- Access to **long-term capital**, advanced **technology**, and improved **distribution networks**.
- Higher **competition**, resulting in **better pricing and service for customers**.

How Will Customers Benefit?

- **More insurers in the market** will create **competitive pricing** and **better policy options**.
- Increased foreign participation will **improve customer service standards**.
- **Higher insurance penetration** will **close the protection gap**, offering financial security to more Indians.
- **Premiums will be invested in India**, contributing to domestic economic growth.

Challenges for Foreign Insurers:

While **100% FDI** brings many opportunities, foreign insurers **may face challenges** in entering the Indian market:

1. **Complex Distribution Networks** – India's **private life insurance sector** relies heavily on **bank-led distribution**, while **non-life insurance** depends on **agency channels**.
2. **Adapting to Indian Market Needs** – Many foreign insurers **will need to adjust their business models** to suit India's **unique regulatory environment and customer preferences**.
3. **Existing Joint Ventures (JVs)** – Many foreign players **are already in JVs with Indian companies**. Restructuring these agreements could **take time**.

Conclusion and Way Forward:

The **insurance sector** is a **critical pillar of India's economy**, providing financial stability and protection to millions.

- The **100% FDI policy** will help attract **global insurers** seeking **greater control over their Indian operations**.
- It aligns with the government's vision of **"Insurance for All" by 2047**, which will require **substantial capital investment**.
- The government is also considering **policy revisions** related to **management structures and board composition** to encourage foreign participation.
- According to the **Economic Survey**, insurers should **focus on Tier 2, Tier 3 cities, and rural areas** to improve penetration.
- **Innovative distribution models** can help include underinsured populations, especially those covered under government schemes like:
 - **Pradhan Mantri Jeevan Jyoti Bima Yojana**
 - **Pradhan Mantri Fasal Bima Yojana**



- Pradhan Mantri Jan Arogya Yojana

Rupee Falls Below 87 Against the Dollar: Causes, Impact & Way Forward

Context: The **Indian Rupee (INR)** has hit a **record low**, breaching the **87-mark** against the **US Dollar**, reflecting both **global economic shifts** and **domestic financial challenges**. This depreciation has raised concerns across markets, businesses, and policymakers.



Key Reasons Behind the Rupee Depreciation:

1. Strengthening of the US Dollar:

- The **US Dollar Index** surged **1.24% to 109.84**, indicating increased investor confidence in the **US economy**.
- Strong **US job data** and **higher interest rate expectations** have made the **dollar more attractive** for investors.
- Rising **US Treasury yields** have further boosted demand for the dollar, leading to capital outflows from emerging markets like **India**.

2. Intensifying Global Trade Tensions:

- The **US-China trade war** has escalated, with **tariffs on Canadian, Mexican, and Chinese goods** creating uncertainty in global trade.
- **Canada and Mexico**, which export goods worth **\$840 billion** to the **US**, have introduced **retaliatory tariffs**.
- **China** is facing a **10% tariff**, leading to a **weaker Yuan**, which has **indirectly impacted the Indian Rupee**.

3. Foreign Investor Outflows:

- **Foreign Institutional Investors (FIIs)** have been **offloading Indian assets**, pulling out **\$11 billion** in **Q3 FY25** alone.
- This significant **capital flight** has put immense **pressure on the rupee**.

4. Rising Trade Deficit:

- **India's trade deficit** has ballooned to **\$188 billion**, marking an **18% rise** from the previous fiscal year.
- The country's **heavy reliance on crude oil imports** has further **intensified currency pressure**.

5. RBI's Forex Intervention & Policy Response:

- The **Reserve Bank of India (RBI)** has been **actively intervening in the forex market**, selling **\$3.3 billion** in reserves over the last **seven weeks** to stabilize the rupee.
- However, with **inflation concerns mounting**, markets are **closely watching** the upcoming **RBI monetary policy review** for possible measures.

Impact of a Weak Rupee:

Challenges of Rupee Depreciation:

Higher Import Costs & Inflation:

- A **weaker rupee** makes imports—especially **crude oil, electronics, and machinery**—more expensive.
- This leads to **higher production costs**, causing **inflationary pressures** on the economy.

Increased Debt Burden for Companies:

- **Businesses with foreign currency loans** will now **pay more** due to rupee depreciation.
- This could impact their **profitability and future investment plans**.

**Capital Outflows & FDI Concerns:**

- A falling rupee may **discourage foreign direct investment (FDI)**, as **global investors seek more stable markets**.
- This could lead to **economic volatility** and **slower growth**.

Weakened Consumer Sentiment:

- A **weaker rupee reduces purchasing power**, making goods and services costlier.
- This could **dampen demand** and impact **overall economic growth**.

Potential Benefits of a Weak Rupee:**Boost for Exporters:**

- A **weaker rupee makes Indian exports more competitive**, benefiting industries such as:
 - **IT & Software Services**
 - **Pharmaceuticals**
 - **Textiles & Manufacturing**
- Companies earning in **dollars will see increased profits** when converted into rupees.

Higher Remittances from NRIs:

- **Indians working abroad** will benefit from **better exchange rates**, leading to **higher remittance inflows**.
- This can **support domestic consumption and economic stability**.

Encouraging Self-Reliance:

- The depreciation highlights the **need for India to focus on self-sufficiency**, rather than relying on **exchange rate advantages** to boost trade.
- Encouraging **domestic manufacturing** and **reducing import dependency** could help in the long run.

Conclusion & The Road Ahead:

The **rupee's depreciation** is a result of **global economic factors**, **trade tensions**, and **domestic challenges**. While the short-term effects include **higher inflation and capital outflows**, the long-term impact depends on **India's economic policies and resilience**.

The **government and RBI** must take **strategic measures** such as:

- **Strengthening forex reserves** to combat currency volatility.
- **Encouraging domestic manufacturing** to reduce import dependency.
- **Enhancing export competitiveness** through policy support.

As the **global economic scenario evolves**, **India's economic strategy** will play a crucial role in **stabilizing the rupee** and **ensuring sustained economic growth**.

India's Ethanol Blending Success: Achieving 20% Ethanol in Petrol Ahead of Schedule

Context: India is set to achieve its **20% ethanol blending target** within the next two months—**well ahead of the original 2026 deadline**. This major milestone will see the country producing **1,100 crore litres of ethanol annually**, strengthening **energy security**, reducing crude oil imports, and **benefiting farmers**.

Key Sources of Ethanol Production:

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To maintain a **stable ethanol supply**, the government is diversifying its sources. The main contributors include:

- **Sugar and Molasses** – Estimated to produce **400 crore litres** per year.
- **Food Corporation of India (FCI) Rice** – Expected to generate **110 crore litres** of ethanol.
- **Broken Rice and Maize** – Combined contribution of **400 crore litres** annually.

With **distillery capacity expanded to 1,600 crore litres**, the government is ensuring production stability through **subsidies, incentives, and infrastructure investments**.

Maize: A Key Player in Ethanol Production

Maize is emerging as a **crucial ethanol feedstock**, with its **cultivation and imports** rising significantly.

Recent Developments in Maize Production:

- **Maize imports soared** in 2024, with India **importing 100 crore worth of maize** between April and June alone.
- **Cultivation expanded by 10%**, leading to increased yields and greater availability.
- **Major maize-producing states:** Karnataka, Madhya Pradesh, Maharashtra, Andhra Pradesh, Rajasthan, Bihar, and Uttar Pradesh.
- **Ethanol Year 2024-25** is expected to produce **42 million tonnes of maize**, with **9 million tonnes allocated for ethanol**.

Experts predict that **higher domestic maize production** will **reduce import dependency** and create a **sustainable ethanol supply chain** in the future.

Government Initiatives to Boost Ethanol Production:

The government has introduced several **policy measures and incentives** to accelerate ethanol production:

- **Lowered FCI Rice Prices** – The cost of FCI rice for ethanol production has been reduced from **28/kg to 22.5/kg**, making production more cost-effective.
- **Dual-Feed Distilleries** – Sugar mills are being modified to **produce ethanol from both sugarcane and maize**, increasing flexibility.
- **Financial Incentives** – Ethanol producers benefit from **subsidized loans, guaranteed procurement, and long-term contracts**, encouraging large-scale production.

These measures are not only **strengthening ethanol output** but also ensuring **better economic benefits for farmers**.

Economic & Environmental Impact of Ethanol Blending:

Cutting Down India's Oil Import Bill:

India spends **10.5 lakh crore annually** on crude oil imports. By blending ethanol, the country can **save 6,000 crore for every 100 crore litres of ethanol produced**.

Boosting Farmer Incomes:

Rising ethanol demand is encouraging **farmers to cultivate maize**, offering **higher earnings** compared to traditional crops.

Promoting a Sustainable Fuel Alternative:

Ethanol is a **clean, renewable fuel** that significantly **reduces carbon emissions**, aligning with **India's climate goals and energy security strategies**.

Challenges & The Road Ahead:

Despite the rapid progress, there are some **challenges that need to be addressed**:

- **Impact on Food Security** – Diverting **more maize for ethanol** may impact **poultry, livestock feed, and food availability**.



- **Infrastructure Development** – More distilleries and supply chain improvements are required to handle increased production.
- **Price Stability** – Maintaining ethanol affordability while ensuring that food prices remain unaffected is a key challenge.

The Future of Ethanol in India:

Despite these hurdles, **ethanol blending is transforming India's energy landscape**. It is promoting **self-reliance, sustainability, and economic growth**.

Conclusion:

India's early achievement of **20% ethanol blending** is a **landmark step** toward a **cleaner and more energy-secure future**. With **strong policy backing, increased maize production, and expanding ethanol distilleries**, the country is poised to:

- **Reduce dependence on oil imports**
- **Empower farmers with better income opportunities**
- **Enhance environmental sustainability**

Moving forward, **continued investment, advanced technology, and a balanced approach to food security and fuel production** will be crucial in making **India a global leader in biofuels**.

Aatmanirbharta in Pulses: A Step Towards Self-Sufficiency

Context: The **Finance Minister** has launched a **six-year mission** to achieve **self-reliance (Aatmanirbharta) in pulses**. This initiative aims to **increase domestic production**, reduce import dependency, and ensure food security.

Key Highlights of the Mission:

Budget & Objectives:

- **Budget Allocation:** 1,000 crore
- **Primary Focus:** Boosting the production of **Tur/Arhar (Pigeonpea), Urad (Black Gram), and Masoor (Red Lentil)**
- **Goal:** Achieve **self-sufficiency in pulses by 2029**, eliminating the need for imports
- **Support Mechanisms:** **MSP-based procurement and post-harvest warehousing solutions**



India's Import Dependency:

- In **2023-24**, pulse imports surged **84% year-on-year** to **4.65 million tonnes**, the highest in six years.
- Import costs increased by **93%**, reaching **\$3.75 billion**.
- **Major Import Sources:** **Canada, Australia, Myanmar, Mozambique, Tanzania, Sudan, and Malawi**.
- The **Union Home Minister** has set a goal to **completely stop pulse imports by 2028-29**.

India's Pulses Production:

India's Global Standing:

- **Largest Producer** – Contributes **25% of global production**
- **Largest Consumer** – Accounts for **27% of world consumption**
- **Largest Importer** – Imports **14% of the world's total pulses**

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**Key Production Insights:**

- Pulses cover 23% of India's total foodgrain area and contribute 9-10% of total foodgrain production.
- Rabi pulses contribute over 60% of total production.

Major Pulses Produced:

- Gram (Chana) – 40% share in total production
- Tur/Arhar – 15-20% share
- Urad & Moong – 8-10% each
 - Top Producing States: Madhya Pradesh, Maharashtra, and Rajasthan
 - Production Growth:
- 2013-14: 192.55 lakh tonnes
- 2021-22: 273.02 lakh tonnes
- 2022-23: 260.58 lakh tonnes: The increase in production is mainly due to Chana and Moong cultivation.

Challenges Hindering Pulses Production:

1. **Low Productivity:** Pulses are often considered a **low-priority crop** due to **unstable yields**.
2. **Cultivation in Marginal Lands:**
 - Traditionally grown as a **residual crop**, often in **rain-fed conditions** with poor soil fertility.
 - The **Green Revolution** prioritized **rice and wheat**, pushing pulses to **less fertile lands**, reducing productivity.
3. **Lack of Technological Advancements:** No **significant breakthroughs** in technology or **high-yielding seed varieties**.
4. **Lower Profitability for Farmers:**
 - Farmers perceive pulses as **less profitable** compared to wheat and rice.
 - Low adoption of **high-yielding varieties (HYV)** due to **limited awareness and accessibility**.
5. **Post-Harvest Losses: Storage Issues:** Excess moisture leads to **spoilage and pest attacks**, particularly by **pulse beetles**.

Government Initiatives to Boost Pulses Production:

1. **National Food Security Mission (NFSM-Pulses):** Aims to **expand cultivation areas** and **increase productivity** across all districts.
2. **Research & Development:** Indian Council of Agricultural Research (ICAR) is developing **high-yielding and climate-resilient seed varieties**.
3. **PM-AASHA Scheme:** Includes **Price Support Scheme (PSS)**, **Price Deficiency Payment Scheme (PDPS)**, and **Private Procurement Stockist Scheme (PPSS)** to ensure **Minimum Support Price (MSP)** for farmers.
4. **Integrated Scheme of Oilseeds, Pulses, Oil Palm, and Maize (ISOPOM):** Launched in **14 major pulse-producing states** to support production and marketing.
5. **Rashtriya Krishi Vikas Yojana (RKVY):** Encourages **state-level pulse development programs** to boost production.

The Road Ahead: Achieving Self-Sufficiency:

1. **Establishing Model Pulses Villages:** The government will **set up model villages** for pulses cultivation, starting from the **kharif season**.
2. **Utilizing Fallow Land:** Plans to **bring unused land** under **lentil cultivation** to increase output.
3. **Creating Seed Hubs:** **150 hubs** will be developed to **distribute high-yielding seeds** across key farming regions.

- Promoting Climate-Resilient Varieties:** The government will collaborate with **agricultural research institutions** to develop **drought and disease-resistant pulses**.
- Incentivizing Farmers & Crop Diversification:** Encouraging farmers to **cultivate pulses alongside traditional crops** to ensure **better income and reduced dependency on imports**.

Conclusion:

The **Mission for Aatmanirbharta in Pulses** is a **transformative initiative** aimed at making **India self-reliant in pulse production**. By **boosting domestic production, investing in technology, and providing farmer incentives**, India is on track to **reduce imports and strengthen food security**.

With **strategic planning and execution**, India can achieve **complete self-sufficiency in pulses by 2029**.

India Shifts Fiscal Anchor from Fiscal Deficit to Debt-GDP Ratio

Context: The **Indian government** has announced a **strategic shift** in its **fiscal policy**, moving from the **fiscal deficit** as the primary **fiscal anchor** to the **debt-GDP ratio**. This transition will take effect from the **2026-27 financial year**, aiming for **greater fiscal sustainability and long-term economic stability**.

Understanding the Shift:

The government has outlined **three scenarios** for **fiscal consolidation**, depending on the **nominal GDP growth rate**:

- Mild Scenario – 10% GDP growth**
- Moderate Scenario – 10.5% GDP growth**
- High Growth Scenario – 11% GDP growth**

Debt-GDP Ratio in India:

- The **central government's debt-GDP ratio** is projected to be **57.1% in 2024-25** and **56.1% in 2025-26**.
- The government aims to **reduce this ratio to 50% ± 1% by 2031**.

Why the Shift?

1. Improved Transparency and Flexibility:

- The **debt-GDP ratio** offers a **more holistic and long-term** view of the country's **fiscal health**, unlike the **rigid annual fiscal deficit targets**.

2. Global Best Practices:

- Many **advanced economies** prioritize **debt sustainability** over **deficit reduction**, ensuring that fiscal policies **remain adaptable to economic changes**.

3. Stronger Fiscal Management:

- A **debt-based framework** enables the government to **allocate resources more effectively**, **rebuild financial buffers**, and **invest in growth-enhancing expenditures**.

4. Greater Clarity in Borrowings:

- The new approach will ensure **transparent disclosure** of **off-budget borrowings**, addressing past concerns about **fiscal opacity**.

Challenges in Implementation:

1. Delayed FRBM Act Targets:





- The shift means a **significant delay** in achieving the **Fiscal Responsibility and Budget Management (FRBM) Act's** target of a **40% debt-GDP ratio**.

2. Balancing Fiscal Discipline with Growth:

- Maintaining **strict fiscal discipline** while ensuring **adequate public spending** for **economic growth** will be a **major challenge**.

3. Rising State-Level Debt:

- The **combined debt burden** of both **the central and state governments** remains **high**, necessitating **coordinated fiscal planning**.

Key Recommendations by the NK Singh Committee:

The **NK Singh Committee** had previously emphasized the importance of **debt sustainability** in fiscal policy. Its key recommendations include:

- **Debt-to-GDP Ratio Target:**
 - A **60% overall target**
 - **40% for the Centre**
 - **20% for States by FY23**
- **Fiscal Deficit Target:**
 - Reduce **fiscal deficit to GDP ratio** to **2.5% by FY23**
- **Formation of a Fiscal Council:**
 - An **independent body** with a **Chairperson** and **two members**, appointed by the Centre.
 - Responsibilities include:
 1. **Preparing multi-year fiscal forecasts**
 2. **Recommending changes to fiscal strategies**
 3. **Enhancing the quality of fiscal data**
 4. **Advising the government** on deviations from fiscal targets
- **Clear Guidelines for Deviation:**
 - The **grounds for deviating** from fiscal targets must be **clearly defined**, preventing **arbitrary adjustments**.
- **State-Specific Debt Trajectories:**
 - The **Finance Commission** should recommend **individual debt trajectories** for each **state**.

Conclusion:

The transition to a **debt-GDP ratio** as the **fiscal anchor** marks a **major reform** in **India's fiscal policy framework**. While this shift **offers greater flexibility** and **long-term sustainability**, its **success depends on effective implementation**, maintaining **fiscal discipline**, and ensuring **balanced economic growth**.



Beggar-Thy-Neighbour Policies: A Growing Threat to Global Trade

Context: The term "Beggar-Thy-Neighbour" has resurfaced as a major concern amid **rising trade tensions** and **currency devaluations**, particularly between economic giants like the **United States and China**. These policies, aimed at boosting **domestic economies**, often come at the expense of other nations, triggering **trade wars** and economic instability.



What Are Beggar-Thy-Neighbour Policies?

Beggar-thy-neighbour policies refer to **protectionist economic strategies** that benefit one nation while harming others. These policies typically include:

- **High Tariffs** – Imposing taxes on imported goods to protect domestic industries.
- **Strict Import Quotas** – Limiting the number of foreign products allowed in the market.
- **Currency Devaluation** – Weakening the domestic currency to make exports cheaper and imports more expensive.

While these measures may provide short-term benefits to **domestic industries**, critics warn that they can **cripple international trade**, leading to **economic slowdowns**, as seen during **the Great Depression**.

How Do These Policies Work?

Governments adopt beggar-thy-neighbour policies to **shield local industries from foreign competition**. However, these actions often provoke **economic retaliation** from other countries, creating a **dangerous cycle of protectionism**.

Key Examples:

1. **Trade Barriers** – Nations impose **high tariffs** and **import restrictions**, making foreign goods **more expensive**.
2. **Currency Manipulation** – Countries **deliberately weaken** their currency to **boost exports** and discourage imports, causing trade imbalances.

Historical Origins:

The term was first introduced by **Scottish economist Adam Smith** in his 1776 book, "**The Wealth of Nations**." Smith **criticized mercantilist policies**, arguing that **free trade benefits all nations**, while **protectionism leads to long-term economic decline**.

Arguments in Favor of These Policies:

Protecting Domestic Industries & Jobs:

- Governments often **shield key industries** to **preserve jobs** and **ensure national security**.
- **New industries** may require **temporary protection** to become competitive in the global market.

Boosting Exports Through Currency Devaluation:

- A weaker domestic currency makes **exports cheaper and more competitive**, leading to a **trade surplus**.
- **Higher exports and lower imports** can **strengthen the national economy**.

Criticism & Global Consequences:

Trade Wars & Economic Retaliation:

- **Tit-for-tat tariffs** often escalate into full-blown **trade wars**, reducing global trade and economic growth.
- The **interwar period (1918-1939)** saw widespread protectionist policies, **worsening the Great Depression**.

Recent Examples of Protectionism:

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- **China & Japan** have been accused of **currency devaluation** to maintain their **trade surpluses**.
- The **U.S.-China Trade War (2018-2020)** involved **heavy tariffs**, disrupting global markets.

Impact on Consumers

Higher Prices for Goods:

- **Tariffs on imports** raise the cost of **foreign goods**, increasing **consumer expenses**.
- Example: **U.S. tariffs on Chinese products** helped **American manufacturers** but **raised prices for American consumers**.

Reduced Purchasing Power:

- **Currency devaluations** may boost **exports**, but they also **weaken purchasing power**, making **domestic goods** more expensive.

An Alternative Approach: Unilateral Free Trade

Avoiding Retaliatory Tariffs:

Some economists argue that **imposing tariffs harms domestic consumers** more than it helps.

- Example: If the **U.S. imposes tariffs on Chinese goods**, China retaliating with **its own tariffs** will **further harm its own consumers**.

The Free Trade Advantage:

- Free trade advocates believe that **one country can benefit** by avoiding **retaliatory tariffs**, allowing it to **profit from another nation's protectionist mistakes**.

Conclusion:

Beggar-thy-neighbour policies may **seem beneficial** for a country in the short run, but they **threaten global economic stability** in the long term. **Trade wars, rising prices, and reduced global cooperation** are just some of the negative consequences.

States Demand a Larger Share in Central Taxes

Context: The state of **Odisha** has joined the growing demand for an increase in the **States' share** of the **divisible tax pool**, urging the **Finance Commission** to raise it from the current **41% to 50%**. Several states argue that they require **greater financial autonomy** to meet their developmental and governance needs effectively.

Understanding Tax Devolution:

Tax devolution refers to the process by which **tax revenues** collected by the **Central Government** are distributed among the **State Governments**.

Key Aspects of Tax Devolution:

- The **Central Government** collects various **taxes** such as **Income Tax, GST, Excise Duties, etc.**, and a **portion** of this revenue is shared with the **states** based on the **Finance Commission's recommendations**.
- The **primary objective** is to **strengthen fiscal federalism**, allowing **states greater financial autonomy** to address their unique developmental needs.
- The **allocation formula** takes into account factors such as **population, geographical area, forest cover, per capita income, and tax mobilization efforts**.
- Besides **tax devolution**, the **Centre** also provides **additional grants** to states for certain **jointly funded schemes**.





Constitutional Provisions Governing Centre-State Financial Relations:

Several provisions in the **Indian Constitution** define the financial relationship between the **Union and the States**:

- **Articles 202 to 206**: Outline the financial administration of states, covering **budget, expenditure, borrowing, and taxation powers**.
- **Articles 268 to 272**: Detail the **distribution of revenues** between the **Union and States**.
- **Article 280**: Mandates the establishment of a **Finance Commission** every **five years** to recommend the sharing of revenues.
- **Article 282**: Allows the **Union Government** to provide **financial assistance** to states for **any public purpose**.

Current Tax Devolution to States:

Key Recommendations from Recent Finance Commissions:

- **14th Finance Commission (2015-2020)**: Increased the **States' share** in the **divisible tax pool** from **32% to 42%**. It also introduced **revenue deficit grants** for **states facing financial shortfalls**.
- **15th Finance Commission (2021-2026)**: **Reduced the States' share to 41%** due to the creation of the **Union Territory of Jammu & Kashmir**.

Funding Ratios for State Schemes:

- **Northeastern and Hill States** receive **90% of the funding** from the **Centre**, while **States contribute 10%**.
- **Other general category States** receive **60% funding from the Centre**, with the remaining **40% covered by the State Governments**.

Why Are States Demanding a Greater Share?

1. Need for More Financial Resources:

- **State Governments** argue that they handle **critical responsibilities**, such as **education, healthcare, policing, and infrastructure**, which require **greater financial support**.
- The **rising costs** of governance and **development projects** necessitate an increase in **financial allocations**.

2. Perceived Inequity Among States:

- **Economically advanced states** like **Karnataka and Tamil Nadu** argue that they **contribute more in taxes** than they receive from the Centre.
- **Concerns** have been raised that **better-performing states** are being **penalized** for their **strong economic performance**, while **less developed states** with **weaker governance** receive **larger financial aid**.

3. Issues with the Divisible Tax Pool:

- A **significant portion** of the **Centre's revenue** comes from **cesses and surcharges**, which are **not shared with States**.
- This means that while **officially States receive 41% of tax revenues**, the **actual share is much lower**, as **cesses and surcharges** constitute up to **28% of the Centre's revenue**.

Way Forward:

1. Review by the 16th Finance Commission:

- The **upcoming Finance Commission** must **assess the financial needs of States** and consider **raising their share in the divisible tax pool**.
- A fairer **resource-sharing mechanism** is essential to promote **balanced economic growth** across India.

2. Strengthening Disaster Relief Funding:

- States that are **prone to natural disasters** face **huge financial burdens**.

- A separate disaster relief fund could be established to provide **targeted financial assistance** to such states.

3. Enhancing Financial Management Capacity:

- **State Governments** should focus on **improving tax collection**, **reducing financial inefficiencies**, and **ensuring better utilization** of allocated funds.
- Strengthening **fiscal discipline** will help states **reduce their dependence on Central funding**.

Conclusion:

The demand for an **increase in States' share of Central taxes** reflects the growing need for **greater financial autonomy** at the **state level**. While the **Finance Commission** plays a crucial role in **determining revenue-sharing**, there is an urgent need for a **more equitable distribution framework** that ensures both **financial stability** and **economic development** across all **Indian states**.

Private Sector Participation in India's Nuclear Energy Sector

Context: The **Union Government** is exploring ways to **involve private players** in India's **nuclear power sector** to achieve the ambitious target of **100 GW nuclear power capacity by 2047**. This marks a significant shift from the traditional model, where **state-owned enterprises** have exclusively controlled nuclear power generation.



Current Status of India's Nuclear Power:

- India's **installed nuclear power capacity** stands at **8,180 MW**, spread across **24 reactors**.
- **10 new reactors** (totaling **8 GW**) are under construction in **Gujarat, Rajasthan, Tamil Nadu, Haryana, Karnataka, and Madhya Pradesh**.
- A **6×1208 MW nuclear plant** has been approved in **Andhra Pradesh** in collaboration with the **USA**.

Key Legislative Changes Proposed:

To allow **private sector participation**, the government is considering **amendments** to:

- **Atomic Energy Act, 1962** – The backbone of India's **nuclear energy development and regulation**.
- **Civil Liability for Nuclear Damage Act, 2010** – Ensures **compensation mechanisms** for nuclear incidents.

Objectives of Private Sector Collaboration:

The government plans to partner with **private companies** to:

- Develop **Bharat Small Reactors**.
- Invest in **R&D of Bharat Small Modular Reactors (SMRs)**.
- Advance **new nuclear technologies** for energy generation.

What is Nuclear Energy?

- **Nuclear energy** is the energy released during **nuclear reactions**, either by **fission** (splitting of atomic nuclei) or **fusion** (merging of atomic nuclei).
- In **nuclear fission**, heavy elements like **uranium or plutonium** split, releasing massive amounts of energy, which is harnessed to generate **electricity** in **nuclear power plants**.

Advantages of Private Sector Involvement:

1. **Faster Expansion of Capacity** : Private investment can **bridge financial gaps** and **speed up** nuclear power growth.

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2. **Technological Innovations:** Collaboration with private companies will bring in cutting-edge technology, global expertise, and efficient project execution.
3. **Cost Efficiency:** Competitive bidding among private players can reduce project costs and minimize delays.
4. **Enhanced Energy Security:** Expanding nuclear power will help reduce dependence on fossil fuels and support India's clean energy goals.

Challenges in Private Sector Entry:

1. **Regulatory Hurdles:** Existing laws need amendments to permit private participation, requiring policy clarity.
2. **High Capital Investment:** Nuclear projects have long gestation periods and huge upfront costs, making them less attractive for private firms.
3. **Liability Concerns:** The Civil Liability for Nuclear Damage Act places high financial liability on nuclear plant operators, discouraging private investment.
4. **Safety & Security Issues:** Nuclear power requires stringent safety measures, necessitating robust oversight to ensure private firms adhere to safety norms.
5. **Public Resistance:** Concerns over radiation risks, nuclear waste disposal, and potential accidents may lead to public opposition against private sector entry.

Government Initiatives:

- Announced a 20,000 crore R&D mission for developing Small Modular Reactors (SMRs).
- Plans to deploy at least five indigenously developed SMRs by 2033.
- NPCIL and NTPC signed a Joint Venture agreement to develop nuclear power facilities in India.

Way Forward:

1. **Establishing a Clear Regulatory Framework:** A strong regulatory structure is needed to ensure safety, transparency, and national security.
2. **Promoting Public-Private Partnerships (PPPs):** The government should oversee nuclear projects, while private companies handle operations, investment, and technological advancements.
3. **Gradual Implementation with Pilot Projects:** Start with small-scale pilot projects to test private sector involvement, manage risks, and ensure smooth scalability.

Conclusion:

The entry of private players in India's nuclear sector could accelerate growth, bring innovation, and enhance energy security. However, regulatory clarity, financial support, and public trust are crucial to making this transition successful and sustainable.

e-NAM 2.0: Upgrading India's Digital Agricultural Market

Context: The Union Agriculture Minister has announced plans to upgrade the National Agricultural Market (e-NAM) to e-NAM 2.0, aiming to resolve logistical challenges in inter-state and inter-mandi trade and enhance market efficiency.

What is e-NAM?

- Launched in 2016, e-NAM is a pan-India electronic trading platform that integrates Agricultural Produce Market Committee (APMC) mandis, creating a unified national market for agricultural commodities.





- **Implemented by:** Small Farmers Agribusiness Consortium (SFAC) under the **Ministry of Agriculture & Farmers' Welfare (MoA&FW)**.
- **Key Features:**
 - **Digital trading platform** for farmers, traders, Farmer Producer Organizations (FPOs), and mandis.
 - **Seamless price discovery** and online payments.
- **Current Reach** (as of Dec 31, 2024):
 - **1,361 mandis** across **23 states** and **4 Union Territories**.
 - **1.79 crore farmers** and **2.63 lakh traders** registered.
 - Facilitated trade worth **2.79 lakh crore**.

Challenges in the Existing e-NAM System:

Despite its success, several **bottlenecks** remain:

1. **Logistical Issues:** **Inefficient transportation** causes **high transit times**, affecting timely delivery.
2. **Inadequate Warehousing & Storage:** **Lack of proper storage facilities** leads to **post-harvest losses**.
3. **Limited Digital Literacy & Internet Access:** Many farmers **struggle to use the platform** due to **lack of awareness** and **poor connectivity**.
4. **Interstate Trade Barriers:**
 - **Variations in state APMC laws** restrict smooth transactions.
 - **Different state tax & compliance norms** create complexity.

Key Features of e-NAM 2.0:

1. **Enhanced Logistics & Transportation Support:**
 - **Unified Logistics Interface Platform (ULIP)** for **real-time tracking** of produce.
 - **Optimized freight options** to reduce **transit time** and improve delivery.
2. **Expanded Warehousing & Cold Storage Infrastructure:**
 - **Subsidized loans** under the **Agricultural Infrastructure Fund (AIF)** to promote **private investment** in storage.
3. **AI-Driven Price Discovery & Quality Assessment:**
 - **Artificial Intelligence (AI) & Machine Learning (ML)** for **fair market price suggestions**.
 - **Automated quality testing** to minimize disputes over **product grading**.
4. **Faster Digital Payments & Financial Support:**
 - **Direct bank transfers & e-wallet integration** for quick settlements.
 - **Fintech partnerships** to provide **micro-loans** based on transaction history.
5. **Simplified Interstate Trade:**
 - **Unified digital pass** to ease **regulatory compliance**.
 - **Standardized tax & compliance framework** for smooth trade across states.
6. **Mobile Accessibility & Vernacular Support:**
 - **Voice-based commands** and **local language options** in the e-NAM app.
 - **Digital literacy campaigns** to train farmers in using the platform.

**Expected Impact of e-NAM 2.0:**

1. **Increased Farmer Participation:** Easier access and better incentives will attract more farmers.
2. **Higher Price Realization:** Direct market access will reduce middlemen, ensuring fairer prices.
3. **Reduced Post-Harvest Losses:** Improved storage & transport infrastructure will cut wastage significantly.
4. **Boost to Logistics & Supply Chain Sector:** Increased investments in agri-logistics will fuel economic growth.

Conclusion:

The e-NAM 2.0 upgrade will transform India's agricultural market by eliminating inefficiencies, boosting digital access, and ensuring fair trade opportunities for farmers. If implemented effectively, it can revolutionize agricultural commerce, making Indian farming more profitable and globally competitive.

India's Gold Investments Surge 60% to 1.5 Lakh Crore in 2024

Context: According to the World Gold Council (WGC), India's gold investments surged by 60% in 2024, reaching \$18 billion (1.5 lakh crore) compared to 2023. This marks a significant rise in demand for gold as an investment and hedge against economic uncertainties.

**Key Highlights of the WGC Report**

- India's gold investment demand: 239 tonnes in 2024 – the highest level since 2013.
- 29% increase from 185 tonnes in 2023.
- Global gold demand: Rose 25%, surpassing 945.5 tonnes in 2023.
- Growing interest in gold ETFs and mutual funds as alternative investment avenues.

Gold in India & Worldwide

- Gold accounts for over 5% of India's total imports.
- Major gold reserves in India:
 - Bihar (44%)
 - Rajasthan (25%)
 - Karnataka (21%)
 - West Bengal & Andhra Pradesh (3% each)
 - Jharkhand (2%)
- Major gold reserves globally:
 - United States, Germany, Italy, and France.

Reasons Behind the Surge in Gold Investments:**1. Rising Gold Prices:**

- Consistent increase in gold prices throughout the year.
- Investors see gold as a hedge against inflation and economic uncertainty.

2. Cultural & Festive Demand:

- Traditional preference for gold during weddings, festivals, and auspicious occasions.

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- Higher **retail demand** significantly boosted gold purchases.

3. Urban Buying Trends & E-Commerce Growth:

- Increased **gold-buying activity in metro cities**.
- **E-commerce platforms** enabled easy investment in **small gold bars and coins**.

4. Weaker Performance of Other Asset Classes :

- **Stock market volatility** led investors to **shift towards gold**.
- **Gold seen as a stable investment** during uncertain economic periods.

Impact on the Indian Economy:

1. **Widening Current Account Deficit (CAD):** Higher **gold imports** increase India's **trade imbalance**.
2. **Inflationary Pressures:** Surge in demand pushes **gold prices higher**, contributing to **inflation**.
3. **Financial Market Disruptions:** More money moving into gold can **reduce liquidity in equity markets**, affecting stock market growth.

Way Ahead: Managing Gold Investments Efficiently

1. **Gold Monetization Schemes (GMS):** Encouraging **depositing idle gold in banks** to **reduce import dependence**.
2. **Strengthening Gold ETFs & Mutual Funds:** Offering **tax incentives** to promote **digital gold investments**.
3. **Expanding E-Gold Infrastructure:** **Fintech platforms** to improve **accessibility to digital gold investments**.

About the World Gold Council (WGC):

- **Established:** 1987
- **Headquarters:** London
- **Offices in:** India, China, Singapore, UAE, and the USA.
- **Governance:** Led by a **Board of Directors** composed of **member company representatives**.
- **Members:** 32 global gold mining companies.

Conclusion:

With **gold demand reaching record highs**, India's love for gold as a **financial and cultural asset** remains strong. However, **balancing imports, investment, and economic stability** will be **key for sustainable growth** in this sector. **Digital gold investments and monetization schemes** could help manage demand while reducing the **impact on India's economy**.

RBI Cuts Repo Rate by 0.25% to Boost Economic Growth

Context: The Reserve Bank of India (RBI) reduced the repo rate by 25 basis points (bps) to 6.25%, marking the **first rate cut since May 2020**. The move is aimed at **stimulating economic growth**, aligning with the Union Budget's 1 lakh crore **income tax relief** to boost urban demand.

- **Inflation is expected to decline**, creating space for **monetary easing**.
- **GDP growth for 2025-26 is projected at 6.7%**, an increase from 6.4% this year.



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- The RBI continues with a neutral monetary policy stance, balancing growth support and inflation control.

Why Did the RBI Cut the Repo Rate?

Slowing Economic Growth & Need for a Boost:

- Economic growth has been **losing momentum**, prompting the government to use **both fiscal (tax cuts) and monetary (rate cuts) measures** to revive demand.
- Lower interest rates **reduce borrowing costs**, making **home loans, car loans, and business loans cheaper**, which can **boost consumption and investment**.

Inflation Remains Under Control:

- Projected inflation for Q1 2025-26: 4.5%.
- Since inflation is **moderating and staying within the RBI's target range (4% ± 2%)**, a rate cut was deemed **appropriate**.

Challenges & Risks to the Economy:

Global Uncertainties & Trade Risks:

- **Geopolitical tensions**, rising **protectionist trade policies**, and **volatile commodity prices** pose risks to economic stability.
- The RBI remains **cautious** but expects a **gradual economic recovery**.

Mixed Domestic Demand Trends:

- **Rural demand is improving**, but **urban consumption is still sluggish**.
- Factors like **employment gains, tax relief, and stable inflation** are expected to **support household spending**.

India's External Sector & Forex Stability:

- The **Rupee's depreciation** has been factored into RBI's policy stance.
- The **Current Account Deficit (CAD)** remains within sustainable limits.
- **Foreign exchange reserves stand at \$630.6 billion**, covering **10+ months of imports**, ensuring **economic resilience**.

Understanding Monetary Policy Stances:

- **Dovish:** The RBI **lowers interest rates** to **stimulate growth**, making borrowing and investment more attractive.
- **Hawkish:** The RBI **raises interest rates** to **control inflation**, even if it slows economic expansion.
- **Accommodative:** The RBI **maintains low interest rates** and injects liquidity into the economy to **support growth and employment**.
- **Neutral:** The RBI takes a **data-driven approach**, adjusting interest rates **based on economic conditions**, without favoring growth or contraction.

With this **rate cut**, the RBI aims to **revive growth while keeping inflation in check**, signaling a **shift toward a more supportive economic policy**.

Budget 2025: Urban Development Gets a Boost, But Challenges Persist

Context: The Union Budget 2025 has allocated 96,777 crore for urban development, reflecting a nominal increase from the previous year. However, after adjusting for inflation, the real value of the allocation has actually declined, raising concerns about the adequacy of funding for urban infrastructure and services.



Key Budget Highlights:

- **Cuts in Key Schemes:** The Pradhan Mantri Awas Yojana (PMAY) has faced significant budget reductions, creating a gap between policy ambitions and actual funding.
- **Reduced Transfers to Urban Local Bodies (ULBs):** Financial support to ULBs has been slashed, and the revenue loss due to GST has further strained their resources.
- **More Funds for Metro Projects: Central Sector Schemes,** particularly for metro rail expansion, have received increased allocations. However, funding for urban programs like the Swachh Bharat Mission and Smart Cities Mission has been cut.
- **10,000 Crore Urban Challenge Fund:** A new initiative aimed at capital-intensive infrastructure projects has been introduced. However, concerns remain over its limited focus on sustainability, employment generation, and social equity.

Understanding India's Urbanization:

Unlike industrialization-driven urbanization seen in the Global North, India's urbanization is primarily driven by economic distress. This phenomenon, often termed "poverty-driven urbanization," is characterized by both rural-to-urban and urban-to-urban migration.

- The COVID-19 pandemic exposed severe shortcomings in urban planning, with reverse migration highlighting deficiencies in basic infrastructure and services.

Major Urban Challenges in India:

1. Lack of Reliable Data:

- With the 2021 Census yet to be conducted, the exact urban population remains unclear. However, estimates suggest that 40% of India's population now resides in urban areas.

2. Outdated Planning & Infrastructure Deficits:

- Spatial plans are outdated, leading to overcrowding, informal settlements, and slums.
- Development strategies prioritize capital investment over people-centric urban growth.

3. Climate Change & Environmental Risks:

- Indian cities face increasing threats from pollution, urban flooding, and heat island effects.
- Delhi NCR, in particular, has been severely impacted by these environmental concerns.

4. Governance & Funding Challenges:

- Despite the 74th Constitutional Amendment, urban planning remains controlled by undemocratic bodies, limiting the power of local governments.
- Cities receive only 0.5% of GDP in intergovernmental transfers, insufficient for comprehensive urban development.

Government Initiatives for Urban Development

1. **Swachh Bharat Mission-Urban (SBM-U) 2.0:** Launched on October 1, 2021, for five years, aiming to achieve safe sanitation and scientific waste management in all cities.

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2. **AMRUT 2.0:** Initiated on **October 1, 2021**, to make cities **self-reliant and water-secure**, focusing on **sustainable water supply** and **sewage treatment**.
3. **Smart Cities Mission:** Aims to **enhance urban living standards** in **100 cities** by developing **efficient services**, **modern infrastructure**, and a **sustainable environment**.
4. **Pradhan Mantri Awas Yojana-Urban (PMAY-U) 2.0:**
 - Aims to **construct 1 crore affordable houses** for the **urban poor** over the next **five years**.
 - **Investment: 10 lakh crore**, with **2.30 lakh crore** in **government subsidies**.
5. **Street Vending Plans:**
 - Development of **100 weekly haats (markets)** and **street food hubs** in key cities.
 - States encouraged to **design street-vending policies** to support **local vendors and micro-entrepreneurs**.

Way Forward: Creating Sustainable and Inclusive Urban Spaces:

While **progress has been made** towards **Sustainable Development Goals (SDGs)**, urban areas continue to struggle with **poverty, inequality, and environmental degradation**.

1. Strengthening Urban Planning & Governance:

- India must adopt a **comprehensive national strategy** to enhance **urban infrastructure, governance, and resource management**.
- Cities should be treated as **engines of economic growth**, requiring **consistent and substantial investments**.

2. Sustainable Urban Development:

- Instead of promoting **high-rise urban sprawl**, **low-rise, radial development models** should be prioritized to **reduce carbon emissions** and **improve urban sustainability**.

3. Empowering Local Governments:

- Greater **financial autonomy** and **decision-making power** should be given to **Urban Local Bodies (ULBs)** for effective urban management.

4. Climate Resilient Cities:

- Indian cities must focus on **green infrastructure, climate adaptation, and disaster preparedness** to tackle **climate change challenges**.

5. Prioritizing Employment & Social Equity:

- **Urban development policies** must integrate strategies for **employment generation, affordable housing, and livelihood security** for marginalized communities.

Conclusion:

The **Budget 2025 allocation** for **urban development** reflects the **government's focus on infrastructure expansion** but falls short in addressing **sustainable and inclusive growth**. To build **resilient, efficient, and people-centric cities**, India must shift towards **long-term urban planning, climate-conscious development, and empowered local governance**.

Government Revamps Market Intervention Scheme (MIS) to Support Farmers

Context: The central government has recently revised the guidelines for the Market Intervention Scheme (MIS), aimed at supporting farmers by stabilizing prices of perishable agricultural commodities. The updated guidelines aim to enhance procurement processes and expand coverage to better assist the farming community during market price fluctuations.



What is the Market Intervention Scheme (MIS)?

The Market Intervention Scheme is a government initiative designed to help State/UT governments procure perishable agricultural and horticultural commodities such as tomatoes, onions, potatoes, etc., when their prices fall below reasonable levels. It is used as a tool to address price volatility for commodities that do not have a Minimum Support Price (MSP).

Under the scheme, the government intervenes when there is a price drop of at least 10% in the prevailing market price compared to the previous normal year, ensuring farmers receive fair compensation for their produce.

Revised Guidelines Under the Market Intervention Scheme:

Integration with PM-AASHA:

The Market Intervention Scheme has now been made a component of the integrated PM-AASHA scheme, which aims to support agricultural markets and ensure price stability for farmers across India.

Increased Procurement Coverage:

The revised guidelines have increased the procurement limit for crops under MIS from the existing 20% to 25% of the total production quantity. This expansion is aimed at enhancing farmer protection during periods of market distress, allowing more crops to be covered under the intervention program.

Direct Payments to Farmers:

In a significant change, States can now opt to pay the difference between the Market Intervention Price (MIP) and the selling price directly into the bank accounts of farmers, eliminating the need for physical procurement. This move aims to streamline the process and ensure farmers receive timely financial support.

Operational Cost Reimbursement:

The central government will reimburse operational costs incurred in storage and transportation of crops from producing States to consuming States. This will be handled by Central Nodal Agencies (CNA) like NAFED and NCCF, ensuring that farmers do not bear the additional financial burden of moving their produce across the country.

Conclusion: Empowering Farmers with Enhanced Support

The revised Market Intervention Scheme represents a stronger commitment by the government to protect farmers' incomes and stabilize prices for essential perishable goods. With higher procurement limits, direct payment options, and cost reimbursements, the updated guidelines are designed to provide more efficient and timely support to farmers in times of market distress. By integrating MIS into PM-AASHA, the government is working towards a more holistic and farmer-friendly approach to price stabilization and market intervention.

Could Trump Break the Capital Controls Taboo with a Tobin Tax?

Context: The topic of **investment barriers** has traditionally been avoided by U.S. policymakers, driven by concerns that even discussing such measures could spark panic in the global financial market. However, under **Donald Trump's economic agenda**, the conversation around **restrictions on inward investment** has become more open, signaling a potential shift in how the U.S. handles its relationship with foreign capital.



Understanding Investment Barriers:

Investment barriers are factors that hinder access to markets or the ability to make investments. These can include:

- **Financial Barriers:** High costs, large capital requirements, and illiquidity.
- **Regulatory Barriers:** Government restrictions, high taxes, and legal limitations.
- **Psychological Barriers:** Risk aversion, lack of knowledge, and behavioral biases.

Trump's Zero-Sum Trade View:

Trump's economic strategy is often described through a **zero-sum lens**, viewing **international trade** as a competition where gains by one nation come at the expense of another. His administration has sought to address **U.S. trade deficits**, which he believes arise from countries undervaluing their currencies to gain an advantage in trade. According to this view, countries with trade surpluses tend to **invest their savings in U.S. assets**, which increases the value of the dollar and, in turn, worsens U.S. trade competitiveness by making American goods more expensive abroad.

Tariffs as a Tool:

To reduce the trade deficit, Trump has used **tariffs** as an economic weapon, imposing them on imports to incentivize local production and reduce reliance on foreign goods. However, this strategy has led to an unintended consequence: a **stronger dollar**. While tariffs are meant to limit imports, the increase in the dollar's value worsens the trade balance and further reduces the competitiveness of U.S. manufacturing.

The **core issue**, as critics argue, is the **relentless global demand for U.S. assets**, which sustains the dollar's strength and increases the trade deficit. **Tariffs**, then, do not address the underlying cause.

Enter the Tobin Tax:

To combat the growing trade deficit and capital inflows, **James Tobin's idea** of a **Tobin tax**—a tax on currency transactions—has been revisited. Initially proposed in the **1970s**, the Tobin tax aims to **slow down excessive cross-border capital flows**, particularly those driving the **overvaluation of the U.S. dollar**. The goal would be to impose a tax on **foreign investment** coming into the U.S. to curb the financial inflows that exacerbate the dollar's strength and worsen the trade deficit.

Tobin Tax: A Tool to Regulate Capital Flows:

The Tobin tax would:

- **Impose a levy on currency transactions**, potentially reducing the speed of speculative capital movements.
- **Generate substantial revenue** without significantly reducing the volume of global capital flows, making it an attractive alternative to tariffs.



- Help **manage capital inflows** and prevent the dollar from becoming too strong, which could mitigate trade imbalances.

Some economists believe a **Tobin tax** would be a more effective tool than tariffs for addressing the **trade deficit**. By taxing cross-border capital flows, it would reduce the incentive to invest in U.S. assets purely for speculative reasons, without significantly hurting productive foreign investment.

Potential Risks of the Tobin Tax:

However, imposing a **Tobin tax** or similar **capital controls** could have significant risks and negative consequences:

1. **Impact on the Dollar:** The mere suggestion of restrictions on foreign investment could lead to a **sharp decline in the dollar's value**, destabilizing both the **U.S. financial markets** and the broader **global economy**.
2. **Impact on U.S. Markets:** A **restriction on foreign investment** could result in a **massive downturn in U.S. stock and bond markets**, causing significant **economic disruption**. Many U.S. companies rely on foreign capital for growth and expansion, and a sudden reduction in investment could lead to **market instability** and **lower corporate valuations**.

Conclusion: A Bold Shift or Dangerous Gamble?

Would Donald Trump break the **capital controls taboo** by imposing a **Tobin tax**? While the idea of taxing cross-border capital flows could provide a way to address the trade deficit without resorting to tariffs, it also carries substantial risks. The **strong dollar** has been a double-edged sword for the U.S. economy, benefitting investors while hurting manufacturing competitiveness. By taxing foreign investment, Trump could attempt to slow this cycle, but the **potential consequences**—from **dollar devaluation** to **market turmoil**—could outweigh the benefits.

Whether or not Trump will push forward with such a drastic measure remains uncertain, but his **zero-sum view of trade** and the ongoing challenges of balancing the **current account** suggest that **capital controls** may not be entirely off the table in his economic policy toolkit.

New Income Tax Bill 2025

Context: Finance Minister **Nirmala Sitharaman** has presented the **New Income Tax Bill, 2025**, in the **Lok Sabha**, aiming to simplify tax laws and make compliance easier.

Introduction: The government has proposed the **Income Tax Bill 2025** to create a **simpler, more transparent, and streamlined tax regime**. Announced during the **Union Budget on February 1, 2025**, the bill eliminates **outdated provisions**, introduces **clearer terminology**, and replaces the term 'assessment year' with 'tax year'.



Although the **fundamental tax structure remains unchanged**, experts view this bill as a **significant step towards modernizing India's taxation system**. If approved, it will come into effect from **April 1, 2026**.

Key Features of the New Income Tax Bill:

Introduction of the 'Tax Year' Concept:

- The bill defines a 'tax year' as a **12-month period starting from April 1**.
- Unlike the current system, where income earned in one financial year is assessed in the following year, the **new system will assess income within the same tax year**.
- For businesses established mid-year, the **tax year will begin from the date of setup and end on March 31**.

Simplified Language for Better Understanding:

- The bill **removes complex legal jargon**, reducing the need for excessive cross-referencing.



- The total length of the tax bill has been **reduced from 823 pages to 622 pages**, despite keeping the number of chapters the same at **23**.
- The number of clauses has increased from **298 to 536**, making the provisions **more structured and easier to comprehend**.

Expanded Definition of 'Income':

- **Virtual Digital Assets (VDAs)**, including cryptocurrencies and NFTs, are now included as taxable assets.
- This aligns VDAs with existing capital assets such as **land, buildings, shares, bullion, and artwork**.

Elimination of Redundant Provisions:

- The bill **removes outdated exemptions**, such as **Section 54E**, which provided capital gains exemptions for transactions before **April 1992**.
- **Unnecessary amendments and outdated references** have been scrapped.

Clearer Tax Provisions:

- Several tax-related provisions, including **TDS (Tax Deducted at Source)**, **presumptive taxation rates**, and **assessment time limits**, have been consolidated into easy-to-read tables.
- **Deductions for salaries** (such as standard deduction, gratuity, and leave encashment) are now grouped together under one section for better clarity.

Reforming the Dispute Resolution Process:

- The **Dispute Resolution Panel (DRP)** will now provide:
 - **Points of determination**
 - **Detailed reasons for its decisions**
 - **Clear justifications for rulings**

Impact on Taxpayers and Businesses:**Easier Compliance for Taxpayers:**

- The bill **removes excessive cross-referencing**, making tax laws easier to navigate.
- **Legal terms have been simplified**, replacing complex words like "notwithstanding" with simpler alternatives like "irrespective of anything."

Smoother Tax Filing and Compliance:

- Provisions related to **revenue recognition, inventory valuation, and income exclusions** have been consolidated into schedules instead of being scattered across multiple sections.
- **Wealth tax-related provisions** have been integrated, reducing the need for external references.

Recognition of the Digital Economy:

- The bill includes **specific provisions for digital assets and service-based revenues**, reflecting the modern structure of the Indian economy.
- Income generated from **digital assets and online services** is now categorized clearly under capital assets.

Challenges & Future Implications:**No Major Structural Reforms:**

- The bill focuses on **simplification rather than major policy changes**.
- There are **no alterations in tax rates, penalties, or compliance mechanisms**.

Transition to the 'Tax Year' Concept:[Download Our Application](#)



- Taxpayers and businesses may **require time to adapt** to the new system.
- **Financial professionals and accountants** will need to **update their taxation models and planning strategies**.

Pending Approval from Parliament:

- The bill has been **introduced in Lok Sabha** but still needs to be **reviewed by a parliamentary committee** before final approval.

Conclusion:

The **Income Tax Bill 2025** is a significant step toward **simplifying and modernizing India's tax system**. The introduction of the **'tax year' concept**, removal of **redundant provisions**, and **streamlined tax structures** aim to make compliance **easier and more transparent**.

However, while the bill enhances **clarity and efficiency**, it does not introduce **major tax rate changes or structural reforms**. The government is **prioritizing continuity and simplification**, potentially paving the way for more substantial tax reforms in the future.

Prime Minister Dhan-Dhaanya Krishi Yojana (PMDKY)

Context: The Prime Minister Dhan-Dhaanya Krishi Yojana (PMDKY) was unveiled by **Finance Minister Nirmala Sitharaman** during the **Union Budget**. This initiative is designed to **revolutionize agricultural practices in 100 districts across India**, taking inspiration from the **Aspirational Districts Programme (ADP)** launched in 2018.



How PMDKY Will Be Implemented:

PMDKY is structured similarly to ADP but focuses **exclusively on agriculture**. The **100 target districts** will be identified based on the following **key parameters**:

- **Low agricultural productivity**
- **Moderate cropping intensity**
- **Below-average access to credit for farmers**

The **Ministry of Agriculture and Farmers' Welfare** is currently analyzing **agricultural data** to select the **districts that will benefit** the most. Funding for the scheme will be pooled from **existing agricultural and allied sector programs**, including those under the **Ministry of Fisheries, Animal Husbandry, and Dairying**.

Objectives of PMDKY:

The primary goal of PMDKY is to **boost rural prosperity by modernizing farming practices**. The scheme focuses on:

1. **Enhancing agricultural productivity** through modern techniques.
2. **Encouraging crop diversification** and sustainable farming methods.
3. **Expanding post-harvest storage facilities** at **panchayat and block levels**.
4. **Improving irrigation infrastructure** for **efficient water use**.
5. **Ensuring access to short-term and long-term credit** for farmers.

Understanding Cropping Intensity:

What is Cropping Intensity?

Cropping intensity is a **key agricultural metric** that measures the **efficient use of land**. It is calculated as the **percentage of the gross cropped area relative to the net area sown**.

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- It indicates **how many crops** are grown on a piece of land within **one agricultural year**.
- India's **cropping intensity** in **2021-22** stood at **155%**, a major jump from **111% in 1950-51**.

PMDKY and the Aspirational Districts Programme (ADP):

What is ADP?

The **Aspirational Districts Programme (ADP)** was introduced in **January 2018** by **Prime Minister Narendra Modi** to **accelerate development** in **112 of India's most underdeveloped districts**.

The 3Cs Approach of ADP:

The program's success is driven by three fundamental principles:

1. **Convergence** – Aligning **Central and State government schemes**.
2. **Collaboration** – Engaging government officers at **district, state, and national levels**.
3. **Competition** – Ranking districts based on their **monthly progress**.

Performance-Based Development:

The ranking system evaluates districts on **49 Key Performance Indicators (KPIs)** spread across **five major socio-economic sectors**:

1. **Health & Nutrition**
2. **Education**
3. **Agriculture & Water Resources**
4. **Financial Inclusion & Skill Development**
5. **Infrastructure Development**

Conclusion:

The **PMDKY initiative** is set to **redefine India's agricultural landscape** by targeting **low-performing districts** and providing **strategic interventions** to improve **productivity, sustainability, and farmer prosperity**. By adopting **ADP's data-driven approach**, the program aims to create a **self-sufficient agricultural ecosystem**, reinforcing **India's vision for rural development and food security**.

SEBI's Proposal for Fast-Track Follow-On Offers for REITs & InvITs

Context: The **Securities and Exchange Board of India (SEBI)** has introduced a framework to facilitate **fast-track follow-on offers (FPOs)** for **Real Estate Investment Trusts (REITs)** and **Infrastructure Investment Trusts (InvITs)**. This initiative is designed to streamline the **fundraising process** for these investment vehicles, making capital raising more **efficient and accessible**.



Key Proposals by SEBI:

Lock-in Period for Preferential Issue of Units:

- **15% of units** allotted to **sponsors and sponsor groups** will be **locked in for three years** from the date of **trading approval**.
- The **remaining units** will be **locked in for one year** from the date of **trading approval**.

Understanding IPOs & FPOs:

Initial Public Offering (IPO):

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- **Definition:** The first-time issuance of shares by a **private company** to the public, allowing it to be **listed on a stock exchange**.
- **Purpose:** Helps companies raise capital for **expansion, debt repayment, or other corporate needs**.
- **Risk Factor:** **Higher**, as investors do not have prior market performance data for the company.

Follow-on Public Offering (FPO):

- **Definition:** A process where an **already-listed company** issues **additional shares** to raise **extra capital**.
- **Purpose:** Used to finance **growth, acquisitions, or debt repayment** without taking loans.
- **Risk Factor:** **Lower than an IPO**, as the company already has a **trading history and an established market value**.

What is an Infrastructure Investment Trust (InvIT)?

- **Structure:** Functions **similar to mutual funds** but focuses on **infrastructure projects**.
- **Purpose:** Allows **individual and institutional investors** to invest in **infrastructure assets** and earn a **share of the income**.

What is a Real Estate Investment Trust (REIT)?

- **Purpose:** Invests in **income-generating real estate**, such as **commercial and office spaces**.
- **Structure:** Works **like mutual funds**, offering **liquidity to real estate investments**.
- **Benefits:**
 - Provides **regular income** through **rental earnings**.
 - Helps in **portfolio diversification**.
 - Offers **long-term capital appreciation**.

This proposal by SEBI aims to boost the **investment ecosystem** by making **capital raising quicker and more efficient** for **REITs and InvITs**, ultimately benefiting **investors and developers alike**.

RBI's \$10 Billion USD-INR Swap Auction: Impact on Liquidity & Rupee Stability

Context: The **Reserve Bank of India (RBI)** is set to conduct its **largest-ever \$10 billion USD-INR buy-sell swap auction** to tackle the **ongoing liquidity crunch** in the banking sector. This move is expected to **stabilize the rupee** and ensure **smooth currency flow** in the financial system.



What is a USD-INR Buy-Sell Swap Auction?

A **Dollar/Rupee Buy-Sell Swap Auction** is a tool used by the **RBI to manage liquidity** in the financial system. It involves a **two-step process**:

1. **First Leg** – The **RBI purchases U.S. Dollars** from banks in exchange for **Indian Rupees**.
2. **Reverse Leg** – On a pre-agreed date, the **RBI sells back the dollars** to the banks at a **predetermined rate** along with a swap premium.

Why is the RBI Conducting this Swap Auction?

- **Liquidity Management** – Helps inject or absorb **rupee liquidity** in the banking system.
- **Exchange Rate Stability** – Reduces **volatility** in the USD/INR market by **balancing dollar supply**.
- **Forex Reserve Optimization** – Ensures **efficient use of foreign exchange reserves**.

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- **Impact on Inflation & Interest Rates** – Regulates **money supply**, indirectly affecting **inflation** and **borrowing costs**.

Benefits of the USD-INR Swap:

- **Boosts Market Liquidity** – Ensures sufficient **funds for banks**, supporting **credit flow**.
- **Strengthens the Rupee** – Reduces pressure on the **currency during forex outflows**.
- **Predictability for Banks** – Helps banks manage their **forex positions and liquidity planning**.
- **Prevents Excessive Volatility** – Controls **sharp fluctuations in currency values**, enhancing investor confidence.

Challenges & Risks:

- **Impact on Forex Reserves** – A large-scale swap could **reduce foreign exchange reserves**.
- **Global Uncertainties** – Effectiveness depends on **global market conditions** and **capital flows**.
- **Market Speculation** – If not executed strategically, it may trigger **unwanted currency speculation**.
- **Temporary Relief** – While useful for liquidity, it is **not a long-term solution** for structural financial challenges.

RBI's \$10 Billion Swap Auction: Key Details:

- **Auction Date** – February 28, 2025
- **Spot Settlement Date** – March 4, 2025
- **Far-Leg Settlement Date** – March 6, 2028
- **Expected USD-INR Rate Movement** – May approach **86.30**

This auction aims to **stabilize the rupee** and **absorb foreign exchange pressures**, particularly amid **global economic fluctuations**.

How the Swap Mechanism Works:

1. **First Phase (Spot Leg)** – Banks **sell USD to the RBI** at the **FBIL Reference Rate** and receive **rupee liquidity** in their accounts.
 - **FBIL (Financial Benchmarks India Private Limited) Reference Rate** is the official benchmark for forex rates in India.
2. **Final Phase (Reverse Leg)** – After three years, banks **buy back USD from the RBI** by **returning rupees** with an **agreed swap premium**.

Conclusion:

The **RBI's \$10 billion swap auction** is a **strategic move** to **enhance liquidity**, **strengthen the rupee**, and **maintain exchange rate stability**. While it offers **short-term relief**, India's financial system must also focus on **long-term reforms** to ensure **sustained stability in forex markets and banking liquidity**.

RBI Deputy Governor Warns Against 'Reckless Financialization'

Context: The **RBI Deputy Governor** has raised concerns over the **dangers of excessive financialization**, cautioning that the allure of **short-term gains** in financial markets can often overshadow the **long-term financial well-being** of individuals.

What is Financialization?



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Financialization refers to the growing dominance of **financial markets, institutions, and instruments** in both **domestic and global economies**. It involves a shift in **investment preferences**, moving away from **traditional physical assets** like **real estate and gold** toward **financial assets** such as **mutual funds, stocks, and derivatives**.

While financialization can **enhance liquidity and investment opportunities**, **reckless financialization** poses serious **systemic risks**, including:

- **Market volatility**, leading to unpredictable price swings.
- **Increased debt burdens**, causing a rise in default risks.
- **Loss of investor confidence**, which can destabilize economies.
- A potential repeat of crises like the **2008 global financial meltdown**.

Key Drivers of Reckless Financialization:

1. **Unchecked Credit Availability:** Easy access to **unsecured loans** and **margin trading** encourages **excessive speculation**, leading to inflated asset prices.
2. **Obsession with Derivatives:** **Complex financial instruments** amplify market speculation, increasing **trading risks** and price instability.
3. **High-Frequency Trading (HFT) Boom:** **Algorithmic trading** accelerates market fluctuations, sometimes beyond **rational economic levels**.
4. **Lack of Financial Literacy:** Many **retail investors** enter the market without a solid understanding of **risks**, leading to **uninformed decisions**.
5. **Focus on Short-Term Profits:** The pursuit of **quick financial gains** often **overshadows long-term financial planning**, leading to reckless investment choices.
6. **Technology-Driven Risks:** **AI-powered trading systems** make investment decisions without transparency, increasing **systemic vulnerabilities**.
7. **Influence of Social Media and Herd Mentality:** **Retail investors**, influenced by **peer pressure** and **online trends**, often engage in **high-risk speculative trading** without proper analysis.

Final Thoughts:

While **financialization** has revolutionized the investment landscape, its **unregulated growth** can **destabilize markets** and **jeopardize individual financial security**. Investors must prioritize **informed decision-making**, while regulators must ensure **responsible financial innovation** to prevent potential crises. **A balanced approach is essential**—where financial markets drive economic progress without compromising stability.

Dinesh Khara Committee: Reforming India's Insurance Sector

Context: The **Dinesh Khara Committee** is a high-powered panel established by the **Insurance Regulatory and Development Authority of India (IRDAI)** to **review the Insurance Act, 1938** and propose **necessary amendments**.

Objectives of the Committee:

- **Modernizing Insurance Laws:** Ensuring the Act meets the evolving needs of the insurance industry.
- **Enhancing Investment Opportunities:** Encouraging **foreign investment** to boost sector growth.
- **Strengthening Insurance Penetration:** Making insurance more **accessible and efficient**.





- **Aligning with Global Standards:** Updating regulations to match modern economic and regulatory requirements.

Key Members of the Committee:

The **seven-member expert panel** is led by **Dinesh Khara**, the former Chairman of the State Bank of India (SBI). Other prominent members include:

- **NS Kannan** – Former MD & CEO of ICICI Prudential Life Insurance.
- **Girish Radhakrishnan** – Former CMD of United India Insurance.
- **Rakesh Joshi** – Former Member of IRDAI.
- **Saurabh Sinha** – Former Executive Director of RBI.
- **Alok Misra** – MD & CEO of MFIN (Microfinance Institutions Network).
- **L Vishwanathan** – Legal Expert specializing in financial regulations.

Key Recommendations of the Committee:

1. **Raising the Foreign Direct Investment (FDI) Limit:** Proposes allowing **100% FDI** in the insurance sector, attracting more **global players** and enhancing **competition**.
2. **Introduction of Composite Licences:** Recommends enabling insurers to operate across multiple **insurance categories** under a **single licence**, streamlining operations.
3. **Flexible Capital Requirements:** Suggests introducing **differential capital norms**, where capital requirements vary based on **business size and risk exposure**.
4. **Revising Solvency Regulations:** Advocates **relaxing solvency margin requirements** to improve **financial efficiency** while maintaining industry **stability**.
5. **Captive Insurance Licences:** Proposes granting **captive licences**, allowing businesses to **self-insure their risks**, reducing dependency on traditional insurers.
6. **Overhauling Investment Regulations:** Calls for a **review of investment policies**, simplifying **foreign insurer investment and repatriation** procedures.
7. **One-Time Registration for Intermediaries:** Suggests **simplifying the registration process** for insurance brokers and intermediaries, reducing regulatory burdens.
8. **Expansion of Financial Services:** Recommends allowing insurers to **distribute other financial products**, improving **market integration**.

Conclusion: The **Dinesh Khara Committee** is set to play a **transformative role** in shaping India's **insurance landscape**. By introducing **progressive reforms**, the committee aims to create a **more inclusive, competitive, and investment-friendly insurance sector**, aligning it with **global best practices**.

India's Fertilizer Strategy

Context: India is taking decisive steps to **reduce its reliance on imported fertilizers**, particularly **Urea, Di-Ammonium Phosphate (DAP), and Muriate of Potash (MOP)**. The government is focusing on **alternative solutions** to ensure **sustainable agriculture**, improve **soil health**, and **lower import costs**.

India's Heavy Dependence on Imported Fertilizers:

MOP – 100% Imported:

India lacks **potash reserves**, making it completely reliant on imports from **Canada, Russia, Jordan, Israel, Turkmenistan, and Belarus**.



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Urea – Domestic Production Dependent on Imports:

While **85% of urea demand** is met through **domestic production**, manufacturing is heavily dependent on **imported Liquefied Natural Gas (LNG)** from **Qatar, the US, UAE, and Angola**.

DAP – A Complex Import System:

India imports DAP in multiple forms::

- **Finished Fertilizer** – Mainly from **Saudi Arabia, China, Morocco, Russia, and Jordan**.
- **Raw Materials** – **Rock phosphate** from **Jordan, Morocco, Togo, Egypt, and Algeria**; **sulphur** from **UAE, Qatar, and Oman**.
- **Intermediate Chemicals** – **Phosphoric acid** from **Jordan, Morocco, Senegal, and Tunisia**; **ammonia** from **Saudi Arabia, Qatar, Oman, and Indonesia**.

Why India Needs to Reduce Urea, DAP & MOP Usage:

1. High Import Dependence & Rising Costs:

- India's reliance on imports for **MOP and DAP** puts pressure on **foreign exchange reserves**.
- The **rupee's depreciation** further increases fertilizer import costs.

2. Nutrient Imbalance & Soil Health Issues:

- **Urea (46% nitrogen), MOP (60% potash), and DAP (46% phosphorus + 18% nitrogen)** are high-analysis fertilizers.
- **Excessive use** of these fertilizers **disrupts soil health**, leading to **inefficient nutrient absorption and wastage**.
- Crops need a **balanced mix of nutrients**, including **macronutrients (N, P, K)**, **secondary nutrients (sulphur, calcium, magnesium)**, and **micronutrients (zinc, iron, copper, boron, manganese, molybdenum)**.

3. Ensuring Efficient Resource Utilization:

- Reducing the use of **high-analysis fertilizers** allows better utilization of **imported raw materials**.
- **Balanced fertilization** improves **crop yields** while **lowering fertilizer expenses**.

Ammonium Phosphate Sulphate (APS): A Sustainable Alternative to DAP:

What is APS?

- **APS (20:20:0:13)** contains **20% Nitrogen (N)**, **20% Phosphorus (P)**, and **13% Sulphur (S)** but **no Potassium (K)**.
- Although APS has **lower phosphorus content** than **DAP (46% P)**, its **balanced nutrient composition** makes it an **effective alternative**.

Advantages of APS Over DAP:

- **Reduces dependence on costly phosphoric acid**, making fertilizer production more **economical and resource-efficient**.
- **Sulphur enrichment improves soil health** and **boosts crop productivity**.
- Ideal for **oilseeds, pulses, maize, cotton, onion, and chilli**, which require **high sulphur content**.
- **DAP should be reserved for wheat, rice, and sugarcane**, where it is most essential.
- **Higher sales potential** – Companies can **sell twice the number of APS bags** compared to **DAP** using the same amount of **phosphoric acid**, making APS a **financially viable alternative**.

The Road Ahead: Shaping India's Fertilizer Future:

1. Rapid Growth in NPKS Complex Fertilizers:

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- Sales of **NPKS fertilizers** in **2024-25** are projected to reach **14 million tonnes (mt)**, nearly **double** the **7.3 mt** recorded in **2013-14**.
- The rapid growth is driven by **APS (20:20:0:13)**, which is steadily **replacing DAP**.

2. Promoting Balanced Fertilization:

- Other **complex fertilizers** like **10:26:26:0**, **12:32:16:0**, **15:15:15:0**, and **14:35:14:0** need **stronger marketing efforts**.
- **Direct MOP application should be minimized**, with its usage **integrated into balanced fertilizers**.

3. Reducing Dependence on High-Analysis Fertilizers:

- The long-term goal is to **limit or gradually reduce Urea, DAP, and MOP usage**.
- **Farmers must be encouraged** to adopt **efficient nutrient application techniques** for better yields **while conserving foreign exchange reserves**.

Conclusion: A Sustainable Fertilizer Revolution:

India's fertilizer strategy is undergoing a **major transformation** to ensure **long-term agricultural sustainability**. By **reducing dependence on costly imports**, **promoting balanced fertilization**, and **adopting sustainable alternatives like APS**, India is paving the way for a **more resilient and self-reliant agricultural sector**.

Encouraging **nutrient-efficient farming practices** will not only **enhance soil health** but also **boost crop productivity**, ensuring a **prosperous future for Indian agriculture**.



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TROPEX 2025: Indian Navy's Largest War Exercise Underway

Context: The Indian Navy's premier Theatre Level Operational Readiness Exercise (TROPEX) for 2025 is currently in progress in the Indian Ocean Region. This biennial mega exercise involves all operational units of the Indian Navy, along with substantial participation from the Indian Army, Indian Air Force (IAF), and the Indian Coast Guard.



TROPEX 2025 is designed to validate the Navy's core warfighting strategies, ensuring an integrated and synchronized response to safeguard India's maritime security interests. It focuses on countering conventional, asymmetric, and hybrid threats in an evolving maritime environment.

Duration and Phases: The exercise spans three months, from January to March 2025, and is divided into multiple phases, including:

- **Harbour Phase** – Focused on planning, coordination, and combat preparations.
- **Sea Phase** – Conducts real-time war drills, including cyber and electronic warfare operations and live weapon firings.
- **Joint Work-Up Phase & Amphibious Exercise (AMPHEX)** – Tests inter-service interoperability and amphibious assault strategies.

Massive Deployment of Warships, Submarines & Aircraft:

This year, TROPEX 2025 features a formidable naval force, including:

- 65 Indian Navy warships
- 9 powerful submarines
- 80+ aircraft of various types

The exercise involves cutting-edge platforms like:

- INS Vikrant (India's indigenous aircraft carrier)
- Visakhapatnam & Kolkata-class destroyers
- Kalvari-class submarines
- MiG-29K fighter jets, P-8I surveillance aircraft, HALE Sea Guardian drones, and MH-60R helicopters

Integration of Indian Army, IAF & Coast Guard:

To enhance joint operations and synergy, the Indian Army, Air Force, and Coast Guard are actively participating with:

- Sukhoi-30, Jaguar, C-130, AWACS, and Flight Refueller aircraft
- An Infantry Brigade with over 600 troops
- More than 10 Coast Guard ships and aircraft

Strengthening India's Maritime Dominance

Over the years, TROPEX has evolved into a high-intensity, complex exercise, reinforcing India's ability to conduct precise, coordinated, and effective joint operations. TROPEX 2025 signifies India's commitment to maritime security, ensuring readiness to defend national interests Anytime, Anywhere, Anyhow.

P-8I Aircraft: India's Cutting-Edge Maritime Patrol Aircraft

Context: India is set to **revive its proposal** to acquire **six additional P-8I** long-range maritime patrol aircraft from the **United States**. This move aims to **bolster the Indian Navy's surveillance capabilities**, reinforcing its strength in maritime operations.

About the P-8I Aircraft:

The **P-8I Poseidon** is a **long-range, multi-mission maritime patrol aircraft** designed and built by **Boeing**, a leading **U.S. aerospace company**.

- It serves as a **successor** to the **Indian Navy's aging Tupolev Tu-142** aircraft.
- The **P-8I is a specialized variant** of the **P-8A Poseidon**, which is extensively used by the **United States Navy**.
- With **cutting-edge sensors, advanced weapons systems, and exceptional range**, the P-8I can **detect and neutralize threats** from **submarines, surface vessels, and aerial adversaries**.

Key Capabilities of the P-8I:

The **P-8I Poseidon** is a versatile aircraft capable of executing multiple missions, including:

1. **Anti-Submarine Warfare (ASW)** – Tracking and neutralizing enemy submarines.
2. **Anti-Surface Warfare (AsuW)** – Engaging hostile surface vessels.
3. **Maritime Surveillance & Reconnaissance** – Conducting long-range patrolling and intelligence gathering.
4. **Intelligence, Surveillance & Reconnaissance (ISR)** – Providing real-time battlefield awareness.

P-8I Aircraft Specifications:

Feature	Details
Length	39.47 m
Wingspan	37.64 m
Height	12.83 m
Crew Members	9
Maximum Takeoff Weight	85,139 kg
Maximum Speed	789 km/h
Maximum Altitude	12,496 m
Operational Range	2,222+ km
Time on Station	4+ hours

The **P-8I's endurance and high-speed capabilities** make it a **formidable asset** for maritime security, ensuring that India maintains **dominance over its waters**.

Why is the P-8I Important for India?

Strengthens India's Maritime Defense: Enhances surveillance and tracking of **hostile submarines and warships**.

Supports Regional Stability: Plays a **pivotal role in Indo-Pacific security**, helping counter growing threats in the **Indian Ocean Region (IOR)**.

Enhances Strategic Partnerships: Strengthens India's **defense ties with the U.S.**, promoting **defense cooperation and interoperability**.





Conclusion:

The P-8I Poseidon is a game-changer in **maritime security**, offering **unmatched reconnaissance, warfare, and surveillance capabilities**. With India planning to **procure more P-8Is**, the Indian Navy will further **fortify its maritime defense**, ensuring **enhanced security and strategic dominance** in the region.

DDoS Cyber Attack on Karnataka's Kaveri 2.0 Portal: Impact & Prevention

Context: Karnataka's **Kaveri 2.0 property registration portal** suffered a major **DDoS attack** in **January 2025**, disrupting key citizen services. Investigations confirmed that the outage was not a technical issue but a **deliberate cyberattack**, highlighting the vulnerabilities of **critical digital infrastructure**.



What is a DDoS Attack?

A **Distributed Denial of Service (DDoS) attack** is a **cyberattack** aimed at overwhelming a server, service, or network with **massive internet traffic**, making it **inaccessible** to genuine users.

How It Works:

- Unlike a **Denial of Service (DoS) attack**, which originates from a **single source**, a **DDoS attack** uses multiple compromised devices (botnets) to **flood a system** with requests.
- The botnet consists of **malware-infected** systems that generate **excessive traffic**, crippling online services.

Types of DDoS Attacks:

- Bandwidth Flooding** – Overloads a system's bandwidth.
- Protocol Exploitation** – Exploits network vulnerabilities.
- Application Targeting** – Attacks weaknesses in specific applications.

Major DDoS Attacks:

X Platform Attack (August 2024):

- Elon Musk's X platform** suffered a **massive DDoS attack**, causing **delays** before a key event featuring **Donald Trump**.

GitHub Attack (2015):

- A **China-based botnet** attacked **Microsoft-owned GitHub**, targeting **anti-censorship projects** using malicious JavaScript injections.

Impact of DDoS Attacks on Web Portals:

- Service Downtime** – Systems crash, leading to **disruptions** and **financial losses**.
- Diversion for Other Attacks** – DDoS attacks can be a **smokescreen** for **data breaches**.
- Reputational Damage** – Frequent attacks **erode public trust** in digital services.

DDoS Attack on Kaveri 2.0:

How the Attack Happened:

- Attackers **flooded the system** using **62 email accounts** from **14 IP addresses**.
- The **January 2025 attack** targeted the **Encumbrance Certificate (EC) search**, generating **6.2 lakh malicious requests** in just **two hours**.

Consequences:

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- **Property registrations dropped** significantly.
- **Government services** were **severely disrupted**.
- Exposed **cybersecurity loopholes** in government portals.

How to Prevent DDoS Attacks?

1. **Traffic Filtering:** AI-powered security tools can block malicious traffic.
2. **Continuous Monitoring:** Cybersecurity teams should detect **unusual traffic spikes** early.
3. **Rate Limiting:** Restricting excessive requests **prevents overload**.
4. **Bot Detection:** CAPTCHAs and AI-based analysis help identify automated bots.
5. **Strong Authentication:** **Multi-Factor Authentication (MFA)** secures user access.
6. **Government & Industry Collaboration:** Working with **cybersecurity agencies** enhances **threat response**.
7. **Cyber Awareness:** Educating users about **phishing risks** and **security best practices**.
8. **Incident Response Plan:** **Dedicated cybersecurity teams** should respond swiftly to threats.

Future of Kaveri 2.0:

The portal was restored on February 5, but the attack highlighted the urgent need for stronger cybersecurity measures. Government agencies must **prioritize digital security** to **prevent future disruptions** and ensure **safe digital governance**.

Indian Army Boosts Air Defence to Counter Drone and Aerial Threats

Context: With the **increasing use of drones** and evolving **security threats**, the **Indian Army** is taking major steps to **strengthen its air defence systems**. **Low-flying aircraft** and **unmanned aerial vehicles (UAVs)** pose new challenges that demand **advanced defence solutions**.



Key Developments in Air Defence:

- **Contract for Quick Reaction Surface to Air Missile (QRSAM):** Expected to be finalized within **4-5 months**, this **indigenously developed missile system** by **DRDO** has a **30 km range** and is a top priority for the Army.
- **Upgrades in Akash Surface-to-Air Missiles (SAM):**
 - Three regiments of **Akash SAM** are already in service.
 - Two regiments of the **enhanced Akash-NG** have been contracted.
 - New **prototypes** for trials are expected within **45 days**.
- **Drone Warfare Challenges:** Lessons from the **Ukraine war** have demonstrated the increasing role of **drones in modern combat**, making **air defence adaptation** crucial.

Understanding Drones and Their Military Applications:

Drones, also known as **Unmanned Aerial Vehicles (UAVs)**, are **pilotless aircraft** used for various applications, from **military missions** to **civilian operations**.

Military Uses of Drones:

- **Surveillance & Reconnaissance:** Used for **intelligence gathering** without endangering human pilots.
- **Precision Strikes:** Armed drones like the **MQ-9 Reaper** can carry **missiles** and conduct **targeted airstrikes**.

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- **Real-time Battlefield Intelligence:** Advanced sensors provide live combat updates.
- **Psychological Warfare:** Continuous UAV surveillance can create fear and deterrence.
- **Logistics & Resupply:** Used to deliver supplies to troops in remote areas.
- **Law Enforcement & Border Security:** Assist in crowd monitoring, surveillance, and rescue operations.

Why India Needs Stronger Aerial Defence:

- **Rising Drone Intrusions:** Adversaries have used drones to drop weapons and conduct surveillance along India's borders.
- **Threats to Critical Installations:** UAVs have been detected near military bases and vital infrastructures, raising concerns about potential attacks.
- **Enhanced Warfare Tactics:** Drones equipped with loitering munitions, spy cameras, and disruptive technology present new security risks.
- **Espionage & Smuggling:** Civilian drones are increasingly misused for spying, smuggling, and unauthorized surveillance.

India's Strategy to Strengthen Air Defence:

- **Advanced Defence Systems:**
 - Deployment of **Quick Reaction Surface to Air Missile (QRSAM)** and smart ammunition.
 - **Counter-drone systems** and **modern anti-aircraft weapons** are being introduced.
- **Technological Innovations:**
 - Development of **radar systems** and **anti-drone weaponry** to detect, track, and neutralize aerial threats.
- **Regulatory Measures:**
 - **Civil Aviation Requirements (CAR)** for drone operations.
 - **Drone (Amendment) Rules 2023**, effective from **September 27, 2023**, aims to **liberalize and expand** drone usage while ensuring security.
- **Indigenous Defence Technology:**
 - **DRDO and Indian defence agencies** are working on **homegrown solutions** to tackle drone threats.
 - Focus on **developing missile systems, electronic warfare tools, and AI-driven counter-drone technologies**.

Conclusion:

Drones have revolutionized warfare and civilian industries, but they also pose significant security risks. As aerial threats evolve, India is taking decisive steps to fortify its air defence systems with cutting-edge technology, strategic policies, and indigenous innovations. Strengthening drone countermeasures will be crucial for safeguarding national security and critical assets in the future.

China's Mega-Dam on Brahmaputra Sparks Environmental and Geopolitical Concerns

Context: China's plan to build the **world's largest hydropower dam** on the **Brahmaputra River**, known as **Yarlung Tsangpo** in Tibet, has raised **major concerns** among **India and Bangladesh**, both of which depend on the river for **water security, agriculture, and livelihoods**.

China's Ambitious Mega-Dam Project:

- **Capacity:** 60 GW (Three times larger than China's **Three Gorges Dam**)
- **Estimated Cost:** \$137 billion
- **Location:** Great Bend of the **Brahmaputra River** in **Medog County, Tibet**
- **Part of China's Plan to Achieve Carbon Neutrality by 2060**



China has a history of **building large dams**, including the **Three Gorges Dam (Yangtze)** and **Zangmu Dam (Yarlung Tsangpo)**. This project, however, is on an **unprecedented scale**, sparking fears over **environmental damage and water security** for downstream nations.

Brahmaputra River: A Lifeline for Millions

- **Origin:** **Tibet (Yarlung Tsangpo)**
- **India:** Becomes **Siang** in **Arunachal Pradesh**, later joining **Dibang and Lohit** tributaries to form the **Brahmaputra in Assam**
- **Bangladesh:** Flows into Bangladesh before merging with the **Bay of Bengal**
- **Bhutan:** Though the main river doesn't flow through Bhutan, **96% of Bhutan's landmass** falls within its basin.

The **Brahmaputra River** is crucial for **agriculture, fisheries, and livelihoods** across its basin, making China's **upstream damming a major concern** for downstream nations.

Why China's Mega-Dam Project Is a Serious Concern:

1. Environmental & Ecological Threats:

Disrupted Water Flow & Reduced Sediment Deposits

- The Brahmaputra carries **nutrient-rich sediments** that fertilize farmlands in **India and Bangladesh**.
- China's **massive dams trap these sediments**, leading to **declining soil fertility** and threatening **agricultural output**.

Increased Risk of Flash Floods:

- **Sudden water releases** from Chinese reservoirs can **trigger devastating floods** in **Arunachal Pradesh and Assam**.
- There have been past incidents where **unannounced water discharges** caused **deaths and widespread destruction**.

Threat to Biodiversity:

- **Fluctuating water levels** could **harm aquatic species**, including the **Gangetic dolphin**, and disrupt breeding cycles of fish.

Impact of Climate Change & Glacial Melt:

- The **Tibetan Plateau**, called the "**Third Pole**", contains vast glaciers that regulate **global climate patterns**.
- Large-scale damming could **alter natural water cycles**, worsening **climate change effects**.

Seismic Risks & Geological Instability:

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- The dam is being built in a **highly earthquake-prone region**.
- A **massive earthquake or landslide** could cause a **dam collapse**, leading to a **catastrophic flood disaster** in downstream areas.

2. Geopolitical Tensions & Strategic Concerns:

China's Control Over Brahmaputra: A Water Weapon?

- India fears China could **manipulate water flow**, creating **artificial droughts or floods** in the region.
- This raises concerns about **water being used as a strategic weapon** in times of conflict.

Legal & Diplomatic Hurdles:

- China is **not a signatory** to the **UN Convention on Transboundary Watercourses (1997)**, which ensures **equitable water-sharing**.
- India and China have an **Expert Level Mechanism (ELM)** since 2006, but **no binding treaty** exists on water-sharing.

Regional Water Conflicts:

- China has also **built dams on the Mekong River**, affecting countries like **Vietnam, Cambodia, and Thailand**.
- Similar concerns have been raised by **Southeast Asian nations** over **reduced water availability** due to China's damming policies.

Economic & Social Impact on India and Bangladesh:

- **Forced relocation of communities** due to changing river courses.
- **Disruptions in irrigation and fishing**, leading to **food insecurity**.

How India Can Respond:

Boosting Domestic Water Infrastructure:

- India is accelerating **hydropower projects in Arunachal Pradesh**, including the **Siang Upper Multipurpose Project (SUMP)**, to ensure **water security and energy independence**.

Strengthening Diplomatic Alliances:

- India is working with **Bangladesh and other regional players** to create a **united front on transboundary water management**.

Enhancing Satellite Surveillance & Early Warning Systems:

- **Advanced satellite monitoring** can help track **Chinese dam activities** in real-time.
- **Improved flood prediction models** will allow better disaster preparedness.

Pushing for International Legal Frameworks:

- India can advocate for **global agreements on river-sharing** and seek **international arbitration** to counter China's unilateral control.

Conclusion:

China's **mega-dam project on the Brahmaputra** poses **serious environmental, economic, and geopolitical threats** to **India, Bangladesh, and the broader region**.

While China claims the dam is part of its **clean energy goals**, its **potential consequences—flood risks, ecological damage, and strategic water control—cannot be ignored**.

India must **act decisively** through **infrastructure development, diplomatic pressure, and advanced monitoring** to safeguard its **water security and regional stability**.

Strengthening India's Telecom Infrastructure: Key Lessons for Resilience

Context: The Coalition for Disaster Resilient Infrastructure (CDRI), a global initiative launched by Prime Minister Narendra Modi in 2019, recently released a report evaluating India's **telecom network preparedness** in disaster scenarios. The findings highlight **critical vulnerabilities** and recommend strategies to ensure **network resilience, power stability, and rapid recovery** during emergencies.



Introduction:

India's **telecommunication infrastructure** is a **lifeline** during disasters, ensuring seamless communication between emergency **services, authorities, and the public**. However, **natural calamities** such as **cyclones, earthquakes, and floods** often **disrupt telecom networks**, leading to severe communication breakdowns.

The CDRI report emphasizes the **weak points** in India's **telecom networks** and suggests **key measures** to enhance their **resilience against extreme weather events**.

Why Resilient Telecom Infrastructure is Essential:

A robust **telecom network** is crucial for **disaster management** as it facilitates:

- **Quick coordination** between the **National Disaster Management Authority (NDMA)** and **local authorities**.
- **Seamless communication** between **emergency responders** and **affected citizens**.
- **Efficient management** of **relief efforts** by **state and central governments**.

However, **telecom networks** are **highly vulnerable** due to their dependence on **power supply, overhead cables, and structural integrity**. Any disruption can **hamper rescue efforts and emergency response**.

Major Challenges in Disaster-Prone Areas:

1. High-Risk Zones: Coastal & Seismic Regions:

- **Undersea cables**, which connect India to **global internet networks**, are particularly vulnerable in **coastal regions**.
- **Cyclones and earthquakes** can cause **severe damage** to telecom towers, leading to **massive service outages**.

2. Power Failures: A Major Concern:

- **Telecom towers depend on an uninterrupted power supply**, which is often disrupted during disasters.
- **Prolonged blackouts delay network restoration**, making it difficult for telecom operators to **resume services swiftly**.

3. Weak Infrastructure of Telecom Towers:

- Many towers are **not designed to withstand high wind speeds**, making them vulnerable in **cyclone-prone areas**.
- **Overhead cables are prone to snapping** during storms, leading to **widespread network failures**.

Strategies for Building Disaster-Resilient Telecom Networks:

1. Strengthening Power Supply for Telecom Sites:

- Ensuring **continuous power** at **critical telecom locations**.
- Maintaining **fuel reserves** for emergency use at telecom towers.
- Deploying **solar or hybrid energy solutions** to reduce dependence on the grid.

3. Reinforcing Telecom Towers:

4.

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- **Upgrading tower designs** to withstand **stronger winds and seismic activity**.
- **Elevating backup power sources** like **diesel generators** to prevent flood-related damage.

3. Transitioning to Underground Fiber Optic Networks:

- Overhead telecom cables **frequently snap** during **extreme weather**. The **CDRI report recommends shifting to underground fiber networks** for better durability.
- Implementing a **"dig-once" policy**, where underground cables are installed **alongside other infrastructure**, reducing repeated disruptions.

4. Enhancing Disaster Monitoring & Response:

- **Real-time tracking** of telecom assets using **AI-powered monitoring systems**.
- **Efficient emergency fuel distribution** to keep telecom towers operational.
- Strengthening **collaboration between the Department of Telecommunications (DoT) and telecom operators** for faster damage assessment and restoration.

5. Ensuring Financial Stability with Parametric Insurance:

- **Parametric insurance** can provide **quick financial assistance** to telecom operators after disasters.
- Faster **compensation mechanisms** ensure **swift recovery** and network restoration.

Roadmap for a Resilient Telecom Network in India:

Short-Term Goals (1-2 Years):

- Strengthening **backup power systems** at telecom sites.
- Implementing **AI-driven real-time damage monitoring**.
- Enhancing **disaster-proofing** in **high-risk areas**.

Medium-Term Goals (3-5 Years):

- **Expanding underground fiber networks** nationwide.
- **Mandatory upgrades** for telecom towers to meet **disaster-resistant standards**.
- Establishing a **national coordination mechanism** for telecom outages.

Long-Term Vision (Beyond 5 Years):

Achieving a **100% disaster-resilient telecom infrastructure**.

Developing **comprehensive policies** for **telecom disaster preparedness** at national and state levels.

Promoting **public-private partnerships** to enhance investments in **climate-resilient infrastructure**.

Conclusion:

India's **telecom sector** is **vital for emergency response**, yet it remains **highly susceptible** to natural disasters. The **CDRI report highlights the urgent need** for:

- **Structural upgrades** in telecom towers.
- **Enhanced power stability** at critical sites.
- **Expansion of underground fiber networks**.
- **Stronger disaster coordination mechanisms**.

By adopting these **proactive measures**, India can ensure **minimal communication disruptions** during disasters, enabling **faster rescue operations** and **efficient crisis management**.

Inauguration of Inland Waterways Terminal at Jogighopa, Assam

Context: The Union Minister of Ports, Shipping & Waterways recently inaugurated the **Inland Waterways Terminal at Jogighopa, Assam**. Strategically positioned near **Bhutan and Bangladesh**, this terminal plays a key role in **enhancing bilateral trade** and reinforcing India's **Neighbourhood First Policy**.

Understanding Inland Water Transport (IWT):

What is Inland Water Transport?

Inland Water Transport (IWT) refers to the **movement of goods and passengers** via **navigable rivers, canals, lakes, and other inland water bodies**. It is an economical, efficient, and eco-friendly mode of transport.

Key Legislative Frameworks:

- **Inland Waterways Authority of India Act, 1985**
 - Established the **Inland Waterways Authority of India (IWAI)** in 1986.
 - Responsible for **development, maintenance, and regulation** of **National Waterways (NWs)**.
- **National Waterways Act, 2016**
 - Declared **111 inland waterways** as **National Waterways (NWs)**.
 - Examples:
 - **NW-1:** Haldia – Allahabad (Ganga-Bhagirathi-Hooghly River System).
 - **NW-2:** Dhubri – Sadiya (Brahmaputra River).
- **Inland Vessels Act, 2021**
 - Replaced the outdated **Inland Vessels Act, 1917**.
 - Ensures **harmonized regulations** for **safe navigation** and operations of inland vessels.

Why is Inland Water Transport Important?

1. Strengthening the Logistics Sector:

- **Cargo movement** on **National Waterways** has witnessed **significant growth** in the last decade.
- Offers **cost-effective** and **fuel-efficient** transportation compared to road and rail networks.

2. Boosting the Tourism Industry:

- Inland waterways enhance **river and cruise tourism**.
- Initiatives like **Cruise Bharat Mission** aim to **increase cruise passengers** by 2029.

About Jogighopa Inland Waterways Terminal:

- **Location:** On the **Brahmaputra River**, Assam.
- **International Trade Hub:** Recognized as a **Port of Call** under the **Protocol on Inland Water Transit and Trade (PIWT&T)** between **India and Bangladesh**.
- **Port of Call:** A designated **stopover point** for vessels where ships can **refuel, undergo repairs, or transfer cargo**.

Conclusion:

The **Jogighopa Inland Waterways Terminal** marks a significant step in **strengthening India's inland water transport network**. By enhancing **regional connectivity, boosting trade, and promoting sustainable transport**, this terminal will play a crucial role in **economic development** and **cross-border cooperation** with neighboring countries.



India's Growing LNG Imports: A Key Driver in the Energy Transition

Context: India's liquefied natural gas (LNG) imports from the United States reached a record **7.14 billion cubic meters (BCM)** in the first **11 months of 2024**, reflecting a **71% year-over-year surge**. This marks a significant shift in India's energy landscape as it strengthens its reliance on LNG.

Understanding LNG:

Liquefied Natural Gas (LNG) is natural gas cooled to **-162°C (-260°F)**, converting it into a **liquid form** for easier storage and transportation. Primarily composed of **90% methane**, LNG is **odorless, colorless, non-toxic, and non-corrosive**.



India's LNG Landscape:

As the **third-largest energy consumer** globally, India is witnessing an **unprecedented rise in energy demand** due to **rapid economic growth**. LNG has emerged as a **strategic energy source** to meet these expanding needs. India's LNG infrastructure includes **import terminals, pipelines, and distribution networks**, supplying **power plants, industries, and city gas networks**. However, the sector faces **congestion issues and supply chain inefficiencies**, limiting its full potential.

US Overtakes UAE as a Key LNG Supplier:

- In **2023**, the **United States** surpassed the **UAE** to become India's **second-largest LNG supplier**, while **Qatar** remains the **top supplier**.
- In **2024**, India's LNG imports from the **US** rose by **53.5%**, highlighting a growing preference for American gas.

Why is India Increasing LNG Imports?

1. **Energy Diversification:** India's transition from **coal-based power** to **cleaner fuels** is driving its LNG imports.
2. **Net-Zero Commitment:** To achieve its **net-zero target by 2070**, India is prioritizing **low-emission energy sources**, with LNG playing a crucial role.
3. **Industrial Growth:** Industries demand **clean and efficient energy**, making LNG a **viable alternative** to traditional fuels.
4. **Urbanization & City Gas Networks:** Expanding **city gas distribution (CGD)** networks and increasing reliance on **Piped Natural Gas (PNG)** are improving **urban living standards**.

Challenges Hindering LNG Growth:

1. **Infrastructure Deficiencies:** Although India aims to **increase natural gas's share to 15% of its energy mix by 2030**, **congested LNG terminals and inadequate infrastructure** pose major obstacles.
2. **Limited Pipeline Network:** A **lack of pipelines** restricts **LNG access** to remote areas, slowing nationwide distribution.
3. **Storage Constraints:** India has **limited LNG storage capacity**, making it **vulnerable to global price volatility and supply disruptions**.

Government Initiatives to Strengthen LNG Infrastructure:

1. **Energy Transition Policy:** The government is focused on **increasing the share of natural gas to 15% by 2030** to reduce dependence on coal.



2. **National Gas Grid Expansion:** Expanding the **LNG pipeline network** aims to **enhance supply efficiency** and **improve accessibility**.
3. **Expansion of City Gas Distribution (CGD):** Accelerating access to **Piped Natural Gas (PNG)** and **Compressed Natural Gas (CNG)** for urban households and transport.
4. **Development of New LNG Terminals:** New **import and storage facilities** are being planned to **meet rising demand**.
5. **Liberalization of Gas Pricing:** Providing **market and pricing freedom** for **deepwater, high-pressure, and coal seam gas sources**, with a **ceiling price mechanism**.
6. **Sustainable Alternative Towards Affordable Transportation (SATAT):** Promoting **Bio-CNG** as an **eco-friendly transportation fuel** to reduce reliance on traditional fuels.

The Road Ahead: Building a Robust LNG Ecosystem:

1. **Encouraging Investments:** The government must introduce **investment-friendly policies** to attract **private and foreign capital** into LNG infrastructure.
2. **Regulatory Simplification:**
3. **Fast-tracking approvals** for LNG projects can **accelerate infrastructure expansion**.
4. **Small-Scale LNG Development:** Supporting **small-scale LNG plants** will facilitate **decentralized energy supply** to underserved regions.
5. **Public-Private Partnerships (PPPs):** A **collaborative approach** between the **government, private players, and financial institutions** is essential to build a **resilient and efficient LNG ecosystem**.

With strategic investments, policy reforms, and infrastructure expansion, India is well on its way to becoming a **global leader in LNG consumption**, ensuring **sustainable and secure energy** for its growing economy.

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India's Own AI Revolution: Developing a Homegrown Large Language Model (LLM)

Context: The Indian government has embarked on an ambitious mission to develop its own **Large Language Model (LLM)** as part of the **10,370 crore IndiaAI Mission**. This initiative aims to build a **homegrown AI ecosystem** tailored to India's **diverse languages, culture, and needs**.

Key Highlights of India's AI LLM Project:

1. Indigenous AI Model Development:

- The project focuses on creating an **India-specific AI system** that truly represents the country's **linguistic and cultural diversity**.
- The development of the **foundational model** is expected to take **4-8 months**.
- The **government's AI compute facility** will be among the **most cost-effective** globally.

2. Infrastructure & GPU Supply:

- **10 companies** have been selected to supply **18,693 high-end GPUs (Graphics Processing Units)**, which are **crucial for training AI models**.
- GPUs are used for **large-scale data processing, machine learning, and deep learning** applications.
- Plans are in place to set up **AI data centers in Odisha**, fostering **AI-driven research and innovation**.
- By making **high-performance GPUs available**, students and researchers will have the tools to **develop large-scale AI models** rather than working in **fragmented, ad-hoc setups**.

IndiaAI Mission: Transforming AI Development:

Key Initiatives Under IndiaAI Mission:

Over the next five years, the mission will support:

- IndiaAI Compute Capacity
- IndiaAI Innovation Centre (IAIC)
- IndiaAI Datasets Platform
- IndiaAI Application Development Initiative
- IndiaAI FutureSkills Program
- IndiaAI Startup Financing
- Safe & Trusted AI Framework

Objective:

The mission aims to:

- Foster **India's leadership in AI** globally.
- Promote **technological self-reliance**.
- Ensure **ethical and responsible AI deployment**.
- Make **AI benefits accessible** across all sections of society.

What Are Large Language Models (LLMs)?

LLMs are **advanced AI models** designed to **understand and generate human language** using **deep learning techniques**.

Applications of LLMs:

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- Text Generation
- Language Translation
- Summarization & Content Creation
- Conversational AI (Chatbots, Virtual Assistants)

Why India Needs Its Own AI Model?

1. **Reducing Dependence on Foreign AI:** Developing an **indigenous AI model** will help India **reduce reliance on foreign tech** and boost **self-sufficiency**.
2. **Enhancing Data Security & Privacy:** A **domestically built AI** ensures **better control over data**, minimizing risks associated with **data privacy and misuse**.
3. **Supporting India's Linguistic Diversity:** The LLM will be **designed to support multiple Indian languages**, ensuring inclusivity and accessibility.
4. **Eliminating Biases in AI:** India's AI model will be trained to **reflect the country's true diversity**, eliminating **cultural or ideological biases** found in foreign AI systems.

Conclusion:

India's move to develop its **own AI-powered Large Language Model** marks a **game-changing shift** in its **technological landscape**. With **cutting-edge infrastructure, government support, and a focus on innovation**, this initiative will position India as a **global leader in AI**, driving **economic growth, digital transformation, and technological independence**.

Liquid Propulsion Systems of ISRO

Context: Recently, ISRO appointed M. Mohan as the **Director of the Liquid Propulsion Systems Centre (LPSC)** in Thiruvananthapuram.

Understanding Liquid Propulsion Systems:

Liquid propulsion systems utilize **liquid propellants**, such as **Liquid Oxygen (LOX)** and **Liquid Hydrogen (LH₂)**, to produce **thrust**. These systems offer several advantages over solid propulsion, including:

- **Higher efficiency**
- **Better controllability**
- **Capability to restart multiple times**

ISRO's Liquid Propulsion Systems Centre (LPSC):

The **LPSC** is a key ISRO facility dedicated to the **design, development, and implementation** of liquid propulsion stages for **launch vehicles**. It operates through two major centers:

- **Thiruvananthapuram (Valiamala)** – Focuses on **rocket propulsion**
- **Bengaluru** – Specializes in **satellite propulsion systems**

Recent Developments in Liquid Propulsion:

1. Gaganyaan Mission:

- ISRO has incorporated **advanced liquid propulsion** in the **Crew Module** for the first **uncrewed mission** of Gaganyaan.
- The **Crew Module Propulsion System (CMPS)** is a **bi-propellant-based Reaction Control System (RCS)** that ensures **precise three-axis control (pitch, yaw, and roll)** during **descent and re-entry**.



2. Cryogenic Upper Stage for GSLV:

- ISRO has **indigenously developed** a **cryogenic upper stage** for the **Geosynchronous Satellite Launch Vehicle (GSLV)**.
- This development has significantly **boosted India's capability** to launch **heavier payloads into space**.

3. Satellite Propulsion Systems:

- The **LPSC** is also responsible for the development of **propulsion systems for satellites**.
- This includes **monopropellant thrusters** and **components for satellite control and maneuvering**.

Conclusion:

India's advancements in **liquid propulsion technology** have bolstered its **space exploration** capabilities, making ISRO a global leader in **rocket and satellite propulsion**. The **LPSC** continues to play a pivotal role in enhancing **India's space missions** with cutting-edge **propulsion technologies**.

India's Nuclear Energy Roadmap: Vision 2047 & Union Budget 2025-26

Context: The **Indian government** has unveiled an ambitious plan to achieve **100 GW of nuclear power capacity by 2047**, aligning with the **Viksit Bharat** vision. This initiative aims to **enhance energy security, ensure sustainability, and reduce dependence on fossil fuels**.



Key Highlights of India's Nuclear Energy Mission:

1. Expanding Nuclear Capacity:

- **Target: 100 GW by 2047** (Current capacity: 8 GW).
- **Ongoing Construction: 10 new nuclear reactors** (8 GW) across **Gujarat, Rajasthan, Tamil Nadu, Haryana, Karnataka, and Madhya Pradesh**.
- **New Project Approval: A 6×1208 MW nuclear plant** in **Andhra Pradesh**, in collaboration with the **United States**.

2. Boosting Small Modular Reactors (SMRs):

- **Budget Allocation: ₹20,000 crore** for **R&D and indigenous SMR development**.
- **Goal: Five operational SMRs by 2033**.
- **Objective: Deploy scalable and efficient power solutions** for industries and remote locations.

3. Strengthening Nuclear Legislation:

To **facilitate private sector participation**, the government plans to amend key legislations:

- **Atomic Energy Act, 1962** – Establishes a regulatory framework for nuclear energy development.
- **Civil Liability for Nuclear Damage Act, 2010** – Ensures compensation mechanisms for nuclear-related incidents.

Bharat Small Reactors (BSRs) & Bharat Small Modular Reactors (BSMRs)

The **government** is introducing **BSRs and BSMRs** to create **cost-effective, safer, and scalable nuclear solutions**.

Bharat Small Reactors (BSRs):

- **220 MW Pressurized Heavy Water Reactors (PHWRs)** with a **strong safety record**.
- **Compact land requirement**, making them ideal for **industrial hubs** like **steel, aluminum, and manufacturing units**.



- **Public-Private Model:**

- **Private sector** provides land, cooling water, and capital.
- **NPCIL** ensures **design, quality assurance, and operations**.

Bharat Small Modular Reactors (BSMRs):

- **Definition:** Advanced nuclear reactors with a capacity of up to 300 MW(e) per unit.
- **Advantages:**
 - **Modular construction** for faster deployment.
 - Can be used to repurpose coal plants and stabilize renewable energy grids.
 - **Potential for hydrogen production** through **high-temperature gas-cooled reactors**.

Government Initiatives for Nuclear Expansion:

The Union Budget 2025-26 has laid out a **comprehensive roadmap** to boost **nuclear capacity**, enhance R&D, and adopt advanced reactor technologies.

1. Scaling Up Nuclear Power:

- **Capacity Growth:** From 8,180 MW to 22,480 MW by 2031-32.
- **New Projects:** 10 additional reactors in the pipeline, expected to be operational by 2031-32.

2. Fast Breeder Reactor (FBR) Development:

- **Prototype Fast Breeder Reactor (PFBR) – 500 MW** achieved critical milestones in 2024.
- **Supports India's closed nuclear fuel cycle strategy**, ensuring sustainable fuel utilization.

3. Uranium Exploration & Resource Utilization:

- Recent discoveries have extended the life of Jaduguda Mines by over 50 years.
- Ongoing R&D on Thorium-based reactors, leveraging India's vast Thorium reserves.

4. Public-Private Collaboration:

- **NPCIL & NTPC** formed the **ASHVINI JV** to develop nuclear power projects.
- **Encouraging private sector investments** while ensuring regulatory compliance.

Ensuring Safety, Sustainability & Global Commitments:**1. Stringent Safety Standards:**

- **Indian nuclear power plants** maintain radiation levels well below global benchmarks.
- **Regular safety assessments and technology upgrades** enhance plant security.

2. Aligning with International Climate Goals:

- **Commitment to COP26 targets** – Achieving 500 GW of non-fossil fuel energy by 2030.
- **Fulfilling Paris Agreement obligations** for a sustainable energy transition.

3. Advancing Thorium-Based Technology:

- **Research on Molten Salt Reactors (MSRs)** to harness India's abundant Thorium reserves.
- **Potential to establish India as a global leader** in next-generation nuclear energy.

Conclusion: The Future of India's Nuclear Power

The Union Budget 2025-26 highlights the **government's commitment** to **nuclear energy expansion**, ensuring **energy security**, reduced carbon emissions, and long-term sustainability.

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The Nuclear Energy Mission for Viksit Bharat is a **strategic step** towards making India a **global hub for advanced nuclear technology**. With **strong policy backing, innovative reactor designs, and public-private partnerships**, India's nuclear sector is poised for **unprecedented growth**, securing the nation's place in a **clean energy-driven future**.

Asteroid 2024 YR4: A Potential Threat to Earth & NASA's Planetary Defense Measures

Context: NASA and the European Space Agency (ESA) are closely tracking asteroid 2024 YR4, which has a **1.2% chance of colliding with Earth on December 22, 2032**. While experts suggest there is a **99% probability it will miss**, further observations are needed to refine its trajectory.



What is an Asteroid?

- **Asteroids** are **rocky celestial bodies** orbiting the Sun, primarily found in the **asteroid belt** between **Mars and Jupiter**.
- Unlike planets, they have **irregular shapes and smaller sizes**.
- Formed **4.6 billion years ago**, they are remnants of the **early solar system**.
- Some asteroids cross **Earth's orbit** and are classified as **Near-Earth Objects (NEOs)**, requiring **continuous monitoring**.

How Often Do Asteroids Hit Earth?

Frequent but Harmless Entries:

- **Thousands of asteroids** enter **Earth's atmosphere daily**, but most **burn up due to friction**, appearing as **meteors or fireballs**.
- Small fragments may **reach the surface** but usually cause **minimal damage**.

Impact of Large Asteroids:

- **Asteroids over 1 km wide**, like the one that led to the **dinosaur extinction**, strike Earth **once every 260 million years**.
- Given the **vastness of space**, such **catastrophic collisions are rare**.

Threat from Smaller Asteroids:

- While smaller asteroids **don't cause mass extinctions**, they can cause **regional devastation**.
- **Example:** The **Chelyabinsk meteor (2013)**, which was just **20 meters wide**, exploded with the force of **500 kilotons of TNT**, injuring **1,500 people** and **damaging thousands of buildings**.
- An asteroid **40 meters wide** could **destroy an entire city**, depending on its **speed and angle of impact**.

NASA's Asteroid Deflection Strategies:

NASA and other space agencies are **actively working on planetary defense mechanisms** to **prevent asteroid collisions** with Earth.

DART Mission: A Breakthrough in Asteroid Deflection:

- **NASA's Double Asteroid Redirection Test (DART)** was the **first mission** to test asteroid deflection.
- In **2022**, the **DART spacecraft** successfully **collided with the asteroid Dimorphos**, altering its trajectory.
- Although **Dimorphos was not a threat**, the mission **proved that asteroid deflection is possible**.

Asteroid 2024 YR4: A Closer Look

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**Discovery and Characteristics:**

- **Discovered:** December 2023 by a **telescope in Chile**.
- **Size:** Estimated to be between **40 to 100 meters** (similar to a football field).
- **Recent Close Approach:** Passed **800,000 km from Earth** on **Christmas Day 2023**—twice the Moon's distance.
- **Next Appearance:** Will re-enter visibility in **2028**.

Current Observations & Challenges:

- **Scientists are racing against time** to study 2024 YR4 before it becomes **too faint by mid-April**.
- Determining its **exact size** is difficult, as brightness depends on **reflectivity**. A **small bright asteroid** can appear as luminous as a **large dark one**.

Potential Destruction from 2024 YR4:**NASA's Risk Assessment: Torino Scale Rating:**

- **NASA's Center for Near-Earth Object Studies (CNEOS)** has given 2024 YR4 a **Torino Scale rating of 3 (moderate risk)**.
- **The Torino Scale** categorizes potential asteroid threats on a scale of **0 to 10**, where **higher numbers** indicate greater danger.
- **For comparison:** The asteroid **Apophis** was initially rated **4**, but further studies **downgraded its risk**.

Energy Release & Impact Comparison:

- If **2024 YR4 collides with Earth**, it could release **8 to 10 megatons of energy**.
- **By contrast:**
 - The **Chelyabinsk meteor** released **500 kilotons** and caused **widespread damage**.
 - **2024 YR4 is nearly twice the size**, meaning its **impact could be far more devastating**.

Conclusion: Should We Be Concerned?

While **2024 YR4 poses a potential risk**, the **chances of impact remain low**. **Ongoing observations** will refine its trajectory and help determine **if defensive measures are needed**.

NASA's advancements in **asteroid tracking and deflection technology**, including missions like **DART**, ensure that **humanity is better prepared than ever to handle asteroid threats**. However, **continued research and planetary defense strategies** remain crucial in **protecting Earth from future space hazards**.

AI-Driven Genetic Testing: Navigating the Challenges and Risks

Context: Artificial intelligence (AI) has revolutionized genetic testing by significantly accelerating the processing of genetic information. While this allows for faster analysis, it also magnifies the **risk of data breaches** and **security leaks**, posing challenges for privacy and data protection.

**The Human Genome Project (HGP): A Milestone in Genetic Research**

Launched in **1990**, the **Human Genome Project (HGP)** was a monumental 13-year initiative aimed at mapping the complete **DNA sequence** of the human genome. The primary goals were to:

- Identify the **20,000-25,000 genes** within the human genome.
- Develop technologies to store, organize, and analyze vast amounts of **genomic data**.
- Address **ethical, legal, and social implications (ELSI)** arising from genetic discoveries.

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The human genome consists of around **3 billion base pairs**, with genes distributed unevenly across the genome. Interestingly, over **9% of the DNA sequence** is identical in all humans, while just **0.1%** accounts for our individual differences. A significant portion of the genome is made up of **repetitive DNA sequences** with still-unknown functions.

AI's Role in Genomics: Unlocking New Potential:

AI has played a crucial role in the transformation of **genomic research**. It enables researchers to process and analyze **larger datasets** at unprecedented speeds. For instance:

- **John Hopkins researchers** used **machine learning** to analyze **junk DNA** (non-coding DNA), discovering its connections to **tumors** and opening new pathways for **cancer research**.
- AI algorithms can detect complex patterns in vast genetic datasets that would be nearly impossible to identify manually.
- AI is also capable of predicting **genetic disease-causing traits**, interpreting **gene-environment interactions**, and offering **personalized health insights**.

AI models can be continuously updated with the latest **scientific research**, ensuring that genetic analyses stay current.

Challenges with AI in Genetic Testing:

While AI-driven genetic testing offers numerous benefits, there are several challenges to be aware of:

- **Predicting Complex Outcomes:** Genetic tests cannot reliably predict complex outcomes like **job success** or **academic achievement**. Genetics plays only a **partial role** (around 30%), with other factors such as environment, education, and lifestyle also having significant influences.
- **Uncertain Diagnoses:** Genetic testing results can sometimes be **inconclusive**, particularly when dealing with **variations of unknown significance**. These may require further testing or family history analysis.
- **Ethical Dilemmas:** Genetic testing can raise profound **ethical concerns**, particularly when unexpected findings arise or when predictions are made about **mental health conditions**.
- **Limited Scope:** For example, **genetic testing for Alzheimer's** may identify **risk genes**, but it doesn't guarantee the disease. A person without the gene can still develop Alzheimer's, and conversely, someone with the gene may never develop it.
- **Proactive Health Measures:** The goal of genetic testing should be to offer **insights for preventative health** rather than make definitive diagnoses.

Ensuring Genetic Data Privacy and Security:

To reduce the risk of genetic data breaches and protect individuals' **privacy**, several measures can be implemented:

1. **Encryption:** Employ strong **encryption methods** to protect genetic data both during **transmission** and while **stored**.
2. **Access Control:** Limit access to genetic data to **authorized personnel only**. Use **multi-factor authentication** to enhance security for users handling sensitive data.
3. **Secure Storage:** Store genetic data in secure, controlled environments, such as **dedicated servers** or **cloud platforms** with robust security protocols.
4. **Regular Security Audits:** Conduct frequent **security audits** to identify and address vulnerabilities in the system.
5. **Anonymization:** Whenever possible, **anonymize** or **de-identify genetic data** used for AI training and analysis to minimize the risk of linking it back to individuals.
6. **Software Development Practices:** Adopt **secure software development practices** to minimize vulnerabilities in AI algorithms and software.
7. **Employee Training:** Educate employees who handle genetic data on **security best practices**, **data privacy regulations**, and the importance of protecting sensitive information.

8. **Transparency and Consent:** Ensure transparency with users about how their genetic data is being used and obtain **informed consent** before collecting or analyzing it.

Conclusion:

While **AI-driven genetic testing** holds immense promise in advancing healthcare, the associated **risks** and **ethical concerns** cannot be ignored. By addressing these challenges through improved data protection measures and ethical practices, we can ensure that the benefits of AI in genomics are realized without compromising individual privacy and security.

NavIC: India's Indigenous Satellite Navigation System

Context: India's Navigation with Indian Constellation (NavIC), developed by ISRO, is a **homegrown satellite navigation system** designed for both **civilian and defense applications**. However, the program has faced multiple setbacks, including **satellite failures** and **technical issues**.



The latest blow came on **February 2, 2025**, when the **NVS-02 satellite** failed to reach its intended orbit due to an **engine malfunction**. This marks another challenge for the **Indian Regional Navigation Satellite System (IRNSS)**, which has been struggling with **satellite failures and replacements** since its inception.

Background and Challenges Faced by NavIC:

1. The Vision Behind NavIC:

- NavIC was **conceptualized after the 1999 Kargil War**, highlighting India's need for an **independent navigation system**.
- The goal was to establish a **seven-satellite constellation** by **2016** to provide **accurate positioning data** across India and surrounding regions.
- Despite ISRO's declaration of **completion in 2016**, recurring **failures and replacements** have hindered progress.

2. Failures in IRNSS Satellites:

a) Atomic Clock Malfunctions (2016 Onward):

- **Rubidium atomic clocks**, crucial for precise timing, **malfunctioned** in multiple satellites.
- Each **IRNSS satellite** is equipped with **three atomic clocks**.
- In **July 2016**, ISRO confirmed that **all clocks in IRNSS-1A** had **stopped working**.
- Similar **clock failures** were later reported in **IRNSS-1C, 1D, 1E, and 1G**.

b) Satellite Launch & Deployment Failures:

- **IRNSS-1H (2017)**, meant to replace IRNSS-1A, **failed** as its **heat shield did not detach**.
- **IRNSS-1K (NVS-02, 2025)** suffered an **engine failure**, leaving it in a **sub-optimal orbit**.
- Out of **11 IRNSS satellites launched**, **six have encountered failures**, affecting the system's efficiency.

Current Operational Status of NavIC:

- According to **ISRO's 2023-24 report**, only **five satellites** remain **fully operational**:
 - **IRNSS-1B, 1C, 1F, 1I, and NVS-01**.
- However, some reports suggest **IRNSS-1C is only partially operational** due to **clock malfunctions**.

Satellite Generations and Technological Upgrades:

- **First-generation satellites (IRNSS-1H, 1I)** carried **modified European atomic clocks**.

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- Second-generation satellites (NVS-01, NVS-02) use a combination of indigenous and foreign clocks.
- Despite these upgrades, NVS-02 failed due to an engine malfunction, raising concerns over the system's reliability.

Why is NavIC Crucial for India?

1. Key Services Provided by NavIC:

- **Standard Positioning Service (SPS):** Available for general and commercial users.
- **Restricted Service (RS):** Exclusive for defense and strategic applications.
- Offers better than 20-meter accuracy across India and 1,500 km beyond its borders.
- Provides dual-frequency navigation in L5 and S bands, making it more resilient than other systems.

2. Strategic Importance for Defense:

- Ensures secure and independent navigation, unlike GPS, which is controlled by the US military.
- Other global navigation systems like GLONASS (Russia), Galileo (EU), BeiDou (China), and QZSS (Japan) are primarily military-driven.
- NavIC allows India's armed forces to operate without reliance on foreign satellite networks.

3. Commercial and Consumer Adoption:

- ISRO is working with mobile and automotive companies to integrate NavIC into commercial products.
- Qualcomm, a leading chip manufacturer, announced NavIC support in its chipsets in December 2023.
- Adoption of NavIC in smartphones, vehicle tracking, and logistics will enhance India's navigation ecosystem.

Future Plans for NavIC Expansion:

- ISRO plans to launch three more second-generation satellites:
 - NVS-03, NVS-04, and NVS-05 to strengthen the NavIC constellation.
- These new satellites will:
 - Improve positioning accuracy and enhance reliability.
 - Ensure continuity of services despite failures like NVS-02.
 - Reduce dependence on foreign navigation systems.

Conclusion:

Despite setbacks, NavIC remains a crucial initiative for India's technological and strategic independence. The failures highlight technical challenges, but with upcoming next-generation satellites, ISRO aims to overcome these hurdles and fully operationalize NavIC.

With enhanced commercial adoption and continuous upgrades, NavIC has the potential to become a global alternative to existing navigation systems, ensuring India's leadership in space-based positioning services.

Harnessing Bacteria to Combat Plastic Waste: Potential and Challenges

Context: The global plastic waste crisis has prompted scientists to explore innovative biological solutions using bacteria and enzymes to break down plastics. Numerous research institutions and companies are actively working to develop and commercialize these technologies. However, scalability, efficiency, and industry acceptance remain significant hurdles.



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Why is Plastic Waste a Problem?

- **Plastics take centuries to degrade**, causing long-term environmental damage.
- In the **last 65 years**, an estimated **8.3 billion tonnes** of plastic have been produced.
- **Less than 10%** has been recycled, while approximately **4.9 billion tonnes** continue to pollute the environment.

Biological Approaches to Plastic Degradation:

1. Enzyme-Based Degradation:

- Scientists have developed **engineered enzymes** to break down **PET (Polyethylene Terephthalate)**, a common plastic used in bottles and packaging.
- In **2016**, **Kōhei Oda's team** discovered **IsPETase**, an enzyme capable of degrading PET, though at a slow rate.
- Recent advancements have led to engineered enzymes that can **degrade 90% of PET in just 17 hours**, breaking it down into reusable components like **terephthalic acid and ethylene glycol**.

Challenges:

- Enhancing the **speed and efficiency** of enzymatic degradation.
- Reducing **costs for large-scale industrial applications**.

2. Microbial Degradation: Bacteria That Eat Plastic:

- Scientists are exploring **bacteria that consume plastics** as an energy source.
- **Example:** A bacterium known as **X-32** can break down plastics into **carbon dioxide (CO₂)**, **water**, and **biomass**—but takes around **22 months** to do so.

Key Process:

1. **Bacteria attach** to the plastic surface.
2. They use the **plastic as a carbon source** for energy.
3. They release **enzymes** that break down the polymer structure.

Challenges:

- **Slow degradation rates** compared to enzymatic solutions.
- Requires further **optimization for industrial use**.

3. Spore-Based Biodegradable Plastic: A Revolutionary Approach:

- Scientists at **Harvard University and the Wyss Institute** have developed a **bacteria-infused thermoplastic** that degrades naturally.
- The technology uses **heat-resistant bacterial spores (Bacillus subtilis)** embedded in plastic.
- These spores **remain inactive** during use but **activate in composting conditions**, accelerating plastic breakdown.

Advantages:

- ✓ Increases **plastic durability** while in use.
- ✓ **Speeds up decomposition** in composting environments.
- ✓ Offers a **potentially industry-friendly alternative**.

Challenges:

- Requires **regulatory approval** for use in consumer products.
- Scaling up **spore purification** for mass production remains difficult.

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Bringing These Solutions to the Industry:

- Companies and researchers are working to make **bacteria- and enzyme-based plastic degradation commercially viable**.
- Notable examples include:**
 - Carbios (France):** Developed a **PET-digesting enzyme** that breaks down plastic in just **10 hours**.
 - North Carolina-based biomaterial firms:** Experimenting with **spore-infused thermoplastics** to enhance biodegradability.

Major Hurdles for Industrial Adoption:

- Improving degradation efficiency** to match industry demands.
- Lowering the cost** of enzyme production and bacterial processing.
- Encouraging **manufacturers to integrate these solutions** into existing production models.

Conclusion: The Future of Bacteria in Plastic Waste Management

While **bacteria and enzymes** present a **game-changing opportunity** to tackle plastic pollution, their success depends on **overcoming challenges in scalability, efficiency, and industry adoption**. Future research should focus on **optimizing enzymatic reactions, advancing microbial degradation techniques, and ensuring cost-effective commercial application**.

Rare Einstein Ring Discovered by ESA's Euclid Telescope

Context: The **European Space Agency's (ESA) Euclid space telescope** has spotted a **rare Einstein ring** surrounding the galaxy **NGC 6505**, located nearly **590 million light-years** from Earth.

Did you know? A **light-year** is the distance light travels in a year, approximately **9.46 trillion kilometers**!



What is an Einstein Ring?

Overview:

An **Einstein ring** is a **circular halo of light** that appears around a **massive celestial object**, such as a **galaxy, black hole, or dark matter cluster**.

How Does It Form? – Gravitational Lensing:

This phenomenon occurs due to **gravitational lensing**, where a **massive object's gravity bends and amplifies light** from a distant background galaxy. When the alignment is nearly perfect, it creates a **complete ring of light**.

- The object bending the light is called a **gravitational lens**.
- The Euclid telescope detected this ring due to the bending effect of **NGC 6505**, which distorted light from an **unnamed galaxy located 4.42 billion light-years away**.

Why is it Called an Einstein Ring?

The concept originates from **Albert Einstein's General Theory of Relativity**, which predicted that **massive objects warp space-time**, curving the path of light around them.

How Rare are Einstein Rings?

- First discovered in **1987**, Einstein rings are **extremely rare**, appearing in **less than 1% of observed galaxies**.



- They are **not visible to the naked eye** and require **advanced space telescopes** like **Euclid, Hubble, or James Webb** for observation.

Scientific Importance of Einstein Rings:

Einstein rings serve as **natural cosmic magnifying glasses**, helping astronomers:

1. **Study distant galaxies** that would otherwise be invisible.
2. **Investigate dark matter**, revealing its distribution in the universe.
3. **Explore dark energy**, the mysterious force driving the universe's accelerated expansion.

Similar Phenomena: Einstein Cross:

Einstein Cross is another **gravitational lensing effect**, where instead of a ring, a **distant galaxy's light splits into four distinct images**, creating a **cross-like pattern** around the foreground galaxy.

Final Thought:

The discovery of an Einstein ring around **NGC 6505** is a **fascinating breakthrough** in astrophysics, offering deeper insights into the universe's **hidden structures and cosmic forces**.

RuTAGe Smart Village Center (RSVC): Transforming Rural India with Technology

Context: The **RuTAGe Smart Village Center (RSVC)** has been launched in **Mandaura village, Sonipat**, marking a groundbreaking step in rural technological development. This initiative aims to integrate **advanced technology** into village life, empowering communities with **sustainable and scalable solutions**.



Concept and Vision:

The **RSVC model** was conceptualized by the **Office of the Principal Scientific Advisor (PSA)**. It is designed to serve as a **permanent technology hub** at the **Panchayat level**, providing continuous support to **15-20 villages** over several years. Its success was recognized when it won **first prize at the NSE's Social Stock Exchange event in Varanasi (2024)**.

Technological Innovations and Services:

The **RSVC initiative** offers a diverse range of **12 technology tracks** to address key rural challenges:

1. Agriculture & Waste Management:

- Solutions for **agriculture, waste disposal, homestays, and village tourism**
- Support from **pre-sowing to post-harvest** in collaboration with **Krishi Vigyan Kendras (KVKs)**

2. RuTAG Technologies:

- Innovations developed by **7 IITs** under the guidance of the **Office of the PSA**

3. Livelihood & Entrepreneurship:

- Strengthening **local businesses** through schemes like the **National Rural Livelihood Mission (NRLM)**

4. Renewable Energy:

- Deployment of **solar hybrid and wind technologies** with technical assistance from **SELCO Foundation**

5. WASH (Water, Sanitation, and Hygiene):

- **Waste management and water sanitation solutions**
- Implementation of **IIT Madras Aquamaps and weVois technologies**

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**6. FinTech and Digital Inclusion:**

- **Financial inclusion** apps and **AR/VR-based tech solutions** developed by **IISC and XR Group**

7. Capacity Building:

- Training programs in partnership with **Tier 2 & 3 colleges**
- **NIFTEM piloting local biscuit manufacturing** using **sugar and ghee**
- **NAARM conducting skill development** for **RSVC heads**

8. Government Scheme Apps:

- Dissemination of **welfare programs and tech-driven government schemes** through **citizen-centric apps**

9. Assistive Technologies:

- Development of **solutions for differently-abled individuals** in collaboration with the **Assistive Technology Foundation**

Why RSVC Matters:

The **RSVC initiative** is designed to bridge the gap between **rural communities and technological advancements**. It aims to:

- Solve pressing rural issues like **animal intrusion, organic farming, and skill development**
- Introduce **cutting-edge innovations** that improve **agriculture, education, and livelihoods**
- Enhance access to **financial services, water conservation, and digital literacy**

The Role of Technology in Rural Development:**1. Agriculture:**

- **GPS-based precision tools** and **mechanization** help **increase productivity** and **reduce labor costs**

2. Education:

- Digital learning platforms like **PM e-VIDYA** and **SWAYAM** enable **quality education** for rural students

3. Financial Inclusion:

- **Direct Benefit Transfer (DBT)** and **PM Jan Dhan Yojana** promote **cashless transactions**, **reducing fraud** and **ensuring transparency**

4. Water Management:

- The **National Program on Aquifer Mapping and Management** uses **technology** for **groundwater conservation** in farming

Future Outlook:

The **RuTAGE Smart Village Center (RSVC)** represents a **major milestone** in **rural empowerment through technology**. With continuous **updates and feedback**, the initiative aims to **scale its impact**, ensuring that **innovation reaches every village**.

This model has the potential to **revolutionize rural development**, making **villages self-sufficient, sustainable, and technologically advanced**.



Navika Sagar Parikrama II: INSV Tarini Reaches Port Stanley

Context: The Indian Naval Sailing Vessel (INSV) Tarini successfully reached Port Stanley on February 18, 2025, completing the third and most challenging leg of the Navika Sagar Parikrama II expedition.

About Navika Sagar Parikrama II:

The Navika Sagar Parikrama initiative highlights the Indian Navy's commitment to women empowerment and maritime excellence.

- The expedition is crewed by two women officers, Lieutenant Commander Dilna K and Lieutenant Commander Roopa A.
- The mission promotes ocean sailing, self-reliance, and India's maritime heritage.
- The historic journey was flagged off from Goa on October 2, 2024, by the Chief of the Naval Staff.
- Covering over 21,600 nautical miles (approx. 40,000 km), the journey consists of five legs with stopovers for replenishment and maintenance.

Route of Navika Sagar Parikrama II:

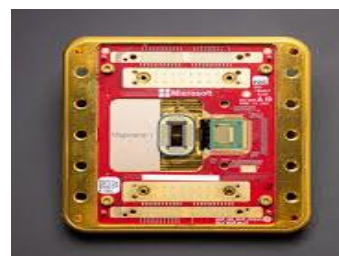
1. Goa to Fremantle, Australia
2. Fremantle to Lyttleton, New Zealand
3. Lyttleton to Port Stanley, Falkland Islands (Completed Phase 3)
4. Port Stanley to Cape Town, South Africa (Upcoming Phase 4)
5. Cape Town to Goa (Final Leg)

About INSV Tarini:

- INSV Tarini is a 56-foot sailing vessel built by M/s Aquarius Shipyard Ltd.
- It was inducted into the Indian Navy on February 18, 2017.
- The vessel has sailed over 66,000 nautical miles (1,22,223 km) and participated in the first edition of Navika Sagar Parikrama in 2017.
- It is equipped with state-of-the-art navigation, safety, and communication systems, ensuring a smooth and secure voyage.

Significance of the Expedition:

The Navika Sagar Parikrama II stands as a testament to women's empowerment in maritime operations, reinforcing India's role as a global naval force. With INSV Tarini reaching Port Stanley, the expedition moves closer to its final destination, showcasing resilience, skill, and determination on the high seas.



Microsoft's Majorana 1: A Quantum Leap in Computing with Topological Qubits

Context: Microsoft has unveiled **Majorana 1**, a groundbreaking quantum computing chip engineered using a **new state of matter**. This innovation could fast-track the development of powerful quantum computers, bringing them to industrial-scale problem-solving by **2027-2029**, instead of waiting decades. However, Microsoft has yet to release any performance benchmarks for this new technology.

Microsoft's Unique Quantum Computing Strategy:

For over **two decades**, Microsoft has been pioneering **topological qubits**, a highly stable form of qubits that require **less error correction** than conventional quantum bits.

What Are Topological Qubits?

- **More stability:** Unlike regular qubits, which are prone to errors, topological qubits store information in the **arrangement and braiding** of exotic particles called **anyons**, rather than in the particles themselves.
- **Anyons** are unique two-dimensional quantum particles that are neither fermions nor bosons, possessing special statistical properties.

Challenges in Developing Topological Qubits:

The journey to creating these qubits was steep, as it required the discovery of **Majorana fermions**, particles that are their **own antiparticles**—a concept first theorized over **80 years ago** by **Ettore Majorana**.

What Are Majorana Zero Modes (MZMs)?

- **Majorana zero modes** are special quantum states appearing at the ends of certain **topological superconductors**.
- These states exist at **zero energy**, acting as both **matter and antimatter** simultaneously.
- Due to their unique properties, they are promising candidates for **fault-tolerant quantum computation**.

Building a New Quantum Material: Topoconductors:

To manufacture these advanced qubits, Microsoft developed **topoconductors**, a hybrid material combining **indium arsenide** (a semiconductor) and **aluminum** (a superconductor).

Why Are Topoconductors Important?

- Just as **semiconductors** enabled the rise of modern electronics, **topoconductors** could lay the foundation for scalable quantum systems.
- They could help scale up quantum computers to **one million qubits**, allowing them to tackle real-world industrial and scientific challenges.
- When cooled to **near absolute zero** and exposed to **magnetic fields**, these materials enable the creation of stable **topological qubits**.

Majorana 1: Microsoft's Breakthrough Quantum Chip

Microsoft's **Majorana 1** is an **eight-qubit** chip, making it smaller than rivals like **Google's Willow (106 qubits)** and **IBM's R2 Heron (156 qubits)**. However, its **Topological Core Architecture** holds the potential to scale quantum computers to the necessary **one million qubits** for solving **real-world problems**.

Design of Majorana 1:

- The chip features **aluminum nanowires** arranged in an **"H" shape**.
- Each **"H" structure** contains four **controllable Majorana particles**, forming a **single qubit**.

Potential Applications of Quantum Computing:

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Microsoft envisions that Majorana 1 could drive **major scientific and industrial breakthroughs**, such as: **Breaking down microplastics** into harmless byproducts.

Developing **self-healing materials** for construction, manufacturing, and healthcare.

Accelerating AI research by using quantum computing to generate **synthetic data** for AI model training. Designing **new materials and molecules** using **natural language input** in AI-driven quantum simulations.

Challenges Ahead:

Despite its potential, quantum computing still faces significant hurdles:

- **Environmental interference** can introduce errors.
- Scaling up stable qubits remains a **technological challenge**.

Quantum Computers vs. Supercomputers vs. Classical Computers:

Classical Computers:

- Process information using **binary code (0s and 1s)**.
- Use **logic gates** like AND, OR, and NOT to manipulate data.

Quantum Computers:

- Use **qubits**, which can exist in **multiple states at once (superposition)**.
- Utilize **quantum gates** (like the **Hadamard and Pauli gates**) for computation, which are **reversible** in nature.

Supercomputers:

- Utilize **advanced GPUs and multi-core processing** to enhance **calculation speeds**.
- Still operate under **classical computing principles**.

Quantum vs. Supercomputers:

- **Supercomputers** only **speed up classical computations**, whereas **quantum computers** solve **entirely new classes of problems** that classical and supercomputers cannot.
- **Quantum gates** enable computing processes **beyond the scope of classical logic gates**.

Final Thoughts:

Microsoft's **Majorana 1** chip could be a **game-changer** in quantum computing, pushing the world closer to practical, large-scale quantum applications. With **topological qubits** showing promise in overcoming **error-prone limitations**, the future of **quantum computing** looks more **transformative** than ever.

Discovery of Rare Kalyana Chalukya-Era Kannada Inscriptions in Telangana

Context: Three rare Kannada inscriptions from the Kalyana Chalukya era have been discovered in Telangana, shedding new light on the history and culture of the 12th century. These inscriptions, dated 1129 CE, 1130 CE, and 1132 CE, belong to the reign of Emperor Someswara-III Bhulokamalla of the Kalyana Chalukya dynasty.



Details of the Inscriptions:

- The first inscription provides details about the construction of the Bijjeswara temple and the donations made by a local village chief.
- The second and third inscriptions record various donations offered to the temple.

Who Were the Kalyana Chalukyas?

The Kalyana Chalukyas, also known as the Later or Western Chalukyas, were successors of the Chalukyas of Badami. Their rule extended from 973 AD to 1180 AD, with their capital at Kalyan (now in Bidar district, Karnataka).

- Taila II was the first ruler of this dynasty, known for his victory over Rajaraja Chola in 992 AD.
- They controlled the Deccan region, playing a crucial role in shaping its political and cultural landscape.

Art and Cultural Contributions:

Architecture:

The Kalyana Chalukyas were renowned for their architectural brilliance, with some of the most magnificent temples and ornate stepped wells (Pushkarni) built during their time.

Notable Temples:

- Kasi Vishveshvara Temple (Lakkundi)
- Mallikarjuna Temple (Kuruvatti)
- Kalleshwara Temple (Bagali)
- Mahadeva Temple (Itagi)

Famous Stepped Wells:

- Manikesvara Temple Pushkarni (Lakkundi) – used for ritual bathing and temple rituals.

Literature and Language:

The Kalyana Chalukya era was a golden period for Sanskrit and Kannada literature. Several literary giants emerged during this time:

- Pampa – One of the greatest Kannada poets.
- Ranna – Celebrated for his epic poetry.
- Durgasimha & Nagavarma – Significant contributors to Kannada literature.

Religious Developments:

This period saw the flourishing of Shaivism, with various sects such as:

- Pashupata
- Lakulisa
- Kalamukha

Additionally, this era marked the rise of a new socio-religious movement under the leadership of Basavanna, leading to the emergence of the Lingayat tradition.

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Significance of the Discovery:

These newly discovered inscriptions provide **valuable insights into temple patronage, governance, and religious practices** of the **Kalyana Chalukya period**. They also highlight the **rich cultural and architectural legacy** that continues to influence the **Deccan region** today.



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Freedom UPSC with **Dhananjay Gautam**

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Earth's Inner Core is Undergoing Structural Changes

Context: A recent study published in **Nature Geoscience** has revealed that **Earth's inner core is undergoing structural changes**, challenging previous assumptions about its stability and composition. Scientists have observed that **the inner core is not as rigid as once believed** and that **its rotation is slowing down**, which could have implications for Earth's day-length and internal dynamics.

Key Insights from the Study:

How Was the Study Conducted?

- **Seismic Waves Analysis:** Researchers used **seismic waves (shockwaves from earthquakes)** to study the Earth's internal layers.
- These waves travel through different layers of Earth, similar to how **CT scans** help visualize the human body's internal structures.

Major Observations:

- Previously, scientists assumed that the **inner core was solid and rigid**, but the new study suggests it is **softer near the surface**.
- The **molten outer core** is influencing the **solid inner core**, potentially **altering its rotation** and **impacting Earth's day-length**.
- It was earlier believed that the **inner core rotates independently** due to its interactions with the mantle. However, this new research indicates that **its rotation is slowing down** over time.

Understanding Earth's Layers:

1. Crust – The Outer Shell:

- The **thinnest layer** (35 km on continents, 5 km on ocean floors).
- **Continental Crust:** Made of **silica and alumina (SIAL)**.
- **Oceanic Crust:** Made of **silica and magnesium (SIMA)**.

2. Mantle – The Middle Layer:

- Extends from the **Moho's discontinuity** to **2,900 km deep**.
- **Asthenosphere (Upper Mantle, up to 400 km deep):** A semi-molten layer, **source of magma**.
- **Lithosphere:** Includes the **crust and upper mantle**, with a thickness of **10-200 km**.
- **Lower Mantle:** Solid and extends beyond the asthenosphere.

3. Core – The Deepest Layer:

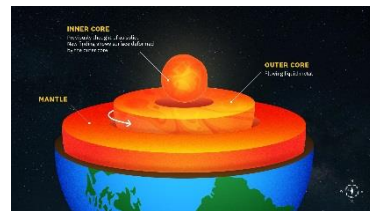
- Begins at **2,900 km depth** and has **extremely high temperature and pressure**.
- Composed of **nickel and iron (NiFe layer)**.

Outer Core:

- In a **liquid state**.
- Known for its **turbulence**, which generates Earth's **magnetic field**

Inner Core:

- Previously believed to be **rigid and solid**, but **new findings suggest it has a softer surface**.





- The **turbulent outer core** was thought to have little impact on the inner core, but the latest research indicates it may influence its motion and rotation.

Why Are These Findings Important?

- **Changes in Core Rotation:** The slowing rotation of the inner core could impact **Earth's day-length** over long periods.
- **New Understanding of Earth's Dynamics:** The interaction between the inner and outer core challenges traditional models of Earth's structure.
- **Geophysical Implications:** These findings could help scientists **better understand seismic activities, magnetic field variations, and long-term planetary changes.**

This research **redefines our knowledge of Earth's inner workings** and paves the way for **further studies on planetary evolution and deep-Earth processes.**





India's Diagnostics Sector: Challenges, Growth & Reforms

Context: India's **diagnostics sector** is a cornerstone of the healthcare industry, enabling **early disease detection** and **treatment planning**. However, inadequate **regulation and oversight** have led to serious risks, as seen in the case of **Shankar Dhange**, whose sister lost her life due to **incorrect diagnostic test results**.



Significance of India's Diagnostics Sector:

- **9% Contribution:** The diagnostics sector accounts for **9% of the healthcare industry**, playing a crucial role in **disease management**.
- **Rapid Growth:** Estimated to reach a **market value of ₹1,275 billion by 2028**.
- **Expanding Network:** India has around **300,000 diagnostic labs**, catering to a growing population.
- **Technological Advancements:** The sector is witnessing a transformation with **AI-driven diagnostics** and **digital health platforms**, improving **early disease detection**.

Key Challenges in India's Diagnostics Sector:

1. Weak Regulatory Oversight:

- Only **12 states and UTs** have adopted the **Clinical Establishments Act**, leading to **inconsistent regulations**.
- No **mandatory accreditation**, allowing many labs to function without **quality control standards**.

2. Shortage of Skilled Personnel:

- **Lack of trained professionals**, including **pathologists, microbiologists, and lab technicians**, affecting **diagnostic accuracy**.

3. Urban-Rural Divide:

- Despite **70% of India's population living in rural areas**, only **24% of diagnostic revenues** come from rural regions.
- **Government labs** in rural areas face **poor infrastructure, lack of funding, and staff shortages**.

4. High Cost of Private Diagnostics:

- No **standardized pricing** leads to **huge disparities in test costs**.
- Private labs **charge exorbitant fees**, making diagnostics **inaccessible for low-income groups**.
- State initiatives like **Telangana's 'T-Diagnostics'** and **Kerala's 'Aardram Mission'** aim to provide affordable diagnostics but face **logistical challenges**.

5. Fraudulent Practices in the Sector:

- **Unqualified technicians and fake pathologists** compromise **patient safety**.
- Some labs use **"bought signatures"** from pathologists to **issue reports without review**.

Regulatory Framework:

1. Clinical Establishments (Registration and Regulation) Act, 2010:

- Aims to **regulate diagnostic centers** and ensure **minimum service standards**.
- Adopted by **only 12 states and UTs**, with **poor enforcement**.

2. NABL Accreditation:

- **National Accreditation Board for Testing and Calibration Laboratories (NABL)** offers **voluntary accreditation**.

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- While large diagnostic chains follow **NABL standards**, many **small labs** operate without **accreditation**.

3. State-Specific Regulations:

- **Karnataka and Kerala** have separate **regulatory frameworks**, but **inconsistent enforcement** remains a challenge.
- **Tamil Nadu's Clinical Establishments (Regulation) Rules, 2018**, mandate **minimum space requirements** for labs.

Way Forward: Strengthening India's Diagnostics Sector:

1. Enhancing Regulations & Compliance:

- **Mandatory NABL accreditation** for all diagnostic centers.
- Uniform implementation of the **Clinical Establishments Act** across **all states**.
- Establish a **central regulatory body** for **consistent oversight**.

2. Expanding Workforce & Training:

- Increase **medical education seats and training programs** for **lab technicians, microbiologists, and pathologists**.
- **Mandate upskilling** and certification of lab technicians.
- **Set a cap** on the number of labs a **pathologist** can be associated with to curb **ghost pathologists**.

3. Eliminating Fraudulent Practices:

- **Digital tracking** of lab reports to **prevent misuse** of pathologists' credentials.
- **Strict penalties** for **fake pathologists and unauthorized technicians**.
- **Regular audits and surprise inspections** to ensure compliance.

4. Bridging the Urban-Rural Divide:

- **Increase government investment** in **rural diagnostic centers**.
- Expand **Public-Private Partnerships (PPPs)** to **improve accessibility** in remote areas.
- Extend **successful state-funded diagnostic models** like **T-Diagnostics & Aardram Mission** nationwide.

5. Standardizing Pricing & Quality Control:

- **Introduce price caps** for essential diagnostic tests.
- **Mandate Standard Operating Procedures (SOPs)** for **sample collection, testing, and reporting**.
- Enforce **internal and external quality control measures**.

Conclusion:

India's diagnostics sector is at a **critical juncture**, with **rapid growth** but **regulatory loopholes** that need urgent reform. Strengthening **regulations, increasing skilled workforce, improving accessibility, and curbing fraudulent practices** will ensure a **high-quality, affordable, and accessible diagnostic sector** that meets the needs of **all Indians**.