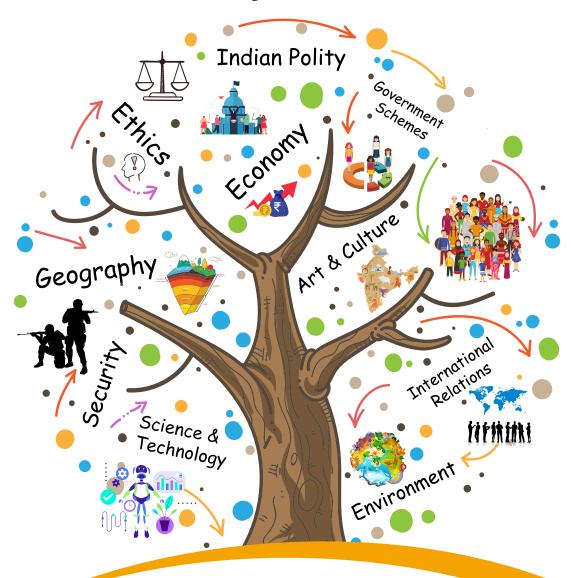
Monthly

Current Affairs

August 2025





ZETA Topicals

313, 3rd floor, 4-B Grover Chambers, Pusa Road, Old Rajendra Nagar, New Delhi



AUGUST 2025

Table of Contents

| August Focus | 2 |
|---|----|
| Wading through global and regional cross-currents: India and the SCO summit | 2 |
| India–Russia–China (IRC) Troika: Current Significance | 4 |
| Governance and Polity | 9 |
| 1. Jan Vishwas (Amendment of Provisions) Bill 2025 | 9 |
| 2. Indian Ports Bill 2025 | 12 |
| 3. The Constitution (One Hundred and Thirtieth Amendment) Bill, 2025 | 13 |
| 4. The National Spo <mark>rts Govern</mark> an <mark>ce Act, 2025</mark> | 15 |
| National Anti-doping (Ame <mark>ndment) bill 2025 MACHTY</mark> | 18 |
| 5. Insolvency and Bankruptcy (Amendment) code 2025 | 20 |
| 6. Next generation GST reforms | |
| International Relations | 25 |
| 7. India-Philippines | 25 |
| 8. India-Japan | 28 |
| 9. India-USA- USA imposes additional 25% tariff on Indian imports | 32 |
| 10. 80 Years of the US bombing- Hiroshima and Nagasaki | 35 |
| Health | 38 |
| 11. World Health Organization (WH <mark>O)</mark> releases updated 24th Model List of Essential Medicines (EML) | |
| Society and Women YOUR ZEAL • OUR EXPERTISE | 41 |
| 12. NARI 2025 Report | 41 |
| 13. Women's Employment Rate in India (2017–2024) | 43 |
| 14. Supreme Court's media regulation directive | 45 |
| 15. Population Ageing and Stabilization in India | 48 |
| 16. UNDP Equator initiative award | 52 |
| Art and culture | 54 |
| 17. Return of Piprahwa Relics: Spiritual Diplomacy & Cultural Sovereignty | 54 |
| 18. Tulsidas' 500th Birth Anniversary: Legacy of Bhakti and Literary Renaissance | 56 |
| Geography, Disaster and Disaster Management | 58 |



| NOME TRAIN - OWN EXPERTISE | ZETA IAS |
|---|----------|
| 19. Worst bleaching on record for Western Australian coral reefs | 58 |
| 20. Flash floods, Cloud bursts in India | 60 |
| 21. India's Strengthened Lightning Preparedness: A Multi-Tiered Approach | 65 |
| Science and Technology, Environment and Ecology | 68 |
| 22. Kandla Port Commissions 1 MW Green Hydrogen Plant | 68 |
| 23. Biochar | 71 |
| 24. National Space Day- August 23, 2025 | 76 |
| 25. Palmyra Palm Tree | 77 |
| 26. Ethanol Blending | 78 |
| 27. ISRO's First Integrated Air Drop Test (IADT-1) for Gaganyaan | 81 |
| 28. India, Japan Sign Deal for Joint Chandrayaan-5 Mission to Explore Moo | |
| Pole | 85 |
| 29. Water Scarcity i <mark>n Ind</mark> ia <mark>շշգչդբիրոնկեր</mark> | 86 |
| Economy Excellence Achievement | |
| 30. Next Generation GST Reforms | 88 |
| 31. US tariffs risk slo <mark>wing</mark> the g <mark>lo</mark> bal economy | 93 |
| Government schemes in News | 98 |
| PM Viksit Bharat Rozgar Yojana (PM-VBRY) | 98 |
| 2. MERITE Scheme | |
| In NEWS | |
| 1. Bhagirathi Eco-Sensitive Zone: | 101 |

YOUR August Focusertise

Wading through global and regional cross-currents: India and the SCO summit

In News: Prime Minister Shri Narendra Modi participated in the 25th Meeting of the Council of Heads of State of the Shanghai Cooperation Organization (SCO), held in Tianjin, China, from 31 August to 1 September 2025.

Key outcomes:

Counter-Terrorism



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- The Tianjin Declaration strongly condemned terrorism, including the Pahalgam attack.
- It called for stopping cross-border movement of terrorists and opposed the use of extremist groups for profit or political purposes.

Membership and Partnerships

Laos was accepted as a partner country, raising the SCO's total to 27 countries:

10 members (including India)

17 partners

Global Governance

A new idea called the Global Governance Initiative (GGI) was introduced to promote:

- Equal treatment of all countries
- Support for multilateral cooperation
- A fair and balanced world order ACHIEVEMENT

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- GGI reflects India's motto: "One Earth, One Family, One Future."

SCO members also opposed unilateral sanctions (like economic restrictions) that go against UN or WTO rules.

Social and Cultural Values

- Supported the UN resolution against:
- Nazism, racism, and xenophobia

Highlighted the importance of: Cultural exchange, Mutual respect, and Peopleto-people connections between member countries

Regional Conflicts

- The SCO condemned military actions in Gaza and Iran.
- Stressed the need for inclusive government in Afghanistan to ensure peace.

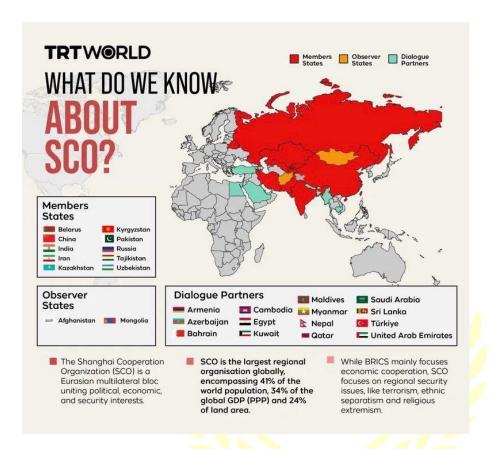
Economic and Development Cooperation

Called for stabilizing global trade and increasing bilateral trade and investment.

Proposed the creation of an SCO Development Bank to support economic projects in member countries.







India-Russia-China (IRC) Troika: Current Significance

The India-China-Russia (ICR) Troika is a trilateral dialogue platform involving three major Eurasian powers. While not a formal alliance, it carries strategic, geopolitical, and economic implications.

The India-China-Russia (ICR) Troika was conceptualized in the late 1990s as a mechanism to promote mutual understanding and cooperation among the three major Eurasian powers. Though marred by divergent interests and recent tensions (especially India-China), the platform remains a key element of Eurasian geopolitics.



1. Strategic Dialogue Platform

- A forum for dialogue among three major powers of Eurasia.
- Helps address key issues like regional security, terrorism, climate change, and global governance.

2. Balancing Global Power Structures

- Provides a **non-Western platform** to counterbalance US/EU dominance.
- Promotes multipolarity, supporting a more balanced global order.

3. Challenges

- Border tensions between India and China (e.g. Galwan 2020) strain trilateral cooperation.
- Russia's growing closeness with China, especially post-Ukraine war, affects the strategic balance.
- India's growing ties with the West (e.g. Quad, I2U2) may cause friction.

Significance of the ICR Troika

- 1. Multipolarity in Global Order:
- The troika aims to counterbalance Western dominance, especially the unipolarity led by the US and NATO.
- Supports a multipolar world order based on sovereign equality and non-interference.
- 2. Strategic Stability in Eurasia:
- As nuclear powers with major military capabilities, their cooperation contributes to regional peace and stability.
- Important for Afghanistan, Iran, Central Asia, and Indo-Pacific issues.
- 3. Economic Cooperation: EAL OUR EXPERTISE
- Potential for synergy in energy (Russia), manufacturing (China), and services (India).
- Scope for cooperation under BRICS, SCO, and Eurasian Economic Union.
- 4. **Common Positions on Global Issues**: Shared concerns on terrorism, climate change, cybersecurity, and reform of global institutions (like the UN Security Council, IMF, WTO).
- 5. **Platform for Dialogue amid Tensions**: Even during bilateral tensions (e.g., India-China border conflict), the Troika allows for continued diplomatic engagement.

Implications for India

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Opportunities:

- 1. Strategic Autonomy: India can leverage ICR to avoid excessive dependence on the West and balance China's influence.
- 2. Eurasian Engagement: Enhances India's connectivity to Central Asia and Russia through INSTC, Chabahar Port, etc.
- 3. **Multilateral Influence**: Increases India's voice in **global governance** through coordination with Russia and China.

Challenges:

- 1. **India-China Border Dispute**: The Galwan clash (2020) and broader **trust deficit** with China limit meaningful cooperation.
- 2. **China-Russia Axis**: Growing Russia-China closeness post-Ukraine war may marginalize India in the Troika.
- 3. **Diverging Worldviews:** India's alignment with **QUAD**, **I2U2**, and **Indo-Pacific** strategy conflicts with China-Russia positions.
- 4. **Limited Institutionalization**: The Troika lacks a permanent secretariat or enforcement mechanisms, reducing its efficacy.

Way forward for India:

- 1. **Issue-based Engagement**: Engage with China and Russia on common issues (terrorism, climate, regional connectivity), while managing differences.
- 2. **Revive Eurasian Outreach**: Deepen ties with Central Asia, Iran, and Russia to reduce China's dominance.
- 3. **Strengthen Other Platforms**: Use BRICS, SCO, and East Asia Summit to maintain multilateral leverage.
- 4. **Strategic Communication**: India must clarify its non-alignment with any military bloc while asserting sovereignty and interests.
- 5. **Balanced Diplomacy**: Maintain QUAD and ICR both, ensuring no entrapment in great power rivalries.

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Shanghai Cooperation Organisation (SCO): Significance

1. Regional Security and Stability

- Originally focused on **counterterrorism**, now expanded to:
 - Cybersecurity
 - Drug trafficking
 - Extremism
- Important in stabilizing **Central Asia** and Afghanistan.

2. India's Strategic Interests





- Enhances India's engagement in Eurasia.
- Platform to raise concerns over cross-border terrorism (especially aimed at Pakistan).
- Supports energy, connectivity, and regional trade goals.

3. Economic & Connectivity Potential

- Offers opportunities for:
 - Energy cooperation
 - Infrastructure projects
 - International North-South Transport Corridor (INSTC)
- India can counter China's BRI through alternative connectivity plans.

4. Countering Western Dominance

- SCO promotes multilateralism, sovereign equality, and non-interference.
- Opposes unilateral sanctions (a dig at the West).

5. Recent Developments

- Laos added as a partner (2024–25), expanding outreach.
- Proposal of SCO Development Bank to fund projects.
- Discussions on Afghanistan, Gaza, and global food/energy security.
- India hosted SCO Summit in 2023, reinforcing its regional leadership.

India's Gains: Navigating a Complex Foreign Policy Landscape

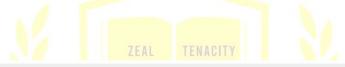
- **a. Strategic Balancing**: India used the platform to engage with both Russia and China, despite ongoing border tensions and the Russia-West divide. This reflects India's ability to maintain strategic autonomy while balancing relations with competing global powers.
- **b.** Counter-Terrorism Advocacy: The summit condemned terrorism and supported India's long-standing demand to curb cross-border terror networks, indirectly calling out Pakistan-based threats.
- c. Energy and Connectivity Push: India reinforced its vision for regional connectivity without endorsing China's BRI, advocating instead for transparent and inclusive infrastructure development.



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- d. Soft Power and Cultural Diplomacy: Through promotion of shared cultural values, people-to-people exchanges, and initiatives like Digital Public Infrastructure, India positioned itself as a responsible regional leader.
- **e. Support for Multilateralism**: The summit's emphasis on sovereign equality, non-interference, and opposition to unilateral sanctions aligns with India's vision of a reformed, multipolar world order.

The 25th SCO Summit proved to be a valuable forum for India to pursue its regional and global interests. It allowed India to assert leadership, promote regional cooperation, and carefully navigate tensions with China and Russia—all while reinforcing its strategic autonomy. Amid shifting geopolitical currents, India's active role in the SCO reflects its growing weight in shaping the future of the Eurasian region and beyond.



The Act East Policy announced in 2014 is the upgrade of the Look East Policy which was promulgated in 1992







Governance and Polity

1. Jan Vishwas (Amendment of Provisions) Bill 2025

In News: Recently, the Jan Vishwas (Amendment of Provisions) Bill, 2025 was introduced in Lok Sabha to amend certain enactments to decriminalize and rationalize offences to further enhance trust-based governance for ease of living and doing business.

Jan Vishwas 2.0 Latest News

• The Jan Vishwas (Amendment of Provisions) Bill, 2025, also dubbed as Jan Vishwas 2.0, was recently introduced in the Lok Sabha.

The new Bill is an extension of the Jan Vishwas (Amendment of Provisions) Act, 2023 (decriminalised 183 provisions in 42 Acts), and aims to amend 16 Central Acts (administered by 10 ministries/departments) to decriminalise and rationalise some offences and penalties.

This means the Bill further enhances trust-based governance for ease of living and doing business.

Need for Jan Vishwas 2.0

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EXCELLENCE ACHIEVEMENT

- Overcriminalisation in Indian laws
- Hindrance to business
- Burden on judiciary

Provisions of Jan Vishwas Bill 2025:

- Scope of amendments: The 2025 Bill proposes amending 355 provisions –
 288 provisions decriminalised to foster ease of doing business, and 67 provisions proposed to be amended to facilitate ease of living.
- Covers 16 Acts including: RBI Act 1934, Drugs and Cosmetics Act 1940, Motor Vehicles Act 1988, Electricity Act 2003, Legal Metrology Act 2009, MSME Act 2006, etc.
- Reforms: The Bill exemplifies process reforms by replacing rigid, punitive compliances with rationalized, trust-based mechanisms to streamline procedures, reduce judicial burden, and create an enabling environment for citizens and businesses alike.

Process reforms are described as "nuts and bolts reforms" that involve changing specific rules or procedures, such as altering a subsection of a rule. They are micro-level, targeted changes to improve operational efficiency in specific sectors or activities within public policy.

Unlike "structural reforms" (e.g., GST, Insolvency and Bankruptcy Code, monetary policy committee) which change the underlying architecture of an economic activity, process reforms improve the operation of a given structure.



Key Features of the Bill

1. No Punishment for First-Time Minor Offences: For 76 minor violations under 10 different laws, first-time offenders will only get a warning or advisory, not punishment.

2. Decriminalization of Minor Offences

The Bill removes jail terms for small or technical mistakes (like paperwork errors) and replaces them with fines or warnings. Example: Laws like the Tea Act, 1953, and Legal Metrology Act, 2009, have been softened further.

3. Fair and Proportionate Fines

Penalties have been made reasonable and balanced. Repeat offenders will face higher fines, but still based on the seriousness of the violation.

4. Faster Dispute Resolution

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Government officers will be given powers to decide penalties through a simpler, administrative process. This will reduce pressure on courts and help resolve cases quickly.

5. Automatic Increase in Penalties

Fines will automatically increase by 10% every three years, so they remain effective over time—without needing new laws every time.

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Significance of the Bill:

- a. **Support for Economic Growth:** As India grows rapidly, process reforms help maintain this pace by making everyday systems smoother and more efficient—especially between big policy changes.
- b. Improving Ease of Life, Business, and Research: These reforms remove common hassles faced by people, companies, and scientists. Example: New rules make it easier for scientific institutions to buy equipment quicklyZEAL OUR EXPERTISE
- c. Clearing Delays and Inefficiencies: Outdated rules, excessive paperwork, and slow services often hold things back. Process reforms help cut red tape and speed things up for everyone.
- d. **Boosting Sector Competitiveness**: By relaxing unnecessary rules, sectors become more productive. Example: Simplified telecom rules helped the IT and BPO industry grow faster.
- e. **Fighting Corruption:** Fewer steps and more transparency leave less room for bribes and misuse of power.
- f. **Building a Problem-Solving Culture**: Instead of accepting slow systems as normal, process reforms encourage governments to





constantly improve and adapt—making them more flexible and responsive.

2. Indian Ports Bill 2025

In News: The Indian Ports Bill, 2025, recently passed by the Lok Sabha, aims to modernise India's port sector by replacing the colonial-era Indian Ports Act, 1908.



Why does India need a new Ports Bill?

- India's maritime sector has expanded dramatically over the past 10 years. Cargo handling at major ports hit a record 855 million tonnes in FY 2024–25, compared to 581 million tonnes in FY 2014–15. Port capacity rose nearly 87 percent in the same period. Average turnaround time for ships has been halved to 48 hours, matching global benchmarks.
- Coastal shipping volumes more than doubled, rising by 118 percent, while cargo
 movement on inland waterways jumped nearly sevenfold. Indian ports are gaining
 global recognition, with nine featuring in the World Bank's Container Port
 Performance Index. Yet, industry leaders had long called for a modern law to replace
 the outdated 1908 framework.

Key provisions of the Bill:

a. **Maritime State Development Council**: The Indian Ports Bill, 2025, establishes the Maritime State Development Council (MSDC) as a





- statutory consultative body to coordinate between the Centre and coastal States. The MSDC will prepare a National Perspective Plan to ensure integrated port development.
- b. State maritime Boards: Coastal States will be empowered to set up State Maritime Boards, bringing uniform and transparent governance across India's 12 major and 200+ non-major ports. The Bill also creates Dispute Resolution Committees to deliver sector-specific redressal in a timely manner.
- c. **Compliance with International conventions**: The legislation mandates compliance with international environmental conventions such as MARPOL and Ballast Water Management, while requiring ports to maintain emergency preparedness systems.
- d. **Digitalisation**: Digitalisation is a central plank with measures such as a Maritime Single Window and advanced vessel traffic systems will enhance efficiency, reduce bottlenecks and cut costs.

The Indian Ports Bill, 2025 is a major step towards making India's ports world-class, aligning with global leaders like Singapore, South Africa, the EU, and the US. It focuses not just on efficiency but also on cooperation between the Centre and States for port-led development.

As part of India's Amrit Kaal vision, the Bill aims to boost trade, attract investment, create jobs, and promote sustainability in the maritime sector.

With Rajya Sabha's approval, it is being seen as one of the biggest reforms in India's port history—paving the way for India to become a maritime leader by 2047.

3. The Constitution (One Hundred and Thirtieth Amendment) Bill, 2025

Context: The Constitution (One Hundred and Thirtieth Amendment) Bill, 2025 was introduced in Lok Sabha on August 20, 2025. It seeks to provide for removal of the Prime Minister, a Chief Minister of a state, or any other Minister in the central or a state government, if he is arrested and detained in custody on account of serious criminal offences. It also applies these provisions to the Union Territory (UT) of Delhi.

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Grounds for removal:

A Minister will be removed from office if: FALL TENACITY

- (i) he is accused of an offence punishable with imprisonment for a term which may extend to five years or more
- (ii) he has been arrested and detained in custody for 30 consecutive days.
 - A Minister in the central government will be removed by the President on the advice
 of the Prime Minister. This advice is to be given by the 31st consecutive day that the
 Minister is in custody.
 - If the Prime Minister does not advise the President by this time, the Minister will cease to hold office from the day thereafter.
 - The same provisions will also apply at the state level, with the Governor of the state acting on the advice of the Chief Minister.
 - In case of Delhi, the acting authority will be the President on the advice of the Chief Minister.
 - In the case of the Prime Minister, or a Chief Minister of a state or Delhi, he must resign by the 31st consecutive day of custody. If he does not resign by this time, he will cease to hold office from the day thereafter.
 - No bar on re-appointments: A Minister who is removed from office under these provisions, may be re-appointed after being released from custody.

Constitutional provisions and features of the bill:

- Article 75: A Union Minister arrested and detained for 30 consecutive days for an
 offence punishable with five or more years of imprisonment:
- Must be removed by the President (on PM's advice), or
- Will automatically cease to hold office if no advice is given by the 31st day.
- Reappointment is allowed after release from custody.





- Article 164: Similar provision for Chief Ministers or State Ministers, removal by the Governor.
- Article 239AA: Applies the same rule to Delhi's Chief Minister and Ministers, removal by Lieutenant Governor (LG).
- Govt of Union Territories Act, 1963: Extends rule to Union Territories Ministers, empowering Administrator/LG to act similarly.
- J&K Reorganisation Act, 2019: Applies the same provisions to Jammu & Kashmir;
 the Lieutenant Governor can remove the CM/Ministers.

Implications of bill:

- a. **Aims to Clean Politics**: Prevents people facing serious criminal charges from holding top government posts while in jail.
- b. **Risky: Can Be Misused**: Politicians could be targeted or jailed unfairly just to remove them from office.
- c. **Presumption of Innocence Ignored**: People can lose their jobs without being proven guilty in court.
- d. Power Shift Toward Centre: Could weaken state governments if central agencies arrest state leaders.
- e. Can Destabilize Governments: Frequent removals could lead to political instability.
- f. Legal Challenges Likely: May be challenged in Supreme Court for violating basic principles like:
- g. Separation of powers
- Presumption of innocence
- Federal structure of the Constitution

Criticism of the Bill:

- Politically motivated arrests could be used to remove rivals.
- Goes against democratic and legal norms.
- May be seen as an attempt to centralize power and weaken opposition.

4. The National Sports Governance Act, 2025

Context: Indian parliamentary act establishing a statutory framework for transparent and ethical sports governance

The Bill provides for establishing: (i) National Olympic Committee, (ii) National Paralympic Committee, and (iii) National and Regional Sports Federations for each designated sport. The national bodies will have affiliation with respective international bodies. These bodies will also have affiliate units at state and district levels.



About the act:

- **Statutory Framework**: The Act creates a legal basis for the recognition, governance, and oversight of national sports bodies.
- Oversight & Recognition: A National Sports Board (NSB) was established to recognize sports bodies, set guidelines, and monitor compliance, with the ability to suspend or cancel recognition
- **Ethical Conduct**: Sports federations are required to adopt codes of ethics and adhere to principles of good governance, fairness, and fair play.
- Athlete Welfare: The Act mandates a Safe Sports Policy to protect athletes, especially women and minors, from harassment and abuse.
- **Dispute Resolution**: A National Sports Tribunal was formed to handle and resolve sports-related disputes.
- Transparency & Accountability: Recognized sports organizations are considered public authorities and are subject to audits by the Comptroller and Auditor General (CAG) and disclosure under the RTI Act.
- Oversight of elections: The central government will establish a national panel of electoral officers to oversee elections of national sports bodies.

 Every national sports body must also constitute an electoral panel to oversee elections of its affiliates.
- Powers of the central government: The central government may exempt a
 national body or its affiliates from any or all provisions of the Bill, if necessary
 in public interest for promotion of that sport.

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Empowering Athletes and good governance:

The Bill is explicitly athlete-centric, focusing on:

- Representation of athletes in administrative roles
- Safeguarding athlete rights

Ensuring timely and transparent selections

Curbing doping and unethical practice

Why do we need a sports governance bill?

The Sports Ministry is currently dealing with over 300 legal cases involving different sports federations, which is slowing down the progress of sports in the country. Many National Sports Federations (NSFs) are stuck in long-running legal disputes over issues like governance and elections. This affects both athletes and sports officials.





With India bidding to host the 2036 Olympics and T20 cricket set to debut at the 2028 Los Angeles Olympics, the government wants to improve transparency and accountability in Indian sports to boost its global reputation.

National Anti-doping (Amendment) bill 2025

The National Anti-Doping (Amendment) Bill, 2025 was introduced in Lok Sabha on July 23, 2025. The Bill seeks to amend the National Anti-Doping Act, 2022.

Doping is the consumption of certain prohibited substances by athletes to enhance performance. The Act gives effect to the UNESCO convention against doping in sports.

It prohibits doping in sports, and provides a framework for testing, enforcement, and adjudication of violations. It establishes the National Anti-Doping Agency (NADA) to implement anti-doping rules.

It also establishes the National Board for Anti-Doping in Sports to oversee activities of NADA and advise the central government on anti-doping regulations.



Appeal Panel – Who Controls It

- Before: The National Sports Board made the Appeal Panel and set the rules.
- Now: The central government will do this instead.

Anti-Doping Body – More Independence





- Before: The Anti-Doping Board could ask for info and give instructions to panels.
- Now: These powers are removed.
- NADA officials will now work **independently**, without interference from:
 - Sports bodies
 - o Olympic committees
 - o Government departments
 - Other agencies

Direct Appeal to CAS

- In international-level cases, appeals can go straight to the Court of Arbitration for Sport (CAS).
- Appeals can be made by:
 - The athlete
 - o NADA
 - o WADA, IOC, IPC, or international federations
- WADA can also appeal directly to CAS if no one else has done so in India.

Implications of the act:

Stronger Government Control

- The central government now has more say in how sports bodies and appeal panels are run.
- This may help standardize rules, but could reduce autonomy of independent sports bodies.

Reduced Powers of National Sports Board

- The National Sports Board will have less control over appeals and disciplinary matters.
- Some worry this could weaken the role of experts in sports governance.

Greater Independence for Anti-Doping Body (NADA)

NADA officials will now operate without interference from sports federations or the government.

This is a positive step for ensuring fair and unbiased anti-doping investigations.

Direct Access to Global Sports Court (CAS)

Athletes and global bodies like WADA can now directly appeal to the Court of Arbitration for Sport (CAS).

This improves transparency and aligns India with international sports standards.





Boosts India's Global Image in Sports

With India aiming to host the 2036 Olympics, this Act helps build credibility and shows commitment to clean, professional sports governance.

5. Insolvency and Bankruptcy (Amendment) code 2025

In News: The Insolvency and Bankruptcy Code (Amendment) Bill, 2025 was introduced in Lok Sabha on August 12, 2025. It amends the Insolvency and Bankruptcy Code, 2016.

What is insolvency?

Insolvency is a situation where an entity is unable to repay its outstanding debt. The Code provides a time-bound process for resolving insolvency among companies and individuals.

Features of the code:

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Creditor-initiated Insolvency Resolution Process (CIRP): Under the law, a company's insolvency process can be started by either the company itself or its creditors. Once this process begins, a Committee of Creditors (CoC) is formed to take key decisions. The CoC takes over control of the company's management and appoints a Resolution Professional (RP). The RP runs the company and handles the entire resolution process while trying to keep the business going

The Code also specifies alternative processes: (i) a fast-track insolvency resolution process with quicker timelines for small companies and start-ups, and (ii) a pre-packaged insolvency resolution process for MSMEs which may only be initiated by the debtor, and the management of the company remains with the debtor.

The Bill removes the fast-track insolvency resolution process. It introduces a creditor-initiated insolvency resolution process (CIIRP) for certain categories of corporate debtors notified by the government. CIIRP may be initiated only by specified financial creditors

Group insolvency: The Bill empowers the central government to prescribe rules for insolvency proceedings against two or more corporate debtors that form part of a group.

Cross-border insolvency: The Code does not address cross-border insolvency. Cross-border insolvency refers to a debtor having assets or creditors in multiple countries. The Bill empowers the central government to prescribe the manner and conditions for administering and conducting cross-border insolvency resolution proceedings.

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Challenges:

- a. New process is more confusing: The new processes (like CIIRP or out-of-court mechanisms) are relatively untested. There could be confusion or litigation about how exactly they work
- b. More rules: More rules, oversight, timelines could make compliance heavier for smaller or less sophisticated firms.
- c. Challenges in implementation: There might be more challenges during implementation — especially ensuring NCLTs (tribunals) have capacity, speed, and resources to strictly adhere to the timelines. Delays in those could negate some benefits.
- d. **Too much protection to creditors**: Some risk of "over-correction" where too much turf is given to creditors, reducing protection for debtors/promoters.

 Also, some debtors may exploit the objection/response rights to delay
- e. **Complexity:** introducing group insolvency, cross-border insolvency, "avoidance transactions" and clean-slate rules means a lot of legal detail to work through potential litigation until they settle down.

Impact and implication of the new code:

- a. **Faster and more efficient debt resolution**: More cases will get resolved sooner. That means less value is lost in the "waiting" period.
- b. **Increased creditor confidence**: With clearer rules and protections, creditors may lend more or take on risk with greater assurance.
- c. **Better chances of "saving" companies:** Under pre-insolvency / CIIRP, companies might avoid full collapse if a workable resolution is found early.
- d. Clarity and permanence of resolution plans: Plans once approved become more final (clean slate, extinguishing old claims), which helps investors and new owners.
- e. **Possibly higher compliance / legal cost burden**: Especially for smaller businesses or in low-margin sectors, meeting all the new requirements might add cost.
- f. **Judicial / Institutional capacity becomes critical**: To reap benefits, the NCLT, insolvency professionals, courts, etc., must have enough manpower, expertise, speed.
- g. **Better alignment with global norms:** Cross-border insolvency, group insolvency, out-of-court initiation these are features in many strong insolvency regimes worldwide. India moving closer to them helps in global investment and trade.



6. Next generation GST reforms

Indirect tax overhaul

THE

Changes to the current structure will be taken up by the GST Council



WHAT MAY BECOME CHEAPER

Most goods from 12% → 5%

- Condensed milk, dried fruits
- Pasta, jams, namkeens
- Utensils, furniture
- Footwear under ₹1,000
- Agricultural implements

Most goods from 28% → 18%

- Air conditioners
- Washing machines, dishwashers
- Cement

Goods currently taxed at the **5%** and **18%** rates are largely expected to remain in the same brackets

In News: In his Independence Day address, Prime Minister Narendra Modi had announced- "The government will bring Next-Generation GST reforms, which will bring down tax burden on the common man.

Impact of reforms: YOUR ZEAL * OUR EXPERTISE

- GST simplified to a two-slab structure (5% & 18%)
- GST reforms cut taxes on household essentials (soaps, toothpaste, Indian breads) to 5% or Nil boosting affordability
- Life-saving drugs, medicines reduced from 12% to Nil or 5% making healthcare affordable
- Two-wheelers, small cars, TVs, ACs, cement cut from 28% to 18% bringing relief to middle-class.
- Farm machinery, irrigation equipment cut from 12% to 5%, reducing farming costs
- Tobacco, pan masala, aerated drinks, and luxury goods taxed at 40%

The reforms, would directly benefit the common man, farmers, MSMEs, women, youth, and middle-class families, while strengthening India's long-term growth.



7 pillars of Next-generation GST Reforms:



Benefits of Next-Generation GST reforms:

The Next-Generation GST reforms are designed not just to reduce tax rates, but to create a virtuous cycle of growth.

Lower Prices, Higher Demand: Cheaper goods and services increase household savings and stimulate consumption.

Support for MSMEs: Reduced rates on inputs like cement, auto parts, and handicrafts lower costs and make small businesses more competitive.





Ease of Living: A two-rate structure means fewer disputes, quicker decisions, and simpler compliance.

Wider Tax Net: Simpler rates encourage compliance, expanding the tax base and improving revenues.

Support for Manufacturing: Correcting inverted duty structures boosts domestic value addition and exports.

Revenue Growth: As seen in past reforms, lower rates with better compliance increase collections.

Economic Momentum: Lower costs \rightarrow higher demand \rightarrow larger tax base \rightarrow stronger revenues \rightarrow sustainable growth.

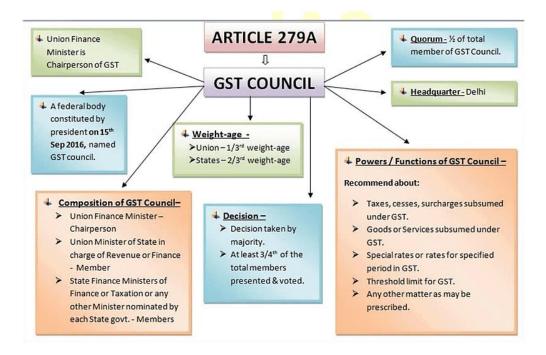
Social Protection: Exemption of GST on insurance and essential medicines strengthens household security and access to healthcare.

Together, these reforms ensure that GST is citizen-centric, business-friendly, and aligned with India's global growth ambitions.

EXCELLENCE ACHIEVEMENT

About GST:

The Goods and Services Tax (GST), introduced on 1st July 2017, is India's most significant indirect tax reform since Independence. By bringing together multiple central and state taxes into a single, unified system, GST created a common national market, reduced the cascading of taxes, simplified compliance, and improved transparency. Over eight years, GST has steadily evolved through rate rationalisation and digitalization, becoming the backbone of India's indirect tax framework.







Benefits of GST:

Elimination of Cascading Effect: GST removes the "tax on tax" effect (cascading effect) by allowing seamless input tax credit across the supply chain, which can lead to reduced prices for goods and services.

Simplified Tax Structure: It replaced multiple indirect taxes with a single, unified tax, simplifying the overall tax structure and compliance for businesses.

Unified National Market: GST promotes a common national market by reducing barriers to inter-state trade, such as the elimination of check posts and entry taxes.

Increased Transparency and Reduced Tax Evasion: The system is designed to be more transparent and efficient, which helps in reducing tax evasion.

Boost to Economic Growth: By creating a more efficient and uniform tax system, GST aims to boost economic activity and ease of doing business.

Reduced Multiplicity of Taxes: GST consolidates various indirect taxes into a few slabs (e.g., 5%, 12%, 18%, 28%), making the tax regime less complex.

No Hidden Taxes: With GST, the final price of goods and services typically includes all applicable taxes, leading to greater clarity for consumers.

International Relations

7. India-Philippines

In News: India and the Philippines have elevated their bilateral ties to a strategic partnership during President Ferdinand Marcos Jr.'s maiden visit to India, focusing on defence, maritime cooperation, and trade.

The visit reinforced the 1952 Treaty of Friendship and focused on strengthening cooperation in areas such as defence, trade, maritime security, technology, and cultural and people-to-people exchanges





Historical context:

- India and the Philippines established diplomatic ties in 1949.

 Since then, their relationship has steadily grown, shaped by shared democratic values, a common anti-colonial past, and increasing alignment in geopolitical interests.
 - India's "Look East" policy now transformed into the "Act East" policy has further strengthened its engagement with Southeast Asia, with the Philippines becoming an increasingly important partner.

India-Philippines Trade Relations

Trade Agreement Signed: India and the Philippines signed a Trade Agreement in 1979.

Trade Growth Since Late 1990s: Significant growth began after the late 1990s, driven by:

India's Look East Policy, and

The 2009 India-ASEAN Trade in Goods Agreement.

Recent Trade Volumes:

YOUR ZEAL • OUR EXPERTISE 2022–23: Bilateral trade crossed USD 3 billion for the first time.

2023-24: Trade reached USD 3.53 billion, with India recording a trade surplus.

Major Indian Exports to the Philippines:

Engineering goods

Pharmaceuticals

Chemicals

Automotive parts

Rice





Key Imports from the Philippines:

Semiconductors

Electrical machinery

Ores

Residues from the food industry

Pharmaceutical Trade:

The Philippines accounts for nearly 20% of India's pharma exports to ASEAN.

India-Philippines cooperation:

India has extended various capacity-building and training programs to the Philippines through the Indian Technical and Economic Cooperation (ITEC) Programme.

The two countries collaborate in areas like disaster relief, humanitarian assistance, and, more recently, digital infrastructure.

India has also offered support for the Philippines' Sovereign Data Cloud pilot project.

Key outcomes of Philippine's President visit to India:

Strategic Partnership Established: India and the Philippines officially upgraded ties to a Strategic Partnership, boosting cooperation across key areas.

Plan of Action (2025–2029): A roadmap was adopted to deepen collaboration in defence, trade, technology, maritime security, connectivity, and climate change.

Visa & Legal Cooperation:

The Philippines now offers visa-free entry to Indian tourists.

India has granted free e-tourist visas to Filipino citizens for one year (from August 2025).

Both countries signed the Mutual Legal Assistance Treaty (MLAT) and the Treaty on Transfer of Sentenced Persons:

MLAT enables cooperation in criminal investigations.

The transfer treaty allows prisoners to serve their sentence in their home country, aiding rehabilitation.

Infrastructure & Digital Cooperation:

The Philippines invited India to join major infrastructure projects.

India will share its Gati Shakti platform for better planning and development.

India will also help set up the Philippines' Sovereign Data Cloud and has invited it to join the Information Fusion Centre–Indian Ocean Region (IFC-IOR) for maritime cooperation.





Significance of India-Philippines Relations

Strategic Location & Maritime Security

The Philippines' location in the Indo-Pacific makes it a crucial partner for India's Act East Policy and maritime strategy. Cooperation helps ensure a rules-based maritime order amid regional challenges, especially concerning China's assertiveness in the South China Sea.

Enhancing Regional Stability

Strong ties with the Philippines strengthen India's role in ASEAN and contribute to peace and stability in Southeast Asia, a key region for global trade and security.

Economic & Trade Opportunities

Growing bilateral trade (crossing USD 3 billion) and investment prospects support India's economic engagement with Southeast Asia. The Philippines serves as a gateway to the larger ASEAN market.

Defense and Security Cooperation

Collaboration through joint naval exercises, defense exports (e.g., BrahMos missiles), and maritime security dialogues enhances India's defense footprint in the region and counters common security threats.

People-to-People and Cultural Links

Shared democratic values, historical ties, and increased educational and cultural exchanges deepen mutual understanding and soft power influence.

Technology & Infrastructure Development

Cooperation in digital infrastructure, disaster relief, and capacity building strengthens the Philippines' development while advancing India's leadership in the Indo-Pacific.

India-Philippines relations are vital for India's strategic outreach in Southeast Asia, promoting regional security, expanding economic ties, and fostering people-to-people connections, aligning with India's vision of a stable and prosperous Indo-Pacific region.

8 India-Japan

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In News: Prime Minister Modi visited Japan to attend the 15th India-Japan Annual Summit in Tokyo. The visit came at the invitation of Japanese Prime Minister Shigeru Ishiba.

ZETA IAS





India-Japan Summit 2025: Key outcomes

Adoption of a Joint Vision Statement (2025–2035) for the Next Decade, to guide bilateral relations.

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Focus areas: 8 priorities areas- economic partnership, security, mobility, ecological sustainability, technology and innovation, health, people-to-people ties, and state-prefecture engagement.

- Strategic & security cooperation

 - ✓ Digital innovation
 - ✓ People-to-people connectivity

Economic & Investment Boost

☐ Japan committed to increasing private sector investment in India.





- □ New Official Development Assistance (ODA) loans worth over ₹11,000 crores for:
 - Delhi Metro Phase IV
 - Water desalination in Gujarat
 - Forest and water resource management
 - Fisheries and aquaculture development

Supply Chain & Critical Minerals

Strengthened collaboration on:

Semiconductors, rare earths, and clean energy technologies

Efforts to diversify supply chains and reduce dependency on China

Defence & Security

Signed updated Joint Declaration on Security Cooperation (revamping 2008 pact).

Institutionalised NSA-level dialogue and expanded joint military exercises: Dharma Guardian, Veer Guardian, Milan

DRDO-ATLA collaboration on missile defence, maritime surveillance, and co-production of defence equipment.

Technology & Space

Launched Digital Partnership 2.0 and Al initiative for large language models (LLMs) and R&D.

ISRO-JAXA pact for joint Chandrayaan-5 lunar mission.

Cooperation on robotics, semiconductors, nuclear energy, shipbuilding, and space situational awareness.

Infrastructure & Connectivity ZEAL • OUR EXPERTISE

Progress on Bullet Train project with next-gen Shinkansen (360 kmph) by 2030.

Launched Next-Gen Mobility Partnership for modern transport.

Continued Japanese investment in Delhi Metro and long-term vision for 7,000 km highspeed rail by 2047.

Green Energy & Climate

Activated Joint Crediting Mechanism (JCM) under Paris Agreement.

Signed declarations on clean hydrogen, green ammonia, and launched Sustainable Fuel Initiative.

People-to-People Exchange





Action Plan to enable movement of 5 lakh people, including 50,000 Indian workers to Japan.

Launched State-Prefecture Partnership, cultural MoUs, and diplomatic training programs.

Historical Background of India-Japan relationship:

- Ancient & Cultural Links
- Cultural and civilizational ties date back to the 6th century when Buddhism traveled from India to Japan via China and Korea.
- Japan reveres India as the birthplace of Buddhism, and this spiritual connection laid a foundation for friendly ties.
- Japanese Buddhist scholars like Tenshin Okakura and Rai Mikiso promoted Indian philosophy and culture in Japan.

Pre-Independence

- Japan supported India's freedom movement:
- Provided refuge and support to Subhash Chandra Bose and the Indian National Army (INA) during World War II.
- Rash Behari Bose, an Indian revolutionary, lived in Japan and helped foster early ties.

Post-WWII, India stood by Japan:

- Jawaharlal Nehru sent food aid to Japan during the post-war recovery.
- India refused to attend the San Francisco Peace Conference (1951) and signed a separate peace treaty with Japan, promoting sovereign equality.

Formal Diplomatic Relations

 Diplomatic ties established in 1952 through the signing of the Peace Treaty and India-Japan Cultural Agreement.

One of the first countries to establish official relations with Japan after WWII.

- Economic Engagement
- 1991 economic reforms in India led to stronger ties. Japan became a major ODA (Official Development Assistance) partner. Cooperation expanded in infrastructure, technology, and trade.
- 21st Century: Strategic Partnership
- 2000: "Global Partnership between Japan and India" announced.
- 2006: Elevated to "Strategic and Global Partnership".
- 2014 onwards: Under PM Modi and PM Abe, relations deepened:

Civil Nuclear Agreement (2016)

Bullet Train (Mumbai-Ahmedabad High-Speed Rail)

Quad cooperation, Indo-Pacific strategy, and defence collaboration.

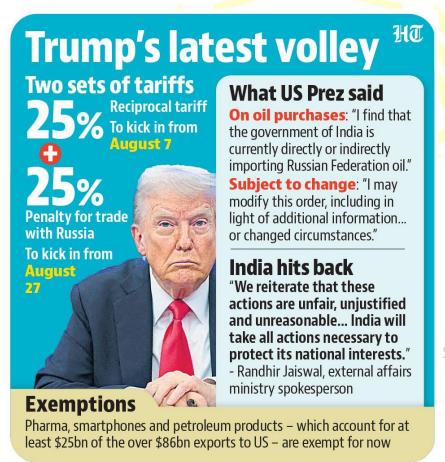


ZETA IAS

India and Japan share a long history of cultural affinity, post-war solidarity, and now a robust strategic partnership. Their evolving relationship reflects shared democratic values, mutual respect, and common interests in a free and open Indo-Pacific.

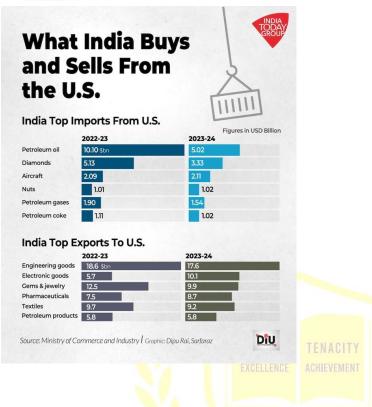
9. India-USA- USA imposes additional 25% tariff on Indian imports

In News: In **August 2025**, the U.S., under President Donald Trump, raised tariffs on a large number of Indian goods—adding an extra 25% on top of existing duties—bringing the total to **50% tariffs** on many exports from India.



SF





Reasons for Penalty tariff: Why USA imposed additional 25% tariff?

- a. India's continued purchases of Russian oil: The U.S. claims India's buying of Russian crude (amid the Russia-Ukraine war) helps Russia financially and undermines U.S. sanctions. So, the tariffs are partly a punitive response to that.
- b. Trade imbalance / Reciprocal tariff logic: U.S. says India has high import barriers (tariffs and non-tariff restrictions) for U.S. goods, while U.S. tariffs on Indian goods are comparatively low. The U.S. argues that raising tariffs on Indian goods is part of a "reciprocal" policy to balance out what it sees as unfair trade disadvantages.
- c. **Non-tariff / regulatory barriers**: The USA has complained that besides high import duties, India uses strong regulatory or technical barriers that restrict U.S. exports.
- d. **Pressure for market access reforms**: Through trade negotiations, the U.S. often asks India to open up sensitive sectors (agriculture, dairy, pharmaceuticals etc.). When those demands aren't met, the U.S. uses tariffs as leverage.
- e. **Domestic U.S. policy and political strategy**: The U.S. under this administration is using tariffs to protect domestic industries, reduce trade deficits, and push for more favourable terms in trade deals.





These tariffs are part of a broader U.S. policy of "economic and strategic leverage.

Implications of 50% tariff on India:

- a. Export Slowdown: Key sectors like textiles, gems & jewellery, chemicals, engineering goods, leather, and marine products will be hit hard due to reduced competitiveness in the U.S. market. Small exporters and MSMEs especially vulnerable.
- b. **Loss of jobs:** sectors dependent on U.S. markets may see layoffs and wage stagnation, particularly in labour-intensive industries (e.g., apparel, leather, handicrafts).
- C. Trade Deficit & Growth Impact: Potential widening of India's trade deficit if U.S. buyers shift to other countries. ACHIEVEMENT Moody's estimates suggest a 0.3% fall in India's GDP due to reduced export earnings.
- d. **Diversification**: India may accelerate efforts to reduce dependence on U.S. markets by exploring new trade partners (e.g., ASEAN, Middle East, Africa). Speed up FTAs with EU, UK, and others.
- e. **Diplomatic & Strategic Tensions**: Tariffs strain India–U.S. ties beyond trade—spilling into geopolitical issues, especially over Russia and global order. It may affect cooperation in areas like technology, clean energy, and Indo-Pacific security if not managed diplomatically.

Implications for USA:

a. **High prices for US consumers**: U.S. importers and buyers of Indian goods (e.g., textiles, IT parts, drugs, jewellery) will face costlier inputs. Could lead to inflationary pressures in certain consumer goods.

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- b. **Disruption to Supply Chains**: Industries relying on Indian raw materials or components (e.g., pharmaceuticals, auto parts, chemicals) may face delays or cost hikes.
- c. Loss of Market Access for U.S. Exporters: India could shift major procurement deals (e.g., defence, infrastructure) to non-U.S. suppliers. Which will reduce opportunities for U.S. companies in a fast-growing market.



d. **Reputational Impact:** Aggressive use of tariffs may undermine U.S. credibility in multilateral forums like WTO and G20, especially among Global South nations.

With the U.S. promoting "friend-shoring" and global companies adopting "China+1" strategies, India has a strong opportunity to emerge as a reliable hub in global value chains. Key sectors like electronics, semiconductors, and defence manufacturing are well-positioned for deeper integration.

While the tariffs were aimed at punishing India for strategic choices like oil imports from Russia, the move has **backfired economically and diplomatically** on both sides. For India, it's a wake-up call to diversify trade and assert strategic autonomy. For the USA, it risks alienating a key partner in the Indo-Pacific. A recalibration through **dialogue and trade diplomacy** is essential to restore mutual trust and long-term cooperation.

India and the United States must embrace a spirit of mutual respect, strategic patience, and shared vision. Open and consistent dialogue is essential to bridge gaps on trade, immigration, and geopolitical alignments. By focusing on common interests—such as regional security, economic growth, climate action, and technological innovation—both nations can turn challenges into opportunities. Strengthening institutional frameworks, expanding people-to-people ties, and promoting trust-based cooperation will be key to transforming this partnership from one of convenience to one of conviction. As the world navigates an era of uncertainty, a robust India–US alliance can serve as a pillar of global stability, democracy, and progress.

10. 80 Years of the US bombing- Hiroshima and Nagasaki

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In News: **August 6 and 9, 2025**, mark **80 years** since the atomic bombings of **Hiroshima and Nagasaki**—two tragic events that not only ended World War II but also ushered in the nuclear age. Over the decades, Japan and these two cities have undergone remarkable transformations—socially, economically, politically, and culturally—while continuing to carry the weight of history.





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Japan's National Evolution Post-1945

1. Peaceful Reconstruction and Development

- Japan adopted a pacifist constitution (Article 9) in 1947, renouncing war as a sovereign right.
- It shifted focus toward economic recovery and modernization, becoming the world's third-largest economy by the 1980s.
- Japan emerged as a global leader in technology, manufacturing, and innovation—symbolizing resilience and discipline.
- 2. Soft Power and Global Diplomacy
- Japan has become a **voice for peace**, nuclear disarmament, and humanitarian values.
- Institutions like the **Hiroshima Peace Memorial Museum** and the **Nagasaki Atomic Bomb Museum** promote global awareness and peace education.
- It has pursued a proactive foreign policy, balancing its alliance with the U.S. while fostering peaceful regional relations.

The Legacy of Hiroshima and Nagasaki: Nuclear Norms, Hibakusha Advocacy, and Global Disarmament Efforts

Role of the Hibakusha

The **Hibakusha**, or survivors of the atomic bombings of Hiroshima and Nagasaki, have played a **central role in global disarmament advocacy**. Through personal testimonies, peace campaigns, and international outreach, they have humanized the catastrophic consequences of nuclear warfare. Their experiences have shaped public consciousness and added **moral weight** to the global movement for the elimination of nuclear weapons.



Suppression and Later Revelation of Nuclear Effects

In the immediate aftermath of the war, **Japan was under U.S. occupation**, and information regarding the long-term effects of the atomic bombings—particularly radiation sickness and genetic damage—was **censored or restricted**. Scientific studies and journalistic reports were often suppressed.

However, public awareness changed dramatically after the **1954 Castle Bravo nuclear test** in the Pacific. The accidental exposure of the Japanese fishing boat *Daigo Fukuryū Maru* (*Lucky Dragon No. 5*) to radioactive fallout ignited national outrage and made the **effects of radiation widely known**. This event was a turning point in Japan's anti-nuclear sentiment.

Debates on Nuclear Norms and Deterrence

There remains an ongoing debate in international relations and arms control communities:

Does the **global norm against the use of nuclear weapons** primarily stem from **moral arguments**, often championed by Hibakusha and civil society, or from the **strategic logic of deterrence**, which argues that nuclear weapons prevent major wars through fear of mutual destruction?

- Moral Perspective: Emphasizes the inhumanity and ethical unacceptability of nuclear weapons, as articulated by Hibakusha and peace movements.
- **Deterrence Perspective:** Argues that nuclear weapons maintain **strategic stability** by discouraging states from engaging in direct conflict.

Today, nuclear arsenals have evolved into **highly sophisticated systems**, including tactical and strategic warheads designed for varying scenarios, raising new questions about deterrence credibility and escalation risks.

Legal and Treaty Frameworks

International legal efforts to manage nuclear weapons have made significant progress, though with limitations:

- The Nuclear Non-Proliferation Treaty (NPT):
 - o Aims to prevent the spread of nuclear weapons.
 - Recognizes five nuclear-weapon states while committing all parties to pursue disarmament.





- Criticized for its asymmetrical structure and lack of enforcement on disarmament.
- The Comprehensive Nuclear-Test-Ban Treaty (CTBT):
 - o Prohibits all nuclear explosions for testing purposes.
 - Not yet entered into force due to lack of ratification by key nuclear states.

However, neither treaty prohibits the actual use of nuclear weapons, leaving a critical gap in international law. The Treaty on the Prohibition of Nuclear Weapons (TPNW), adopted in 2017, addresses this gap by outright banning the use, possession, and development of nuclear arms—but major nuclear powers have not signed it.

Health

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11. World Health Organization (WHO) releases updated 24th Model List of Essential Medicines (EML)

Context: The WHO Model List of Essential Medicines (EML) is reviewed and updated every two years by the Expert Committee on the Selection and Use of Essential Medicines. The list aims to identify the most effective, safe, and cost-effective medicines to meet the priority health needs of populations globally.

Recent Additions to the Essential Medicines List

- 1. Glucagon-like Peptide-1 (GLP-1) Receptor Agonists
 - Indications: Type 2 diabetes, cardiovascular disease, chronic kidney disease, and obesity.
 - These drugs have demonstrated strong outcomes in managing blood glucose, reducing cardiovascular risk, and aiding in weight loss.

2. Rapid-Acting Insulin Analogues

- Indications: Management of both Type 1 and Type 2 diabetes.
- Offer better post-meal glucose control and lower risk of hypoglycaemia compared to regular insulin.

Significance





Inclusion in the EML is expected to:

- Lower drug costs globally by encouraging generic production.
- Reduce out-of-pocket expenditure, especially in low- and middle-income countries.
- Improve accessibility to life-saving medications for millions.

Diabetes and Obesity: Global and Indian Context

Diabetes

• A chronic condition that occurs either due to insufficient insulin production or the body's inability to effectively use insulin.

Global burden

- Over 800 million people affected as of 2022.
- Projected to exceed 1.3 billion by 2050.

India's burden:

Approximately 77 million adults (18+ years) have Type 2 diabetes.

An additional 25 million are prediabetes, highlighting a major public health challenge.

Obesity

Characterized by excessive fat accumulation, increasing the risk of type 2 diabetes, cardiovascular disease, and other health issues.

Global trends:

- Prevalence has more than doubled since 1990.
- Now affects over 1 billion people worldwide.

India-specific data (NFHS-5, 2019–21):

- 24% of women and 23% of men are classified as obese.
- Rising obesity is particularly concerning in urban and semi-urban populations.

India's Policy and Programmatic Initiatives

National Programme for Prevention and Control of Non-Communicable Diseases (NP-NCD)

Focuses on screening, diagnosis, and management of diabetes, hypertension, cancer, and other NCDs.

National List of Essential Medicines (NLEM)

Identifies essential medicines to ensure availability and affordability across all levels of healthcare.





Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP)

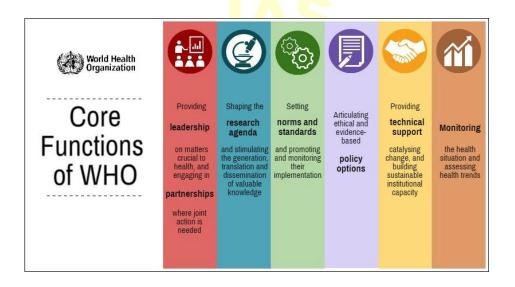
Promotes the use of low-cost generic medicines through Jan Aushadhi Kendras.

Fit India Movement

Launched to encourage physical activity, raise awareness about fitness, and promote healthy lifestyles to combat lifestyle diseases like obesity and diabetes.

The inclusion of advanced diabetes and obesity-related medications in the WHO Eseconomysential Medicines List marks a major step forward in global health equity. It aligns with India's ongoing efforts to tackle the rising burden of non-communicable diseases through accessible treatment, preventive health programs, and public awareness initiatives. Going forward, integrating these medicines into national health systems will be crucial to improving outcomes for millions of patients.

The World Health Organization (WHO) is a specialized agency of the United Nations responsible for international public health.^[1] The WHO Constitution states its main objective as "the attainment by all peoples of the highest possible level of health".^[2] Headquartered in Geneva, Switzerland, it has six regional offices and 150 field offices worldwide.



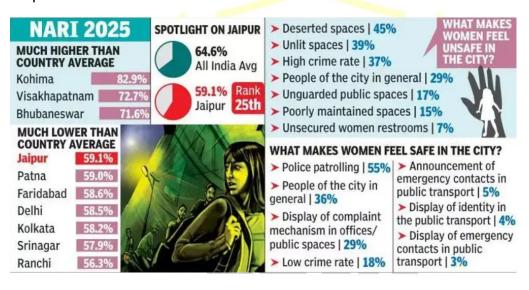


Society and Women

12. NARI 2025 Report

In News: The National Annual Report and Index on Women's Safety (NARI) 2025 report, based on a survey of 12,770 women across 31 Indian cities, found India's national safety score to be 65%, indicating that 40% of women still feel unsafe.

The report highlights neighbourhoods and public transport as major harassment hotspots, a higher frequency of harassment among women under 24, and underreporting of incidents due to low trust in authorities and poor institutional response.



Key Findings from the NARI 2025 Report

- Overall Safety Score: The national safety score was 65%.
- Perception of Safety: 40% of women feel "not-so-safe" or unsafe in their cities.
- Safety by Age: Younger women, particularly those under 24, reported significantly higher rates of harassment (14% compared to 7% overall).
- Harassment Hotspots: Neighbourhoods (38%) and public transport systems (29%) were identified as the most frequent locations for harassment.
- **Underreporting:** A significant majority (two-thirds) of harassment incidents go unreported.



- Lack of Trust: Only one in three victims felt confident enough to file a formal complaint, and only a small percentage of filed complaints were registered or acted upon.
- Workplace Safety: Many women (53%) were unaware of mandatory Sexual Harassment of Women at Workplace (POSH) policies.

Key Factors Contributing to Safety Gaps

- Weak Infrastructure: Poor lighting and unsafe public transport contributed to safety concerns.
- **Institutional Responsiveness:** Weak responsiveness from authorities and slow action on complaints were cited as significant issues.
- Patriarchal Norms: The report noted that patriarchal norms also played a role in the perception of safety.



Safest and Least Safe Cities ZEAL . OUR EXPERTISE

Safest Cities:

Cities like Kohima, Visakhapatnam, Bhubaneswar, Aizawl, Gangtok, Itanagar, and Mumbai ranked higher due to factors like strong gender equity, women-friendly infrastructure, and civic participation.

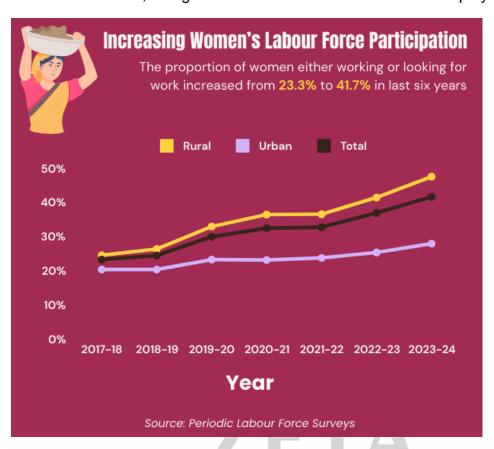
• Least Safe Cities:

Patna, Jaipur, Faridabad, Delhi, Kolkata, Srinagar, and Ranchi were ranked lowest.



13. Women's Employment Rate in India (2017–2024)

Context: The Labour Ministry reported a significant rise in female workforce participation, with women's employment rate increasing from 22% in 2017–18 to 40.3% in 2023–24, alongside a marked decline in female unemployment.



Women's Employment Rate?

It refers to the Workforce Participation Rate (WPR) of women — the percentage of women actively engaged in economic activities such as:

- Self-employment/OUR ZEAL OUR EXPERTISE
- Regular salaried employment
- Casual labour

Data is primarily drawn from the Periodic Labour Force Survey (PLFS).

Key Trends and Highlights (2017–2024)

Overall Growth in Employment

- WPR increased from 22% → 40.3%
- Female unemployment rate fell from $5.6\% \rightarrow 3.2\%$

Rural vs Urban

Rural female employment grew by 96%





Urban female employment rose by 43%

Rise in Self-Employment

- Self-employment among women increased from 51.9% → 67.4%
- Reflects both opportunity and distress-led entrepreneurship.

Formal Workforce Participation

- 1.56 crore women entered the formal workforce
- 16+ crore registered on the e-Shram portal (unorganised sector)

MSMEs & Start-ups

- Women-led MSMEs doubled over the period
- 68% of MUDRA loans were disbursed to women entrepreneurs
- Nearly 50% of start-ups have at least one-woman director

Public Policy Support

ZEAL TENACITY

- Gender Budget increased by 429% over the last decade
- Flagship schemes supporting women's employment:
 - MUDRA Yojana
 - Stand-Up India
 - PM SVANidhi
 - Skill India Mission
 - e-Shram portal

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Empowering Nari Shakti



14. Supreme Court's media regulation directive

In News: The Indian Supreme Court, in August 2025, directed the Union government to frame guidelines for regulating social media, particularly for influencers, in a case involving insensitive remarks against persons with disabilities.

Context and Reasoning

Case Background: ZEAL OUR EXPERTISE

The directive came after a case involving comedians who made derogatory comments about disabled individuals on their social media platforms.

Commercialization of Free Speech:

The Court noted that influencers and comedians often monetize their content, and this commercial activity cannot justify hurting the sentiments of vulnerable groups.

Balancing Free Speech and Social Responsibility:

The Supreme Court's emphasis is on striking a balance between the fundamental right to freedom of expression and the need for social responsibility and dignity, particularly in a diverse society.





SOCIAL MEDIA

Rules Seek To Empower Users Of Digital Platforms & Ensure Accountability

- 1] Tighter timelines to take down unlawful content, assist law enforcement
- 2] Identify first originator of a message that causes identified offence
- 3] Stricter rules for bigger platforms, including local presence
- 4] Voluntary user verification mechanism

DIGITAL MEDIA & OTT PLATFORMS

Seek to address concerns over digital content through....

- 1] Self regulation & self-classification of content – universal, adult etc
- 2] Code of ethics To follow prescribed guidelines
- 3] Three-tier grievance redressal mechanism
- 4] Subjects digital news media to same laws as traditional media

IN CASE OF NON COMPLIANCE...

Intermediary will lose its safe harbour from user content

Liable to punishment under IT Act or IPC

Key Supreme Court Observations

- The right to free speech under Article 19(1)(a) of the Constitution is not absolute.
- Commercial exploitation of free speech, especially in a way that offends or mocks vulnerable sections of society, is not constitutionally protected.
- The Court emphasized the need to balance freedom of expression with respect for human dignity, particularly for marginalized or disabled groups.

Recommendations:

Regulatory Framework with Enforceable Consequences:

The Union Government, in consultation with the National Broadcasters and Digital Association, is directed to develop comprehensive regulatory guidelines for social media influencers and podcasters. These guidelines must include proportionate and enforceable consequences to ensure compliance, avoiding mere procedural formalities without substantive impact.

Awareness, Sensitisation, and Accountability:

Emphasis is placed on promoting awareness, sensitisation, and adherence to digital ethics among social media users. At the same time, individuals who engage in harmful conduct online must be held accountable for any societal harm caused, ensuring that platforms are used responsibly.

Unconditional Apology and Rights Balancing:

Influencers found to have violated norms must issue an unconditional apology through the same platforms on which the harm occurred. The Court clarifies that this directive is not intended to restrict the right to free speech, but rather to ensure a balanced approach that upholds individual liberty while safeguarding the dignity and rights of diverse communities.



Key Laws Regulating Social Media in India:

a. IT Act, 2000:

- Section 79(1): Provides safe harbour to platforms for third-party content—if they stay neutral.
- Section 69A: Allows government to block online content for national interest (security, public order, etc.)
 - b. **IT Rules, 2021 (Amended 2023):** Platforms must remove unlawful content, promote user awareness, and ensure safety.
- 2023 Amendment (on Govt-related misinformation) is currently stayed by SC due to misuse concerns.

Important SC Judgments:

- Shreya Singhal v. Union of India (2015): Struck down Section 66A (vague & unconstitutional). Affirmed satire, dissent, and criticism are protected speech unless violating Article 19(2).
- K.S. Puttaswamy v. Union of India (2017):
 Recognised right to privacy under Article 21. Influenced later data protection laws, including the Digital Personal Data Protection Act, 2023.

Why is Regulation Needed?

1. Protection of Vulnerable Groups:

- Derogatory or offensive content targets women, minorities, children, the elderly, and persons with disabilities.
- Supreme Court has cautioned against influencers using humour or satire to perpetuate discrimination and stigma.

2. Misinformation and Fake News:

- Viral misinformation during elections, pandemics (e.g., COVID-19), or communal events can cause public disorder.
- Deepfakes and Al-generated content are new-age threats.

3. Threat to National Security:

- Platforms can be used to spread propaganda, incite violence, or engage in crossborder misinformation warfare.
- E.g., WhatsApp used during riots or coordinated misinformation during Pulwama attack.

4. Erosion of Privacy:





- Misuse of personal data and algorithmic profiling for advertising or political targeting.
- SC in Puttaswamy judgment (2017) recognised privacy as a fundamental right.

5. Commercialisation of Free Speech:

- Influencers and podcasters monetise content that may breach ethical boundaries or legal norms.
- Court observed a need to distinguish free speech, commercial speech, and prohibited speech.

6. Lack of Accountability:

 Social media influencers operate with minimal oversight, often evading consequences for offensive or misleading content.

7. Cross-Border Jurisdiction Issues:

Global platforms headquartered abroad make enforcement of Indian laws challenging.

15. Population Ageing and Stabilization in India

Context: India is undergoing a demographic shift marked by a sustained decline in Crude Birth Rate (CBR) and Total Fertility Rate (TFR), along with rising life expectancy. This transition is leading to both population stabilization and population ageing, creating opportunities and challenges across social, economic, and health sectors.

Key Demographic Indicators:

Indicator Past Value Current Value (2023-24)

Crude Birth Rate (CBR) 36.9 (1971) 19.5

Total Fertility Rate (TFR) 5.2 (1971) 2.0 (Replacement level)

Life Expectancy ~50 years (1971) ~71 years

Elderly (60+ years) ~6% (2001) ~10% (2023); Projected ~20% by 2050

2 Crude Birth Rate (CBR): Number of live births per 1,000 populations per year.

2 Total Fertility Rate (TFR): Average number of children a woman would bear in her lifetime.

2 Population **Stabilization**: A stage where the population size stabilizes as births and deaths even out.

2 Population Ageing: Increase in the proportion of elderly people (60+ years) in the population.



Causes of Declining CBR and TFR in India:

- 1. Increased Female Literacy & Employment
- 2. Urbanisation and Higher Living Costs
- 3. Access to Family Planning Services (Mission Parivar Vikas, NHM)
- 4. Delayed Marriages and Childbearing
- 5. Changing Aspirations & Smaller Family Norms
- 6. Increased Use of Contraceptives and awareness

Implications of Population Stabilization in India

Positive Outcomes:

1. Demographic Dividend:

- A falling birth rate means a higher proportion of working-age population (15–59 years) relative to dependents.
- This window offers an economic advantage as more people are productive, contributing to GDP.
- Example: Countries like South Korea and China capitalized on this window for rapid economic growth.

2. Better Resource Management:

- With fewer children being born, governments can allocate resources more effectively across health, education, housing, etc.
- It reduces pressure on infrastructure, water, food, and public services, improving quality of governance.

3. Improved Child & Maternal Health:

- Lower fertility rates enable better spacing between children, reducing maternal and infant mortality.
- Fewer births allow healthcare systems to focus on quality over quantity, promoting institutional deliveries, antenatal care, and nutrition.

Challenges:

1. Regional Disparities:





- While southern and western states (Kerala, Tamil Nadu, Maharashtra) have reached or gone below replacement level fertility, northern states like Uttar Pradesh, Bihar, and Jharkhand continue to have high TFR (>2.1).
- This leads to **interstate demographic imbalances**, migration pressures, and **unequal development outcomes**.
- Policy implementation must be **decentralized and state-specific**.

2. Shrinking Workforce (in the Future):

- As fertility continues to fall, the youth population entering the workforce will decline, reducing the labour pool.
- This could impact **economic growth**, especially in labour-intensive sectors like agriculture, manufacturing, and construction.
- Countries like Japan and Germany are already facing similar challenges.

3. Skewed Sex Ratio:

- In regions with strong son preference, declining fertility exacerbates the prevalence of sex-selective abortions, leading to imbalanced sex ratios.
- This fuels **gender-based violence**, trafficking, and **social unrest** due to a surplus of unmarried men (e.g., "bare branches" phenomenon in China).

Implications of Population Ageing

Rising Healthcare Burden:

- Elderly individuals suffer from chronic illnesses like diabetes, arthritis, hypertension, cancer, and dementia.
- The healthcare system must shift towards preventive and geriatric care, requiring trained personnel and specialized services.
- Rural areas, where a majority of elderly reside, lack accessible and affordable care.

2. Pension & Social Security Pressure:

- The ageing population increases demand for non-contributory pensions, subsidies, and healthcare.
- Schemes like Atal Pension Yojana, IGNOAPS (Indira Gandhi National Old Age Pension Scheme), and PM Vaya Vandana Yojana are under pressure due to increasing beneficiaries and limited fiscal space.

3. Dependency Ratio Increases:





- With fewer working-age people and more elderly, the economic burden on younger generations rises, affecting productivity and savings.
- The old-age dependency ratio is projected to nearly double by 2050.

4. Social Isolation:

- The rise of nuclear families and urban migration has led to elderly being left alone in rural areas or old age homes.
- This leads to mental health issues, neglect, and even elder abuse.
- There is a need for community-based elder care and inclusive housing policies.

5. Need for Age-Friendly Infrastructure:

- Urban and rural spaces are not designed for the elderly—lack of ramps, accessible toilets, or assisted living.
- Smart Cities Mission and PMAY should integrate universal design standards for senior citizens.
- Public transport and digital services must be made inclusive and user-friendly for elderly users.

Opportunities:

1. Growth of the Silver Economy:

- The elderly represents a **growing market** for products and services like healthcare, insurance, home care, travel, and wellness.
- Businesses can cater to their needs, creating employment and innovation.
- Japan's success in developing elderly-focused services is a model to emulate.

2. Experience-Based Workforce: OUR EXPERTISE

- Many retirees possess decades of expertise that can be harnessed through consulting, mentoring, and part-time work.
- Policies should support flexible retirement, reverse mentoring, and lifelong learning.

3. Promotion of Intergenerational Solidarity:

 Initiatives like intergenerational housing, community centres, and elderyoung skill exchanges can promote social cohesion.



 Traditional Indian joint family systems offer cultural resources that can be adapted to modern contexts.

India's journey towards population stabilization and ageing is a dual-edged sword. While it offers the opportunity for economic planning, empowerment, and sustainability, it also demands a strong social security architecture, targeted health systems, and inclusive urban planning. The success of India's demographic transition will depend on how it balances the needs of the young and the elderly in a resource-constrained yet aspirational society.

16. UNDP Equator initiative award

In News: **Bibi Fatima**, a grassroots leader from **Ladakh**, was awarded the prestigious **UNDP Equator Initiative Award** for her outstanding work in **sustainable mountain livelihoods**, **women empowerment**, and **climate-resilient community practices**.

bout the Equator Initiative Award: TENACITY

- Instituted by the United Nations Development Programme (UNDP).
- Recognizes local and indigenous community efforts in biodiversity conservation, poverty reduction, and climate adaptation.
- Given every two years to 10 community-based organizations worldwide.
- Promotes "Nature-based solutions" aligned with SDGs, Paris Agreement, and Convention on Biological Diversity (CBD).

Who is Bibi Fatima?

Bibi Fatima is a pioneering grassroots woman leader and social entrepreneur from the Union Territory of Ladakh, India. She is best known as the founder of *Ladakh Basket* — a women-led initiative aimed at reviving traditional, organic, and sustainable food systems in the high-altitude Himalayan region. Her work bridges the gap between gender empowerment, climate resilience, and cultural preservation.

Empowering Rural Women:

- Bibi Fatima mobilized and trained over 500 women from remote Ladakhi villages to form self-help groups (SHGs).
- These women were provided with skills in organic farming, value addition, handicrafts, and marketing.
- She enabled women to earn independent incomes in areas traditionally dominated by men or subsistence farming.



Her leadership fostered social cohesion, reduced gender-based economic dependency, and promoted female agency in community decision-making

Climate-Resilient Agriculture:

- Recognizing the fragile ecosystem of Ladakh, Fatima promoted indigenous, droughtresistant crops like buckwheat, barley, and apricot.
- She adopted and taught low-input sustainable agriculture techniques adapted to arid, high-altitude conditions.
- Her approach aligns with climate adaptation goals, as changing weather patterns increasingly threaten Himalayan agriculture

Reviving Traditional Knowledge Systems:

Fatima's work is rooted in Ladakhi cultural practices, such as:

- Using local composting methods
- Promoting zero-waste packaging A TENASITY
- Emphasizing seasonal diets EXCELLENCE ACHIEVEMENT

This not only sustains the ecological balance but also preserves cultural heritage in the face of rapid modernization.

Bibi Fatima exemplifies the power of grassroots leadership, especially when driven by women in ecologically sensitive regions. Her initiative demonstrates how traditional wisdom, when combined with modern sustainability goals, can lead to resilient, inclusive, and self-reliant rural communities.

Her story is a model for replicable development, especially in mountain ecosystems and among marginalized rural populations across India and the Global South.



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PM Modi's Independence Day speech:

On August 15, 2025, the Prime Minister highlighted the transformative impact of women's SHGs, emphasizing their transition from the margins to becoming powerful drivers of entrepreneurship and exports. He noted that their products are now reaching international markets, generating significant business.

Role of SHGs & "Lakhpati Didis"

• PM Modi noted that **women's self-help groups**, earlier neglected, have over the last 10 years shown *remarkable success*. Their products are now reaching international/global markets.

Numerical Strength & Influence

- He pointed out that there are currently about 10 crore women associated with SHG
- Women from SHGs are now visible in many roles in villages "bank-wali didi, Anganwadi didi, dawai-wali didi" etc., showing grassroots presence and influence

Skill Training & Technology Inclusion

- Plans to train women SHGs in operating and repairing drones to enable use of technology in agriculture.
- The government proposed equipping **15,000 women SHGs** with drones for agriculture and related services.

Women-Led Development & Broader Participation

- Modi emphasised "women-led development" as essential for India's progress. He stressed how
 women are not only beneficiaries but active contributors in areas like STEM, space missions (e.g.
 Chandrayaan), civil aviation etc.
- He also pointed out that in international fora (like G20), the approach of women-led development is being acknowledge

Cultural Sovereignty

In News: India recently witnessed the return of the sacred relics of Lord Buddha from Mongolia, where they had been taken temporarily for public veneration during the Buddha Purnima celebrations. These are believed to be the Piprahwa





relics—among the most sacred Buddhist relics—excavated from **Siddharthnagar**, **Uttar Pradesh**, near the Indo-Nepal border.



What are the Piprahwa Relics?

- Discovered in 1898 by British archaeologist William Claxton Peppe in a stupa at Piprahwa (believed to be ancient Kapilavastu).
- A stone casket found during excavation contained bone fragments, jewels, and an inscription identifying them as the ashes of Lord Buddha.
- These relics are preserved under the custody of the National Museum,
 New Delhi, and are considered sacred by Buddhists worldwide.

Significance of the Return:

Strengthens Spiritual Diplomacy:

- The relics were temporarily taken to Ulaanbaatar, Mongolia in 2024 at the request of the Mongolian government and Buddhist clergy.
- Their respectful return strengthens India's Buddhist diplomacy and soft power in Asia—particularly among Buddhist-majority countries like Mongolia, Thailand, Sri Lanka, Vietnam, and Japan.

Reinforces India's Role as the Custodian of Buddhist Heritage:





- India is the land of Buddha's enlightenment, and home to several key pilgrimage sites: Lumbini (nearby), Bodh Gaya, Sarnath, Kushinagar.
- Return of the relics reaffirms India's central role in the global Buddhist community.

Cultural & Religious Sensitivity:

• The return of relics highlights the importance of ethical handling of sacred artefacts, respecting religious sentiments and ensuring international cooperation in their preservation.

Legal Status: Protected Antiquities

- Under the Antiquities and Art Treasures Act, 1972, the Piprahwa relics are designated "non-exportable antiquities", protected by the Archaeological Survey of India (ASI) and National Museum.
- They are part of the "priceless heritage of India" and cannot be permanently gifted, sold, or exported.
- Their temporary travel abroad is allowed only under strict governmental and security protocols, with the understanding that they are to be returned immediately after the religious occasion.

International Significance

The move reflects growing recognition of cultural repatriation and responsible heritage sharing.

With increasing global debates on returning colonial-era artefacts, India's handling of the Piprahwa relics sets a precedent for:

Sacred object diplomacy

Legally protected yet culturally shared heritage

Temporary cultural loans with international trust

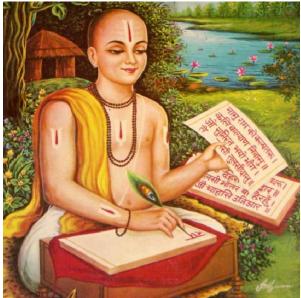
18. Tulsidas' 500th Birth Anniversary: Legacy of Bhakti and Literary Renaissance

In News: In 2025, India commemorates the **500th birth anniversary of Goswami Tulsidas** (born circa 1525 CE), the saint-poet who authored the revered **Ramcharitmanas**—a retelling of the Ramayana in **Awadhi**. The government and various religious and literary institutions have launched **year-long celebrations**,





including seminars, publications, recitations, and cultural programs to honour his enduring legacy.



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Who was Tulsidas?

- Goswami Tulsidas was a 16th-century Vaishnava saint, poet, philosopher, and a major figure of the Bhakti Movement.
- Born in **Ramaghat, Uttar Pradesh**, during the **Mughal era**, Tulsidas lived through a time of social and religious turmoil.
- He composed devotional literature in vernacular languages, making spiritual knowledge accessible to the masses.

Major Works of Tulsidas

| Work | Description Description |
|---------------------------------|---|
| Ramcharitmanas | A devotional retelling of Valmiki's <i>Ramayana</i> in Awadhi. Focuses on <i>bhakti</i> (devotion) and ideal conduct. |
| Vinay Patrika | A collection of emotional appeals to Lord Rama, rich in poetic beauty. |
| Hanuman Chalisa | A devotional hymn to Lord Hanuman, widely recited across India. |
| Kavitavali, Dohaval Gitavali | i, Other lyrical works combining bhakti and moral teachings. |



Democratisation of Religion & Literature

- Wrote in **vernacular Awadhi**, instead of Sanskrit, making spiritual texts accessible to the common people.
- Helped unify people across castes, classes, and regions through the shared language of devotion

Strengthening Bhakti Movement

- Emphasised Saguna Bhakti (devotion to a personal God with form) through Rama and Hanuman.
- Inspired emotional devotion over ritualistic practices—similar to other saints like Kabir, Surdas, Mirabai.

Cultural Resistance During the Mughal Period

- In a period marked by political turbulence and religious strife, Tulsidas' works
 offered spiritual solace and cultural assertion.
- His writing preserved and reinforced Hindu dharmic values, acting as a soft resistance to socio-religious pressures.

Linguistic and Literary Legacy

- Considered the father of modern Awadhi literature.
- His poetic style combined classical meters with folk traditions, creating a uniquely Indian literary idiom.

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Geography, Disaster and Disaster Management

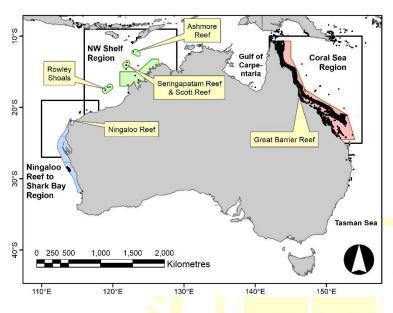
19. Worst bleaching on record for Western Australian coral reefs

In News: n 2024-25, Western Australia experienced the **longest, largest and most intense marine heatwave** on record for the state.





This heatwave caused heat stress to coral reefs over an extent of about **1,500 kilometres**, from Ningaloo Reef in the north through to Ashmore Reef



Underlying Causes

- Global warming: Rising sea surface temperatures due to climate change have made marine heatwaves more frequent, more intense, and longerlasting.
- Lack of cooling relief: Normal cooling events (monsoons, storms, upwelling's) which might ease heat stress were insufficient or delayed.
- Background warming conditions: Even winter waters were unusually warm, adding cumulative thermal stress.

Impacts and Concerns

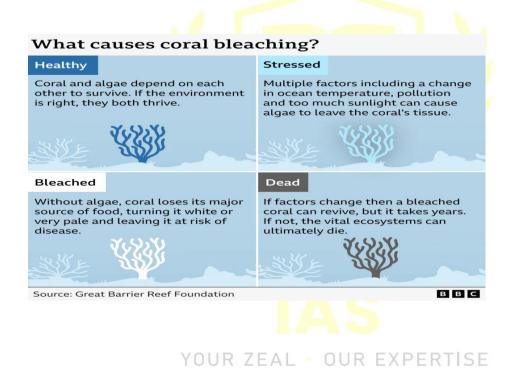
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- Ecological damage: Coral mortality is high in many places. Loss of coral cover affects reef structure, habitat for fish and marine organisms.
- Tourism & local livelihoods: Reefs like Ningaloo are major tourist attractions. Their degradation threatens income for local communities, guides, diving, etc.
- **Biodiversity loss**: Many coral species, fish, and other reef organisms depend on healthy reefs. Bleaching weakens or kills corals, and reduces resilience
- Lower recovery potential: Reefs need time to recover. With bleaching events becoming more frequent, recovery intervals shrink, reducing chances of full ecological regeneration



Lessons for India and Globally

- Relevance to India's coral reefs: India has several coral reef systems (e.g. Gulf of Mannar, Lakshadweep, Andaman & Nicobar, Gulf of Kutch). Trends in WA are warnings for Indian reefs facing warming seas.
- Need for climate mitigation: To limit global warming (e.g. to 1.5°C or 2°C), to slow or reduce marine heatwave intensity.
- Importance of local adaptation & reef management: Identify "resilient reefs," reduce local stresses (pollution, overfishing, sedimentation), enhance coral restoration
- Monitoring & early warning: Use of DHW, remote sensing, marine heatwave forecasts to act proactively.
- Legal / policy frameworks: Marine protected areas, policies for sustainable tourism, protection of reef ecosystems under our environmental laws.



20. Flash floods, Cloud bursts in India

In News:

In August 2025, India, particularly the Himalayan states, experienced multiple severe flash floods and cloudbursts, leading to significant loss of life, missing persons, and widespread destruction.

Key Events in August 2025

Uttarkashi, Uttarakhand (Dharali Village Cloudburst and Flash Floods)





- On 5 August 2025, a massive cloudburst over the Kheer Ganga river triggered flash floods and landslides in Dharali village. Homes, hotels/homestays, shops, roads were damaged or swept away.
 - Confirmed casualties: at least 4 people dead; dozens including civilians and army personnel missing. Rescue operations ongoing.
- Chositi (Chashoti), Kishtwar district, Jammu & Kashmir
 On 14 August 2025, a cloudburst triggered flash floods in Chositi village, which is on the route of the Machail Mata pilgrimage. Heavy damages—houses, temples, bridges, vehicles.
 - Deaths: At least ~60-68 people, many injured, dozens missing. Large-scale loss of property and infrastructure

Chamoli, Uttarakhand (Tharali Area)

Around 23 August 2025, cloudburst in Tharali area led to flash floods.
 Damage to shops, homes, vehicles, and two missing persons

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Uttarakhand Cloudburst and Flash Flood

Date: 06th August 2025 Time: 10:00 AM



SITUATION UPDATE

- · On August 5, 2025, at approximately 1:45 PM, a cloudburst over the Kheer Ganga catchment triggered a massive flash flood in Dharali village, located in Uttarkashi district. The deluge resulted in extensive destruction, sweeping away nearly 20-30 houses, shops, local markets, roads, and approximately 20 hotels and homestays. The affected area includes both local residents and tourists staying in the region.
- In a separate but related incident, a second cloudburst occurred later the same day in the Sukhi Top area near Dharali, further aggravating the situation through additional flash flooding and debris flow.
- As per initial media reports, at least 4 fatalities have been confirmed, and approximately 100 individuals are reported missing or potentially trapped under debris. Among the missing are 8 to 10 Indian Army personnel stationed at a camp in the lower Harsil area, highlighting the severity and scale of the impact.
- · The road at Bhatwadi on the Uttarkashi-Harsil route has been completely washed away due to the flash floods, severely affecting accessibility to the Harsil region. Road connectivity remains disrupted as of the latest updates.
- In Barkot tehsil's Banala Patti area, flash floods in the Kud Gadhera stream led to the loss of nearly 18 goats, affecting the livelihoods of local shepherds.
- In Haridwar district, continuous heavy rainfall led to severe waterlogging across multiple areas. With the Ganga River's water level rising significantly, local police have advised residents and visitors to avoid the ghats and to remain vigilant.

Statistical Overview Districts Affected: Families Affected: Approx. 100 Houses Damaged: Causalities: Rescued People: Livestock Affected:

Supported By:

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Government Response

- In light of continued adverse weather conditions, the India Meteorological Department (IMD) has issued an Orange Alert forecasting heavy rainfall in the districts of Nainital, Champawat, Udham Singh Nagar, Bageshwar, Pauri, Tehri, Haridwar, and Dehradur
- Immediately following the cloudburst in Uttarkashi district, comprehensive rescue and relief operations were launched by the authorities. Teams from the State Disaster Response Force (SDRF), National Disaster Response Force (NDRF), Indian Army, and the Indo-Tibetan Border Police (ITBP) were swiftly mobilized to the affected regions. The Indian Army's Ibex Brigade is actively participating in the operations.
- Media reported that a total of 138 individuals—including residents, tourists, pilgrims, and laborers—have been successfully rescued as of
- To facilitate debris removal and restore connectivity, heavy machinery, including JCBs, has been deployed at multiple locations. A dedicated team from the NDRF is stationed at the incident site to support ongoing operations. Three helicopters have been requested to access remote and cut-off areas, while sniffer dogs and drones are being utilized to trace missing persons and assess inaccessible zones.
- Approximately 150 army personnel have been deployed in and around the affected town to support search, rescue, and logistical efforts.
- As a precautionary measure, the government has ordered the closure of all schools and Anganwadi centers in the districts of Pauri, Champawat, and Udham Singh Nagar on August 6, 2025.

Key Contacts: Mr. Vishnu P , Sphere India: +91 90487 79909; vishnup@sphereindia.org.in Source of Information Media, Social Media, Sphere India WhatsApp Group Ms. Kusum Ghildiyal , Uttarakhand IAG Convenor | 94120 27279 The makes every effort to verify the information contained in its Situation Reports. As the ground situation changes rapidly in emergency situations, users should check with concerned agencies before making any decisions assed on the information provided in this report. unicef @

Causes & Underlying Factors

- Cloudbursts: Sudden, extremely heavy rainfall over a small area, often exceeding 100 mm/hour, which Himalayan terrain amplifies into flash floods
- **Topography**: Steep hills, fragile slopes, narrow valleys (e.g. in Uttarkashi, Kishtwar) make runoff very rapid; soil and slope stability often compromised.





- Heavy monsoon rains: Enhanced by climate change, moisture content in atmosphere, erratic monsoon patterns
- Human factors: Settlements, pilgrimage routes in vulnerable locations; infrastructure (roads, bridges, homes) often poorly adapted to such extreme events. Possibly deforestation or land use changes reducing absorption (though specific to each case).

Impacts

- Loss of Lives and Missing Persons: Many dead, dozens missing in Kishtwar,
 Uttarkashi. Pilgrims particularly vulnerable (e.g. Machail Mata Yatra route) in Chositi.
- **Infrastructure damage**: Roads, bridges, hotels/homestays, homes destroyed or rendered unusable. Access cut off, complicating rescue.
- **Economic / livelihood losses:** Tourism, local trade, agricultural lands affected. Pilgrimage stoppages. Houses and small shops destroyed.
- Disaster response stress: SDRF, Army, NDRF involved; missing persons increase rescue burden; relief operations hampered by terrain and ongoing bad weather.

How to Prevent or Mitigate Flash Floods and Cloudburst Disasters:

Early Warning Systems & Weather Forecasting

- **Install Doppler Weather Radars** in all vulnerable districts for real-time rainfall tracking.
- Use satellite data, AI, and hydrometeorological modelling to predict cloudbursts.
- IMD must issue timely and localized alerts (via SMS, apps, radio, sirens).
- Deploy community-based alert systems in high-risk villages and pilgrimage routes.

Regulated Land Use & Construction Norms

- Ban construction in high-risk zones: riverbeds, steep slopes, and landslideprone areas.
- Implement scientific zoning regulations with proper land use planning.
- Make eco-sensitive zones (ESZs) around vulnerable river basins strictly noconstruction zones.

Disaster-Resilient Infrastructure





- Build flood-resistant roads, bridges, and housing using modern materials and designs.
- Create storm water drainage systems to manage intense rainfall runoff.
- Construct retaining walls, embankments, check dams, and rainwater harvesting systems in hilly areas.

Eco-Restoration & Catchment Management

- Afforestation and reforestation in degraded slopes to increase water absorption.
- Restore wetlands, springs, and traditional water bodies to act as natural buffers.
- Prevent illegal sand mining and deforestation, which destabilize riverbanks and slopes.

Improved Governance & Monitoring

- State Disaster Management Authorities (SDMAs) must conduct regular vulnerability mapping.
- Strengthen implementation of the Environmental Impact Assessment (EIA) for all hill projects.

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- Monitor compliance with National Building Code and Hill Area Development Plans

Community Awareness and Preparedness

- Educate locals and tourists on disaster protocols, emergency kits, and evacuation routes.
- Conduct mock drills, training, and include locals in disaster preparedness committees.
- Special focus on pilgrimage routes (e.g. Kedarnath, Amarnath, Machail Mata) with signage, shelters, and trained guides.

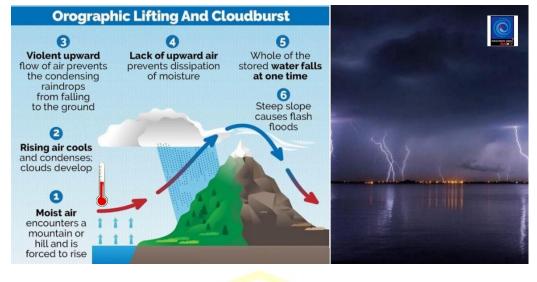
Policy & Legal Interventions

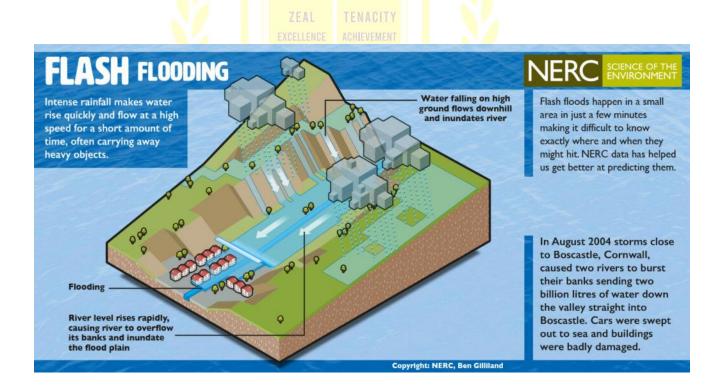
- Enforce stricter hill-area construction regulations under the Disaster Management Act, 2005. ZEAL OUR EXPERTISE
- Integrate disaster risk reduction (DRR) into urban and rural development planning.
- Promote nature-based solutions (NbS) in policies—e.g., using natural vegetation buffers instead of concrete embankments.

Research & Documentation

- Support scientific research on cloudburst patterns, glacial melt, and climate change impacts.
- Establish disaster data repositories and make them accessible to planners and communities.







21. India's Strengthened Lightning Preparedness: A Multi-Tiered Approach

Context: India has significantly improved its lightning forecasting and disaster response systems through coordinated efforts between the National Disaster Management Authority (NDMA) and the India Meteorological Department (IMD). With thousands of lightning-related deaths annually, this preparedness marks a vital step in safeguarding vulnerable populations, especially in rural areas.





Why Lightning is a Concern in India?

- India records over 20 million lightning strikes annually, particularly during pre-monsoon and monsoon seasons.
- Lightning accounts for over 2,500 deaths every year, making it one of the deadliest natural disasters in India, especially in rural and tribal areas.
- States most affected: Odisha, West Bengal, Jharkhand, Bihar,
 Chhattisgarh, Madhya Pradesh, Maharashtra, and Uttar Pradesh.

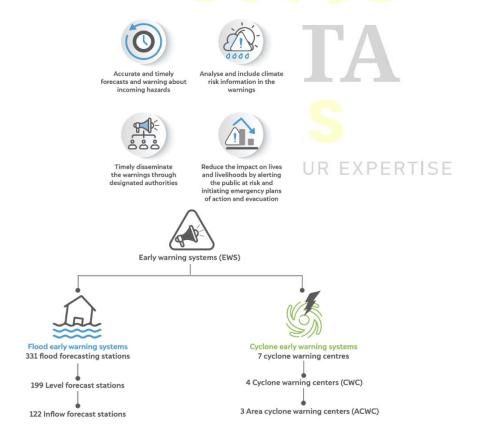
Institutional Efforts for Lightning Preparedness

India Meteorological Department (IMD)

- Provides real-time lightning alerts using satellite and ground-based sensor networks.
- Issues short-term forecasts (now casting) and region-specific warnings, integrated with GIS maps.

Damini Mobile App

- Developed by the Indian Institute of Tropical Meteorology (IITM), Pune.
- Provides lightning alerts within a 20-km radius.
- Features safety tips, Do's & Don'ts, and localized warning systems.
- Multilingual support enhances outreach in rural areas.





Early Warning Systems (EWS)

- NDMA & IMD operate a multi-hazard early warning platform, which includes:
 - SMS alerts via mobile carriers
 - Loudspeakers in rural areas
 - Integration with Panchayats and local disaster response teams

Community-Level Preparedness

- Public awareness campaigns through Panchayati Raj Institutions (PRIs), schools, and ASHA workers.
- NDMA's guidelines encourage setting up lightning shelters, training of volunteers, and village-level preparedness plans.
- Gram Sabhas are used to disseminate seasonal lightning forecasts and protective measures.

Significance

Climate Change Link: Warming increases atmospheric instability, leading to more intense lightning events. Recent studies show a 30–40% rise in lightning incidents in some states over the last decade.

Technological inclusion: Digital tools like Damini App, weather sensors, and Al-based forecasting improve last-mile connectivity.

Disaster Risk Reduction (DRR): India's lightning strategy aligns with the Sendai Framework (2015–2030) for reducing mortality and improving resilience.

Way Forward

- 1. Expand coverage of the Damini App and integrate it with regional languages and local radio stations.
- Install lightning conductors and shelters in high-risk zones, especially in tribal and hill districts.

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- 3. Strengthen school-level education on lightning safety as part of the disaster preparedness curriculum.
- 4. Real-time integration of IMD alerts with district and village control rooms.
- 5. Promote public-private partnerships to expand sensor networks and mobile alert technology.





Science and Technology, Environment and Ecology

22. Kandla Port Commissions 1 MW Green Hydrogen Plant

Context: In a major step towards decarbonising port operations and industrial transport, Deendayal Port (Kandla), Gujarat has commissioned a 1 MW Green Hydrogen Plant under the National Green Hydrogen Mission (NGHM). It is among the first hydrogen production facilities in India within a major port ecosystem.

About Kandla Port:

Kandla Port, now officially named Deendayal Port, is a major seaport located on the Gulf of Kutch in Gujarat's Kutch district. It is the largest port in India by cargo volume, known for handling bulk cargo, being a tidal port, and serving as a trade-free zone.





Key Features of the Green Hydrogen Plant

Feature Details

Location Kandla Port, Gujarat (Deendayal Port Authority)

Capacity 1 MW Electrolyser

Annual Output Approx. **140 tonnes** of Green Hydrogen

Source Renewable electricity (e.g., solar/wind) to power electrolysis of

water

Usage Targeted for industrial use, port logistics, transport, and pilot-

scale mobility initiatives

Partnering

Agencies

Ministry of Ports, Shipping & Waterways; MNRE

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What is Green Hydrogen?

- Produced using electrolysis powered by renewable energy (no CO₂ emissions).
- Different from **grey hydrogen** (from fossil fuels) or **blue hydrogen** (fossil fuels + carbon capture).
- Can decarbonise hard-to-abate sectors: steel, cement, fertilisers, shipping, aviation.

National Green Hydrogen Mission (NGHM)

- Launched in 2023, NGHM aims to:
- Make India a global hub for green hydrogen production & export
- Produce 5 million tonnes of green hydrogen annually by 2030
- Add 125 GW renewable capacity and create over 6 lakh jobs
- Support Green Hydrogen Hubs in refineries, ports, steel clusters

Significance of Kandla Port Hydrogen Plant

For India's Energy Transition:

- Reduces fossil fuel dependence in port and maritime operations
- Supports India's Net-Zero by 2070 pledge

For Industry and Transport:



- Enables green hydrogen-based fuel cell vehicles, forklifts, cranes
- Could power clean cargo handling, reducing local emissions

For Infrastructure Development:

- Model for other ports under Sagarmala Programme
- Aligns with Ministry of Ports' Green Port Policy

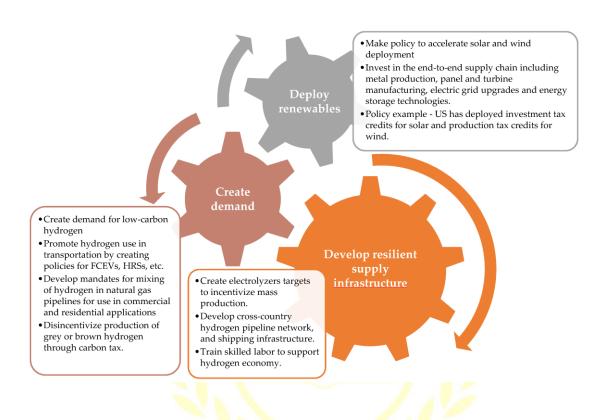
Challenges to Hydrogen Economy:



Challenges to Green Hydrogen Expansion in India

- High cost of electrolysers and renewable energy YOUR ZEAL OUR EXPERTISE
- Lack of infrastructure for storage, distribution, refueling
- Limited demand aggregation for industrial-scale use
- Need for policy clarity on green hydrogen certification





23. Biochar

In News: With the Indian Carbon Market scheduled for launch in 2026, carbon dioxide removal technologies—such as biochar—are expected to play a crucial role in reducing emissions and advancing the country's path toward sustainable development.

Key Statistics Related to India's CO₂ Emissions

- Global Share: India contributes approximately 4% of global cumulative greenhouse gas (GHG) emissions (1850–2019), despite being home to over 17% of the world's population.
- Per Capita Emissions: India's per capita emissions remain about one-third of the global average, reflecting its relatively low historical responsibility.
- Emission Intensity: Between 2005 and 2020, India successfully reduced the emission intensity of its GDP by 36%, demonstrating progress toward decoupling emissions from economic growth.
- Global Ranking: India is currently the third-largest emitter of GHGs, following China and the United States.





What is Biochar?

Biochar is a **carbon-rich**, **stable**, **porous substance** produced by **pyrolysis** — the heating of organic biomass (such as crop residues, manure, or wood waste) in a **low-oxygen environment**.

It is used primarily as a **soil amendment** and a **carbon sequestration** tool.

Benefits of Biochar:

Agricultural Benefits:

- Improves soil fertility and nutrient retention
- Increases water-holding capacity critical for drought-prone regions
- Supports beneficial soil microorganisms
- Reduces dependency on chemical fertilizers
- Reduces soil acidification ZEAL TENACITY

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Environmental & Climate Benefits:

- Sequesters carbon in soils for hundreds to thousands of years
- Reduces GHG emissions from soils (CH₄, N₂O)
- Controls air pollution by preventing stubble burning
- Recycles agricultural and organic waste sustainably

Energy & Economy:

- Co-products from pyrolysis (e.g., bio-oil, syngas) can be used for energy
- Potential for carbon credit generation under voluntary carbon markets

Potential Applications of Biochar

Carbon Capture & Sequestration

- Biochar's **stable molecular structure** allows it to sequester carbon in soils for **100 to 1,000 years**, making it a highly effective **long-term carbon sink**.
- It contributes to increasing **soil organic carbon**, improving **soil health**, and enabling the **restoration of degraded lands**.
- Emerging research suggests that engineered or modified biochar can also be used to adsorb CO₂ from industrial flue gases, though its efficiency currently remains lower than conventional carbon capture technologies.

Biochar as a Versatile and Long-Term Carbon Sink

 Biochar's highly stable molecular structure allows it to sequester carbon in soils for periods ranging from 100 to over 1,000 years, positioning it as a highly effective and durable carbon sink. Its diverse applications across





- agriculture, industry, construction, and wastewater treatment present scalable opportunities for reducing greenhouse gas emissions.
- In agriculture, biochar enhances soil water retention and can reduce nitrous oxide emissions—273 times more potent than CO₂—by 30% to 50%. It also improves soil organic carbon levels and contributes to the restoration of degraded lands.
- In industrial carbon capture, engineered biochar variants have shown potential to absorb CO₂ from flue gases, though current efficiencies remain lower than those of conventional capture technologies.
- In the construction sector, incorporating 2% to 5% biochar into concrete has been shown to improve material strength, enhance thermal resistance by up to 20%, and sequester as much as 115 kg of CO₂ per cubic metre.
- Furthermore, in wastewater treatment, one kilogram of biochar can purify between 200 and 500 litres of water. This translates to a potential demand of 2.5 to 6.3 million tonnes of biochar annually in India alone, which generates over 70 billion litres of wastewater each day.

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Renewable Energy & Power Generation

- The **pyrolysis process** used to produce biochar also generates valuable byproducts such as **syngas** and **bio-oil**.
- In the Indian context, biochar production could yield approximately:
 - 20–30 million tonnes of syngas, which can generate around 8–13
 Terawatt-hours (TWh) of electricity annually.
 - 24–40 million tonnes of bio-oil, which can potentially substitute 12–
 19 million tonnes of diesel or kerosene.

Environmental and Economic Impact:

- Use of bio-oil and syngas can significantly reduce fossil fuel consumption, thereby cutting India's crude oil import bill.
- Adoption of these bio-products could help achieve a reduction of over 2% in fossil fuel-based emissions, supporting India's energy transition and net-zero targets.

Agriculture:

The application of biochar significantly enhances water retention, particularly in semiarid and nutrient-depleted soils. This improvement leads to a 30–50% reduction in nitrous oxide (N_2O) emissions—a greenhouse gas with 273 times the global warming potential of CO_2 —making biochar an important tool in climate change mitigation efforts.





Construction Sector:

Incorporating 2–5% biochar into concrete enhances its mechanical strength and increases heat resistance by up to 20%. Additionally, such concrete can capture approximately 115 kg of CO₂ per cubic metre, contributing to carbon sequestration within the built environment.

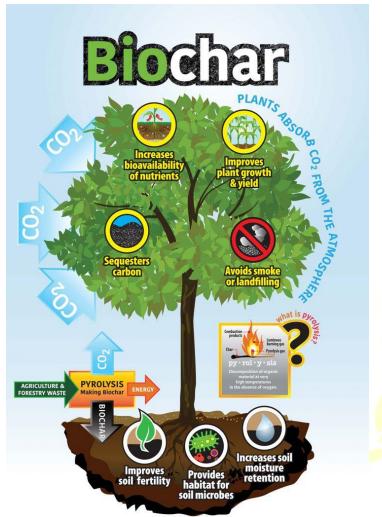
Wastewater Treatment:

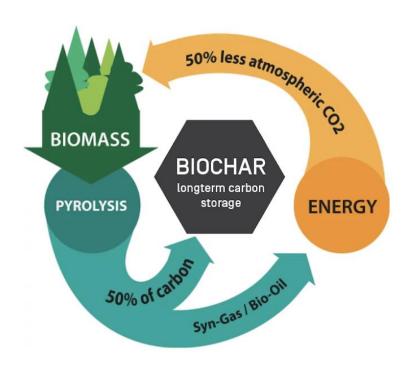
Biochar offers a **cost-effective and efficient method** for treating polluted water. Given that India generates over **70 billion litres of wastewater daily**, with nearly **72% remaining untreated**, biochar-based filtration and adsorption techniques can play a vital role in improving water quality and addressing public health concerns.











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24. National Space Day- August 23, 2025

Context: India celebrated its second **National Space Day** on 23 August, commemorating the successful landing of **Chandrayaan-3** on the Moon. This achievement marked India as the first country to land near the Moon's southern pole and the fourth globally to achieve a soft landing. The day was observed with events organized by ISRO to inspire youth and promote space science awareness

Theme: "Aryabhatta to Gaganyaan: Ancient Wisdom to Infinite Possibilities"

- Purpose: To honour India's space achievements, promote the benefits of space technology, and inspire youth to pursue STEM fields.
- Activities: Included a National Meet (NM 2.0) discussing space applications for a developed India by 2047, and events at the Bharat Mandapam in New Delhi, which were streamed online







25 Palmyra Palm Tree

In News: Palmyra palm trees in Odisha are providing dual benefits by reducing lightning-related deaths and serving as a food source for elephants during lean seasons.

About Palmyra tree (Borassus flabellifer)

Common Names: Sugar Palm, Toddy Palm, Fan Palm.

Origin and Distribution:

- Native to tropical Africa, the Palmyra palm is now widely cultivated and naturalized across India.
- In India, it is commonly planted as a windbreak on plains and arid regions.

Climatic and Soil Requirements:

- Soil: Highly adaptable, thriving in diverse soil types including sandy soil, red soil, black soil, and river alluvium. It can also grow well on arid and wasteland soils.
- Rainfall: Suitable for semi-arid regions receiving less than 750 mm of annual rainfall.
- Altitude: Can grow from sea level up to 800 meters above sea level.

Propagation:

 Mainly propagated through seeds, as there is currently no vegetative propagation method available.

Advantages of the Palmyra Palm Tree

a. Environmental Benefits:

Acts as an effective **windbreak** in arid and semi-arid regions, helping to reduce soil erosion.

Thrives on poor, degraded, and wasteland soils, contributing to **land reclamation** and desertification control.

b. Economic Uses:

The **sap** (toddy) is tapped to produce **toddy** (a traditional alcoholic beverage) and **jaggery** (palm sugar), supporting local livelihoods.

Its fruits and seeds are edible and rich in nutrients.

The **fibres from the leaves and trunk** are used to make mats, brushes, ropes, and handicrafts, providing employment opportunities in rural areas.





c. Agricultural Benefits:

The tree's shade helps protect understory crops in agroforestry systems.

Its deep roots help improve soil structure and water retention.

d. Cultural Significance:

The Palmyra palm holds religious and cultural importance in many Indian states, featuring in festivals and traditional practices.

e. Sustainability:

Being drought-resistant and hardy, it requires **minimal irrigation and care**, making it a sustainable choice for dry regions.

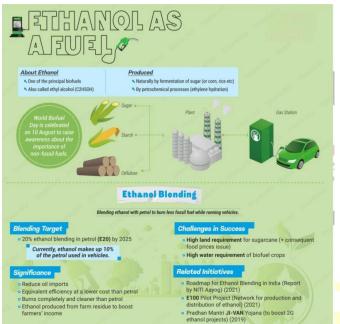


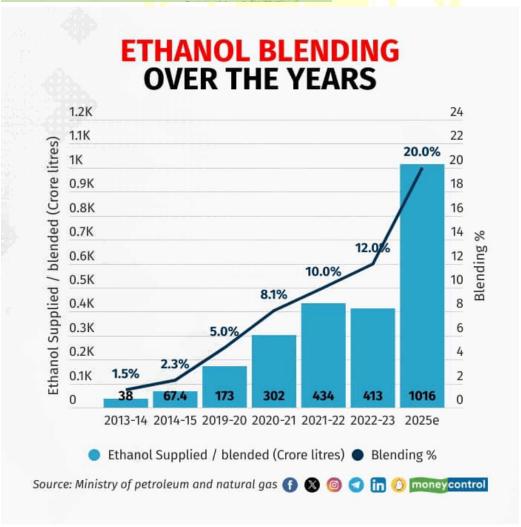
26. Ethanol Blending

Context: India has made significant strides in its ethanol blending program, aiming to enhance energy security, reduce greenhouse gas emissions, and support the rural economy.













- **E20 Implementation:** As of April 2025, India has achieved 20% ethanol blending in petrol (E20), five years ahead of the 2030 target.
- Ethanol Supply Year 2023–24: The country blended approximately 707.4 crore litres of ethanol, marking a significant in Fuel Availability: Over 17,400 retail outlets across India are dispensing E20 petrol, with plans to expand furthercrease from previous years.
- Future Targets:
- E30 by 2030: The government has set a new target to increase ethanol blending to 30% by 2030, following the early achievement of the E20 goal.
- **Policy Support:** The government has allowed unrestricted production of ethanol from sugarcane juice, syrup, and various types of molasses for the 2025/26 ethanol supply year, aiming to boost production capacity

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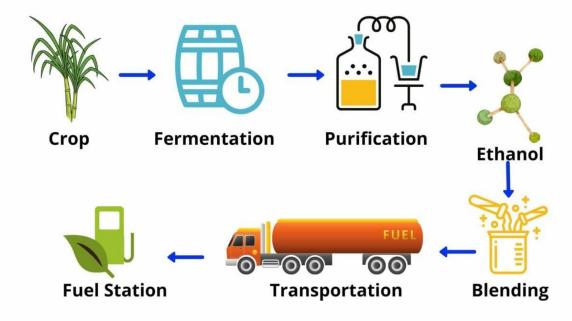
Economic and Environmental Benefits

- Reduction in Oil Imports: Ethanol blending has helped India save over ₹1.30 lakh crore in foreign exchange by reducing dependence on imported crude oil.
- Farmer Income Support: The program has provided an additional income stream for farmers, especially in sugarcane-producing regions.
- Environmental Impact: Blending ethanol with petrol has led to a net reduction of over 557 lakhs metric tonnes of CO₂ emissions, contributing to India's climate goals

Challenges and Considerations

- Vehicle Compatibility: Older vehicles not certified for E20 may experience engine knocking, reduced mileage, and performance issues.
- **Supply Chain Constraints:** Ensuring consistent ethanol supply to meet blending targets remains a logistical challenge, particularly in remote areas.
- Policy Adjustments: The government is reviewing the feasibility of increasing ethanol blending beyond E20, considering technical and infrastructure limitations





Z ISRO's First Integrated Air Droi

27. ISRO's First Integrated Air Drop Test (IADT-1) for Gaganyaan

In News: Indian Space Research Organisation (ISRO) successfully conducted its first Integrated Air Drop Test (IADT-1) for the Gaganyaan mission.

Objective: To validate the **parachute-based deceleration system** used during the **re-entry and landing phase** of the Gaganyaan crew module.

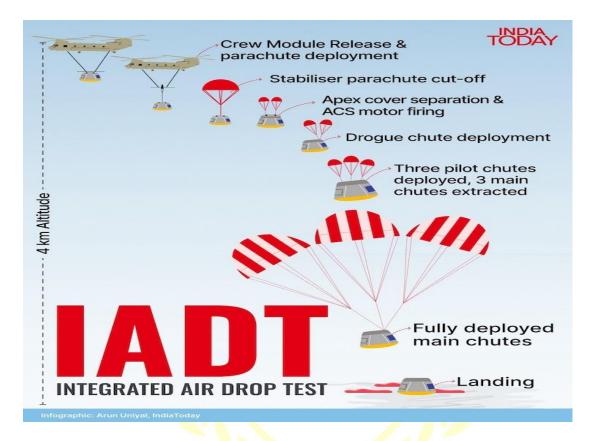
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The test involved dropping a **full-scale crew module** from an Indian Air Force aircraft (typically an Ilyushin-76) at an altitude of around **4.5 km**.

The module was integrated with:

- Parachutes (main and drogue chutes)
- Recovery systems
- Sensors and instrumentation to record performance





How it works:

- 1. **Air Drop**: The crew module is dropped from the aircraft mid-air.
- 2. **Drogue Parachutes**: Deploy first to stabilise the fall and reduce speed.
- Main Parachutes: Deploy next to further slowdown the descent to a safe landing speed. YOUR ZEAL + OUR EXPERTISE
- 4. **Landing Simulation**: Mimics real conditions of **earth re-entry** to validate that astronauts can land safely.

Why is IADT-1 important?

1. Human Safety Validation

- The parachute system is the **last line of defence** in ensuring that astronauts return safely to Earth.
- A failure here could mean fatal consequences in an actual mission.





 This test proves that ISRO's crew escape and recovery systems are functional and reliable.

2. Critical Step Toward Crewed Flight

- IADT-1 is one of several key milestones leading up to the first crewed spaceflight.
- Other steps include:
 - Pad abort tests
 - Uncrewed missions (G1, G2)
 - o Final crewed mission
- Without successful air-drop validation, ISRO cannot proceed confidently to full-scale launches.

3. Demonstrates Indigenous Capability

- The module, parachutes, and most subsystems are designed and built in India.
- It showcases India's engineering, aerodynamics, and space system integration capabilities.

4. Enhances Strategic and Technological Prestige

- Only a handful of countries have launched humans into space (USA, Russia, China).
- Gaganyaan positions India in that elite group, enhancing:
 - o International prestige
 - Space diplomacy
 - Leverage in global technology partnerships ERTISE

5. Military and Civil Collaboration

- The test involved IAF aircraft, Indian Army ground teams, and DRDO inputs.
- Showcases growing inter-agency coordination in critical national missions.

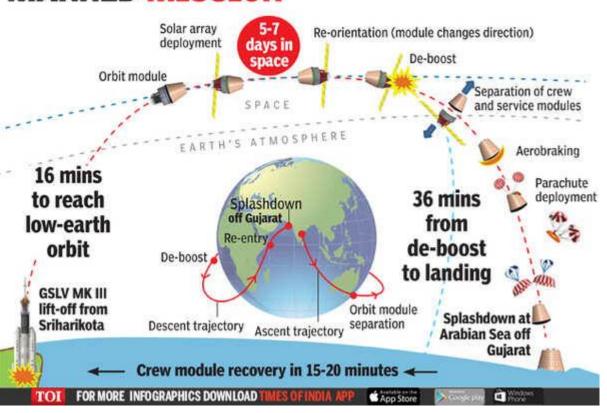
What is Gaganyaan Mission?



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- Overview: India's first human spaceflight program, aiming to send a crew of 3
 astronauts to Low Earth Orbit (LEO) at 400 km for 3 days and return them
 safely to Earth.
- Mission Phases: Includes unmanned test missions followed by the first manned mission expected to happen in early 2027.
- **Significance:** Gaganyaan success will place India among the **elite group of nations** (US, Russia, China) with human spaceflight capability.
- Crew training for Gaganyaan: Group Captain Prasanth Balakrishnan Nair, Group Captain Ajit Krishnan, Group Captain Angad Pratap, and Wing Commander Shubhanshu Shukla are India's astronauts-designated for Gaganyaan.

MANNED MISSION







28. India, Japan Sign Deal for Joint Chandrayaan-5 Mission to Explore Moon's South Pole

In News: India and Japan have signed the implementing arrangement for the Chandrayaan-5 mission, a joint exploration of the polar region of the moon by the space agencies of the two countries.

The Implementing Arrangement between the Indian Space Research Organisation (ISRO) and Japan Aerospace Exploration Agency (JAXA) concerning Joint Lunar Polar Exploration Mission was inked during Prime Minister Narendra Modi's visit to Japan in August 2025.

- The Chandrayaan-5 mission aims to study the lunar volatile materials, including lunar water, in the vicinity of a Permanently Shadowed Region (PSR) in the lunar South pole.
- The mission will be launched by JAXA on board its H3-24L launch vehicle, carrying the ISRO-made lunar lander, which will carry the Japan-made lunar rover.
- ISRO, apart from developing the lunar lander, is also responsible for developing a few scientific instruments for the mission for exploration and in-situ analysis of the volatiles reserved in the lunar polar region.

What is the Chandrayaan-5 / LUPEX Mission?

Chandrayaan-5, also known as LUPEX (Lunar Polar Exploration), is a joint lunar mission being developed by India (ISRO) and Japan (JAXA) to explore the Moon's South Pole, particularly its Permanently Shadowed Regions (PSRs), which may hold water ice and other volatiles.

Mission Objectives

- To detect and analyse water ice and volatiles on and beneath the Moon's surface.
- To explore **permanently shadowed regions (PSRs)** of the lunar South Pole, which are among the coldest places in the solar system.
- To assess the **availability and usability of lunar resources** for future exploration, including human missions.
- To demonstrate advanced **rover mobility**, **subsurface sampling**, and **in-situ scientific analysis** technologies

Mission Configuration



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Component Responsible Agency Key Details

Launcher JAXA H3-24L rocket

Lander ISRO Will carry and deploy the rover

Rover JAXA (MHI)

Heavier, more capable than Chandrayaan-3's

Pragyan

Instruments ISRO, JAXA, NASA,

Spectrometers, neutron detectors, drills, etc.

Timeline

Launch Window: Expected between 2027–2028

Mission Duration: Around 100 days on the lunar surface

Significance of the Lunar South Pole

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Permanently shadowed regions never receive sunlight → ideal traps for water ice

- Potential source of fuel, oxygen, and water for future lunar bases
- Vital for sustainable lunar exploration and resource utilisation

Strategic Importance

- Boosts India–Japan space collaboration
- Enhances India's position in global lunar exploration efforts
- Aligns with India's growing ambitions in human spaceflight and deep space missions

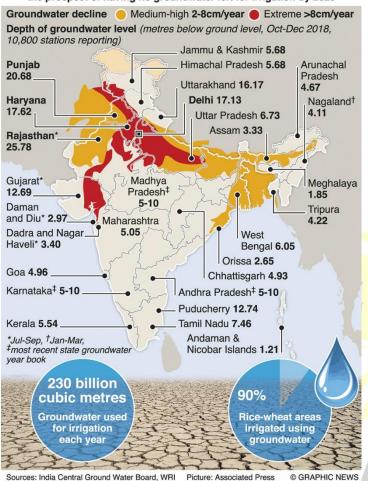
29. Water Scarcity in India

In News: In August 2025, India is facing a significant water scarcity crisis, with nearly 600 million people experiencing high to extreme water stress, exacerbated by depleting groundwater, erratic monsoons, and rising demand from population growth and urbanization.



India's water scarcity challenge

India, the world's largest groundwater user, is seeing levels declining across the country with farmers in Punjab, Haryana and Rajasthan facing the prospect of having no groundwater left for irrigation by 2025



While progress is being made in water conservation and distribution, with initiatives like the Jal Jeevan Mission providing tap water access, the underlying issues of groundwater over-exploitation, increasing demand, and climate change continue to threaten water security and economic growth.

Key Aspects of the Water Scarcity Crisis

- a. **Over-Reliance on Groundwater:** Over 80% of India's water needs are met through fast-depleting groundwater, with water tables in some regions sinking by several centimetres annually.
- b. **Erratic Monsoons:** Fast-arriving monsoon rains are not sufficiently replenishing rivers and reservoirs, leading to overall shortages.
- c. **High Demand:** Rising demand from population increase, economic growth, and urbanization is outpacing the available water supply.
- d. **Climate Change:** Climate change intensifies the problem by affecting monsoon patterns and further straining water resources.





Consequences

- **a. Economic Impact:** Water scarcity is a major threat to economic growth, potentially cutting India's GDP by a significant amount of water demand continues unchecked.
- **b. Health Risks:** Residents often rely on contaminated water sources, leading to waterborne diseases and malnutrition, particularly affecting vulnerable populations.
- c. Increased Migration and Conflict: Communities face increased migration and potential conflicts over limited water resources due to failed crops and resource competition.

Solutions and Initiatives

- e. Community-Driven Conservation: Organizations are implementing large-scale water conservation movements rooted in community participation and scientific methods
- f. **Groundwater Recharge:** Reforestation with native species is being used to improve soil permeability, increase rainwater infiltration, and revive seasonal streams.
- g. **Wastewater Reuse**: Treating and reusing wastewater for agricultural and industrial purposes is recognized as a solution to relieve water demand and reduce pollution, according to Wikipedia.
- h. **Jal Jeevan Mission:** The government's program is expanding tap water coverage in rural areas, significantly improving access and providing a boost to rural sanitation



30. Next Generation GST Reforms

In News: Prime Minister Narendra Modi announced Next generation GST reforms in his independence day speech at the Red Fort.

The proposed "next-generation" Goods and Services Tax (GST) reforms signify a profound restructuring of India's indirect tax regime, marking a shift from incremental procedural changes to comprehensive systemic transformation.

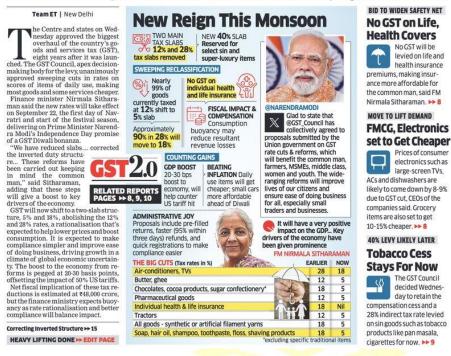


■ 5% GST for essentials, 18% for most goods & services

■ Revenue impact of ₹48,000 crore estimated FM: Unanimous call, no disagreement with states

GREAT SAVINGS TAX

Boost for consumption as council slashes rates in sweeping rationalisation



Reforms:

With these reforms, the GST will now get rid of the multiplicity of slabs – 5 per cent, 12 per cent, 18 per cent and 28 per cent – with a broad two-slab structure – a merit rate of 5 per cent and a standard rate of 18 per cent

In addition to a special demerit rate of 40 per cent for super luxury, sin and demerit goods like cigarettes and tobacco

WOUR ZEAL OUR EXPERTISE Impact of New Generation Reforms:

The reforms are not just rate cuts; they have wider implications

- Relief for Consumers: Daily essential items, personal care, household goods, some health goods & services will be cheaper. This helps especially middle-class / lower middle-class households.
- j. **Stimulus to Consumption**: Reduced GST on many goods is expected to boost demand, particularly ahead of festival seasons.
- k. Ease of Doing Business / Compliance: Fewer slabs means simpler classification, lower incidence of disputes, possibility of smoother compliance processes.





- I. **Support for MSMEs**: Reduced tax burden, simpler structure helps small and medium businesses.
- m. Revenue Risk for States and Centre: With many goods moving to lower tax slabs, immediate revenue shortfall is possible. States with higher dependence on GST revenue may be particularly affected.

Challenges & Issues

- Transition & Implementation: Switching over items, ensuring correct classifications, re-pricing, updating GST systems, awareness among businesses & consumers.
- Revenue Loss / Compensation: Ensuring that states are compensated or that revenue losses do not impair their ability to fund public services.
- Maintaining Equity: While many goods are moving into lower slabs, some luxury/sin goods are taxed more heavily; how the burden shifts could have equity implications.
- Avoiding Slippage / Loopholes: Ensuring that "sin goods" classification, cess, valuation etc. are well-defined to avoid misuse or revenue leakage.
- Behavioral Effects: Rising tax on luxury / sin goods could lead to substitution or smuggling.

What is GST?

- GST (Goods and Services Tax) is a comprehensive, destination-based indirect tax that replaced a complex web of central and state taxes in India.
- Introduced by the 101st Constitutional Amendment Act, 2016, and implemented on 1st July 2017.
- Follows the principle of "One Nation, One Tax".

GST Council:

The Goods and Services Tax (GST) Council was established under the 101st Constitutional Amendment Act, 2016. The GST Council is a constitutional body responsible for addressing GST-related issues and providing recommendations to both the Union and State governments on matters of taxation. Formed under the 101st Constitutional Amendment through Article 279A, the GST Council plays a critical role in creating a harmonized tax structure and fostering a unified national market for goods and services.

Objectives of GST Council

GST Council has been instrumental in shaping policies, settling disputes, and ensuring the seamless execution of the GST system throughout the nation since its establishment. Its key objectives include the following:

To ensure a smooth implementation of GST.



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- To simplify the tax structure, eliminate cascading taxes, and reduce compliance costs.
- To monitor all the taxation processes to avoid fraudulent processes.

Composition of the GST Council (Article 279A)

| Position | | Member |
|------------------------------|------------------------------|---|
| Chairperson | | Union Finance Minister |
| Vice-Chairperson | | Elected by GST Council members from among themselves (term decided by Council) |
| Moniboro | ZEAL TENA ELLENCE ACHIEVE | Union Minister of State for Revenue or Finance State Finance/Taxation Ministers or nominated Ministers |
| Permanent Invitee | | Chairperson, Central Board of Indirect Taxes and Customs (CBIC) (Non-voting) |
| Ex-officio Secretary | FТ | Union Revenue Secretary (Ministry of Finance) |
| Significance of GST in India | | |

Significance of GST in India

- 1. Tax Unification "One Nation, One Tax"
 - GST replaced multiple indirect taxes like VAT, service tax, excise, CST, etc., creating a unified national market. UR EXPERTISE
 - Promotes **ease of doing business** by removing tax barriers across states.

2. Elimination of Cascading Effect

- GST provides Input Tax Credit (ITC) at each stage of value addition.
- This reduces the **tax-on-tax burden**, lowering prices and improving efficiency.

3. Formalization of the Economy

• GST incentivizes registration and digital compliance, bringing more businesses into the **formal tax net**.





• Enhances **transparency** in transactions and accounting.

4. Boost to Cooperative Federalism

- The **GST Council** ensures collaboration between the Centre and States.
- Promotes consensus-based federal decision-making.

5. Improved Revenue Collection

- With a broader tax base and better compliance mechanisms (e.g. e-way bill, e-invoicing), GST helps **increase tax revenues**.
- Minimizes tax evasion through IT-based monitoring (via GSTN).

6. Supports Economic Growth

By reducing indirect tax burdens and improving efficiency in supply chains,
 GST can stimulate investment and consumption.

7. Simplicity and Transparency ACHIEVEMENT

- Replaces complex and multiple tax rates with a simpler structure, especially under the GST 2.0 (2025) reforms.
- Promotes clarity in tax liabilities and reduces litigation.

8. Enhances Logistics and Distribution

- No entry tax/check posts across states has reduced transit time and fuel costs.
- Boosts logistics sector productivity.

Way Forward for GST 2.0

1. Ensure Revenue Neutrality L * OUR EXPERTISE

- Compensate states for potential short-term losses due to rate rationalisation.
- Strengthen tax buoyancy through compliance and digital monitoring.

2. Strengthen the GSTN Infrastructure

 Improve the GST Network for seamless return filing, e-invoicing, and real-time data tracking.

3. Reduce Classification Disputes

 Issue clear guidelines to prevent ambiguity in item classification under different slabs.

4. Rationalise Cess and Exemptions

 Minimise ad hoc cesses and streamline exemptions to avoid revenue leakage.

5. Enhance Capacity Building





Train tax officials and support MSMEs to adapt to the simplified structure.

6. Strengthen Cooperative Federalism

 Promote consensus-driven decisions in the GST Council to preserve Centre-State trust.

7. Gradual Move Toward a Single Rate

 In the long term, aim for a uniform GST rate (except for sin/luxury goods) to simplify the regime further.

31. US tariffs risk slowing the global economy

In News: In August 2025, the U.S. announced a 50% tariff on select Indian exports, citing concerns over trade imbalances and subsidy-related WTO violations. Effective from 27 August 2025, these tariffs target sectors such as pharmaceuticals, textiles, auto components, and electronics.

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| Date | Event | Tariff Announcement |
|------------------|---|--|
| April 2, 2025 | Announcement of reciprocal tariffs | The US announced a 26% tariff on Indian goods, later adjusted to 25%. |
| April 5, 2025 | Baseline tariff effective | A 10% baseline tariff on all imports, including India, was implemented. |
| | | |
| April 9, 2025 | Delay of nation- specific tariffs | The 16% nation-specific tariff for India was delayed for 90 days until July 9. |
| July 8, 2025 | Extension of delay | The delay period for nation-specific tariffs extended to August 1. |
| July 30, 2025 | Announcement of 25% tariff plus penalty | The US declared a 25% tariff on Indian goods, effective August 7, with an unspecified penalty for Russian oil purchases. |



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| August 1, 2025 | Initial 25% tariff effective (corrected from earlier reports) | 25% tariff (10% baseline + 15% reciprocal) applied to Indian goods. |
|--------------------|---|---|
| August 7, 2025 | Executive order for 25% tariff implementation | The White House issued an executive order confirming a 25% tariff on Indian goods, effective immediately, with exemptions for pharmaceuticals, electronics, and energy. |
| August 27, 2025 | An additional 25% tariff is effective | An additional 25% tariff was implemented, bringing the total to 50% for most Indian goods (except exempted sectors). |
| October 5, 2025 | Grace period for intransit goods | Goods loaded onto ships before August 7 and arriving before October 5 are subject to the earlier 25% tariff rate, not the 50% rate. |

Trade in numbers

Tables show top exports and imports between the U.S. and India from April 2024 to Nov. 2024



US Tariff Implementation Dates on Indian Goods (2025)

50% tariff on India





The tariff structure on Indian goods combines a baseline 10% duty with a 25% reciprocal tariff, which was announced by Trump on April 2, 2025, and an additional 25% tariff effective from August 27, 2025. Unlike China, which faces a 30% tariff, or Vietnam and the Philippines at 20%, India and Brazil face the highest rate of 50%.

There are some exemptions that apply to pharmaceuticals, semiconductors, energy resources (crude oil, natural gas), and critical minerals, sparing key sectors like India's generic drug exports, which account for 50% of the US market.

Because of this tariff, the sectors like textiles, gems and jewellery, leather, marine products, chemicals, and auto components face significant exposure, with 55% of India's US-bound exports at risk

List of Indian Products Impacted by US Tariff Rates

| Product Category | Tariff Rate (August 7, 2025) | Tariff Rate (August 27, 2025) |
|--------------------------|---|---|
| Textiles & Apparel | 25% | 50% |
| Gems & Jewellery | 25% | 50% |
| Leather & Footwear | 25% (20.8– 29.51% for footwear) | 50% (45.8– 54.51% for footwear) |
| Marine Products | 33.26% (25% + 2.49% anti- dumping + 5.77% countervailing) | 58.26% (50% + 2.49% + 5.77%) |
| Chemicals (Organic) | 25% | 50% |
| Automobiles & Auto Parts | 25% | 50% |



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| Iron, Steel, Aluminium | 25% (5–12.5% for industrial goods) | 50% (30– 37.5% for industrial goods) |
|-------------------------------|---|---|
| Agricultural Products | 25% (e.g., onions at 25.54%) | 50% (e.g., onions at 50.54%) |
| Machinery & Engineering Goods | 25% | 50% |
| Ceramic, Glass, Stone | 25% | 50% |
| Rubber Items | 25% | 50% |
| Paper & Wood Products | 25% | 50% |
| Furniture | 25% | 50% |
| Dairy Products | 56.46% (buttermilk, fermented milk); 30.84% (milk powder) | 81.46%; 55.84% |
| Pharmaceuticals | 0% | 0% |
| Electronics & Semiconductors | 0% | 0% |
| Energy Products | 0% | 0% |
| Critical Minerals | 0% | 0% |

US Tariffs: Impact on India's Economy (August 2025)

- \$434 billion: India's total exports
- \$87 billion: Exports to the US (2.5% of India's GDP)
- \$4–5 billion: Estimated loss in engineering exports
- 0.2-0.5%: Expected decline in GDP growth





Forecast revised from 6.5% to as low as 6%

Affected Sectors:

MSMEs (Textiles, Leather): Face competitiveness loss vs **Vietnam & Bangladesh** (which enjoy lower tariffs)

India's Strategic Response to the US Tariff

India's Ministry of External Affairs condemned the tariffs as "unfair, unjustified, and unreasonable," emphasising the country's sovereign right to make energy decisions. Rather than immediate retaliation, India is pursuing a multi-pronged strategy.

- **Diplomatic Engagement**: Government remains committed to a fair bilateral trade agreement, with a fall 2025 deadline for negotiations.
- Sectoral Support: direct subsidies have been ruled out but measures like interest subsidies, loan guarantees, and reduced certification fees for MSMEs are proposed.

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- Market Diversification: Industry leaders like Anand Mahindra advocate exploring new markets to reduce US dependence.
- Domestic Resilience: PM Narendra Modi has promoted local products to cushion global demand shocks.

. India has also highlighted Western double standards, noting that the US and EU continue trading with Russia while pressuring India

US Pressure on India Amid Geopolitical Tensions

The tariffs aren't just about money also about politics. The US is unhappy with India because India buys a lot of oil from Russia and is part of a group called BRICS, which the US sees as a challenge to its power. Even though China buys more Russian oil, the US gave China lower tariffs, probably because the US is still negotiating trade deals with them.

This is different from the friendly relationship Trump showed when he met India's Prime Minister Modi in early 2025. Experts say these tariffs are like "economic blackmail" to try to force India to give in to US demands.

Tariff Delay for Negotiations

The US waiting 21 days before adding the extra 25% tariff gives both countries a chance to talk and try to make a deal. If they agree, the tariffs might be lowered to about 15–20%. But some tough topics, like farming and dairy, are hard to solve. India needs to protect its farmers and small businesses while also making trade deals.

These tariffs also show that the World Trade Organisation (WTO) can't always solve problems quickly, and India might fight back with its own tariffs. In the





long run, India might work harder to rely on itself and sell its products to more countries so it doesn't get stuck in this situation again.

Conclusion

The US's 50% tariff hurts India's export industries and economy, especially textiles, gems, and small businesses. India is responding carefully with diplomacy, industry support, and exploring new markets. It must stay strong and smart to protect its interests in a changing global landscape.

Government schemes in News

1. PM Viksit Bharat Rozgar Yojana (PM-VBRY)

Overview

- Launched on 1 August 2025, the PM Viksit Bharat Rozgar Yojana is a flagship employment-linked incentive scheme by the Government of India.
- The scheme aims to generate **3.5 crore new jobs** in the formal sector over two years, i.e., from August 2025 to July 2027.
- It is part of the government's efforts to formalize employment, improve job quality, and enhance labor market participation in the post-pandemic economic recovery phase.

2. Objectives

- To create gainful and sustainable employment opportunities in the organized sector. UR ZEAL OUR EXPERTISE
- To provide **social security benefits** to workers through formalization.
- To incentivize both employees and employers to encourage formal hiring and improve compliance.
- To reduce informal employment and enhance the tax base.

Implementation

- The scheme is administered by the **Ministry of Labour and Employment**.
- Employers register their employees on the designated portal to claim incentives.
- Periodic monitoring and evaluation ensure transparency and effectiveness.





Significance

- Tackles the **unemployment challenge** in a rapidly growing economy.
- Encourages **formalization of jobs**, which improves worker welfare (social security, insurance, provident funds).
- Supports the Make in India and Atmanirbhar Bharat initiatives by boosting domestic manufacturing and services.
- Contributes to **inclusive growth** by creating jobs for youth and women.

6. Challenges & Considerations

- Effective outreach to MSMEs and informal sector workers is crucial.
- Ensuring timely disbursement of incentives.
- Monitoring misuse or duplication of benefits.
- Need for complementary skill development programs to improve employability.

2. MERITE Scheme

Context: The MERITE (Multidisciplinary Education and Research Improvement in Technical Education) Scheme is a Central Sector Scheme approved by the Union Cabinet, with a Rs. 4,200 crore outlay, to improve technical education quality, equity, and governance across India's States and Union Territories.

Aligned with NEP 2020, the scheme will support 275 institutions, including 175 engineering colleges and 100 polytechnics, to enhance student learning and employability, strengthen research, and develop future-ready academic administrators.

Key Objectives YOUR ZEAL * OUR EXPERTISE

- Enhance Quality and Equity: To improve the overall quality and ensure equitable access to technical education across all states and union territories.
- **Strengthen Governance:** To improve governance mechanisms within technical education institutions.
- **Boost Research and Innovation:** To foster a stronger research and innovation ecosystem within the technical education sector.
- **Improve Learning Outcomes:** To increase student learning, employability, and transition rates to higher education or employment.



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- **Promote Multidisciplinarity:** To develop guidelines for and implement multidisciplinary programs within technical courses.
- Address Gender Gaps: To develop future academic administrators, with a specific focus on increasing the number of women faculty.

Implementation and Impact

- **Beneficiary Institutions:** 275 technical institutions, including 175 engineering colleges and 100 polytechnics, will be supported.
- Alignment with NEP 2020: The scheme's interventions are designed based on the goals of the National Education Policy 2020.
- Stakeholder Involvement: Participating states and union territories are key stakeholders with a major role in the scheme's implementation.
- Budget: The scheme has a total budgetary support of Rs. 4,200 crores, with Rs. 2,100 crores from the World Bank as a loan.
- Expected Outcomes: The scheme aims for long-term benefits, including better quality assurance, more relevant curriculum, and improved institutional accreditation.



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1. Bhagirathi Eco-Sensitive Zone: PERTISE

Context: The Bhagirathi Eco-Sensitive Zone (BESZ) in the Indian Himalayas remains an active area of conservation and development, with ongoing projects like the Uttarkashi incinerator drawing public and environmental concern in 2025, and its management guided by the Zonal Master Plan (ZMP) approved in 2020.

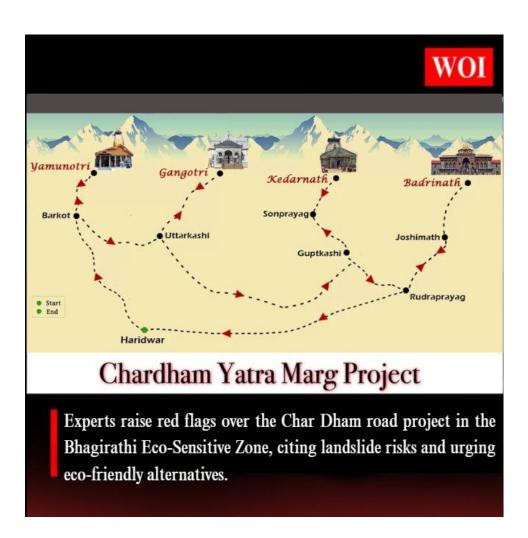
Key Aspects of the BESZ in 2025

- Ongoing Projects: A new solid-waste incinerator in the Gangotri area within the BESZ
 has generated controversy among environmental and social activists in 2025, highlighting
 the challenges of balancing development and the zone's ecological integrity.
- **Supreme Court Directives:** A key ruling from the Supreme Court in June 2022 prohibits the construction of any new permanent structures within the eco-sensitive zone.



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- **Environmental Governance:** The Zonal Master Plan (ZMP), approved in 2020, guides development activities and conservation efforts within the BESZ.
- Monitoring and Compliance: A Monitoring Committee is responsible for overseeing compliance with the ESZ notification and the ZMP, providing annual reports to the Chief Wildlife Warden



Why is this Zone Important?

- **Ecological Significance:** The Bhagirathi ESZ is a vital part of the fragile Ganga-Himalayan ecosystem, located in the Garhwal lesser Himalayas.
- **Conservation Focus:** It aims to provide "shock absorbers" to the protected areas through strict regulation of activities within the zone, ensuring ecological protection.







ESZs are notified around protected areas by the Centre on the basis of

surveys done by states, to provide a buffer against development activities

National Parks

Wildlife Sanctuaries

The Wildlife Conservation Strategy, 2002, provides for a 10-km-wide ESZ. but the actual extent varies, depending on local factors

The laws and guidelines that govern Ecologically Sensitive Zones (ESZs)

THE 2011 **GUIDELINES**

Three types of activities



PERMITTED PROHIBITED (like farming) (like mining)

REGULATED (like construction

of hotels and road-widening)



June 3, 2022 The Supreme Court mandates a mini-

mum 1-km ESZ around all protected areas; imposes construction freeze

April 26, 2023: The SC exempts 659 ESZs for which the Centre has issued notifications or received proposals. But ban on mining up to 1 km stays even if the ESZ is marked at the zero line



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