

## Today's Prelims Topics

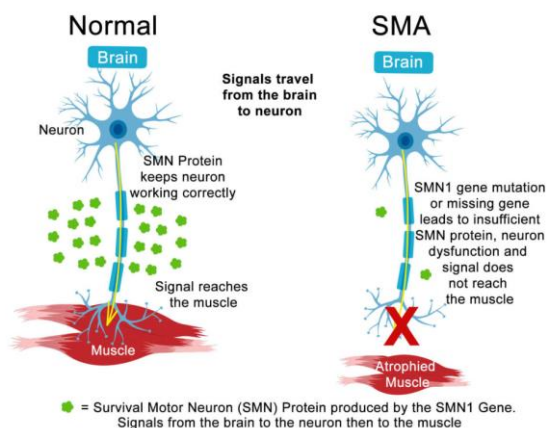
### Spinal muscular atrophy

#### Context

Kerala's SAT Hospital gave India's first **presymptomatic SMA treatment** to a newborn identified through **prenatal screening**, using the rare drug **Risdiplam** to prevent future nerve damage.

#### About Spinal Muscular Atrophy (SMA)

- **Definition:** A serious genetic disorder that affects motor neurons, leading to progressive muscle weakness and loss of movement control.
- **Cause:**
  - Caused by mutations in the **SMN1 gene**.
  - This leads to a deficiency of **SMN protein**, essential for motor neuron survival.
- **Prevalence:**
  - Affects about **1 in 10,000 births**.
  - It is one of the **leading genetic causes of infant and child mortality**.
- **Types of SMA:**
  - **Type 0:** Most severe; symptoms begin before birth.
  - **Type 1:** Appears within the first 6 months of life.
  - **Type 2:** Onset between 6 and 18 months.
  - **Type 3:** Develops after 18 months into adolescence.
  - **Type 4:** Adult-onset, usually mild symptoms.
- **Symptoms:**
  - **Muscle weakness**, especially near the center of the body (proximal muscles).
  - May affect walking, sitting, or breathing in severe cases.
  - **Involuntary muscles** (heart, digestive system, blood vessels) are **not affected**.
  - Symptoms range from **mild to severely disabling**.
- **Treatment & Symptom Management:** No cure exists currently.
  - **Symptom management includes:**
    - **Physical therapy** – improves posture, mobility, and slows muscle weakening.
    - **Nutritional support, respiratory care, and assistive devices** may be used.
  - **FDA-approved therapies (2016–2020):**
    - **Disease-modifying therapies** – slow disease progression.
    - **Gene replacement therapy** – targets the root genetic cause.



Source: [TheHindu](https://www.thehindu.com)

## Indus Valley Script

### Context

ASI will host a global conference in August to discuss decoding the **Indus Valley script**.

### Indus Valley Script

- Developed during **2600–1900 BCE**.
- Earliest known writing system in the **Indian subcontinent**.
- Still **undeciphered**, presenting a major challenge to researchers.
- **Features:**
  - Inscribed on **seals, pottery, tools, tablets, ornaments**, etc.
  - Written in **pictorial** and **boustrophedon** (alternate left-to-right and right-to-left) styles.
  - Found on artefacts from **Pakistan and northwest India**.
  - No inscriptions longer than **26 symbols**.
- **Material Forms**
  - **Inscribed on:** Seals, pottery, bronze tools, stoneware, bones, shells, ivory, steatite, copper tablets.
  - **Seals:**
    - Square, ~2.5 cm<sup>2</sup>.
    - Usually feature **animal motifs** with script on top.
    - Made of **steatite, silver, faience, calcite**, often glazed.
  - **Functionality:**
    - Used for **trade, identification, and administration**.
    - Some seals used as **amulets/talismans**.
    - **Clay tags** found in **Mesopotamia** show evidence of long-distance trade.
    - Combined **text + narrative imagery** → possible **religious or mythological** significance.



Source: [TheHindu](https://www.thehindu.com)

## Govt has not abandoned lateral entry to posts

### Context

The government clarified that **lateral-entry recruitment** through UPSC is **not scrapped**, despite withdrawing an ad for 45 posts due to **reservation concerns**.

### What is Lateral Entry?

- It is the appointment of **specialists from the private sector** or non-government organisations into the **middle and senior levels** of government.
- Meant to bring in **domain expertise** and address the **shortage of IAS officers**.
- Proposed by **NITI Aayog** in its **Three-Year Action Agenda**.
- Also recommended by the **Group of Secretaries (GoS)** on Governance.
- **Enhance domain expertise** in government policymaking and implementation.
- **Address shortage** of officers at key levels in central administration.
- Recruit professionals from fields like:
  - Revenue, Finance, Economic Affairs
  - Agriculture, Civil Aviation, Commerce
  - Road Transport, Rural Development, etc.

### Recruitment Process

- Conducted by the **Union Public Service Commission (UPSC)**.
- Steps involved:
  - **DoPT** requests UPSC to initiate recruitment.
  - UPSC issues **online applications** for specified roles.
  - Shortlisted candidates are interviewed.
  - **Final selection list** is recommended to DoPT.
  - Appointments made for **3–5 years**.

Source: [IndianExpress](#)

## Green India Mission

### Context

The Ministry of Environment, Forest and Climate Change (MoEFCC) released the revised Green India Mission (GIM) plan for 2021–2030 on June 17, 2025, coinciding with the World Day to Combat Desertification and Drought.

### What is the Green India Mission (GIM)?

- **Launched:** February 2014
- **Under:** One of the **8 missions** under the **National Action Plan on Climate Change (NAPCC)**
- **Nodal Ministry:** **Ministry of Environment, Forest and Climate Change (MoEFCC)**
- **Aim:** To address climate change through **mitigation** and **adaptation**, focusing on **forest-based ecosystem restoration**

### Comparison: GIM 2014 vs Revised GIM (2021–2030)

#### Vision & Objectives

Aspect	GIM 2014	Revised GIM 2021–2030
<b>Vision</b>	Protect, restore, and enhance forest cover; respond to climate change	Same vision, but aligned with <b>India's NDCs under the Paris Agreement</b>
<b>Focus</b>	General forest cover improvement	<b>Targeted approach:</b> Aravallis, Western Ghats, Himalayas, Mangroves, Arid Northwest

#### Targets

GIM 2014	Revised GIM Plan
<b>Afforestation</b> on 5 million ha of non-forest land	<b>24–25 million ha</b> afforestation/restoration (via GIM + convergence)
Improve forest quality on 5 million ha	GIM will directly <b>treat 1 million ha</b> by 2030
Annual CO <sub>2</sub> sequestration target: <b>50–60 million tonnes</b>	Projected <b>carbon sink:</b> up to <b>3.39 billion tonnes CO<sub>2</sub></b>

#### Sub-Missions / Components

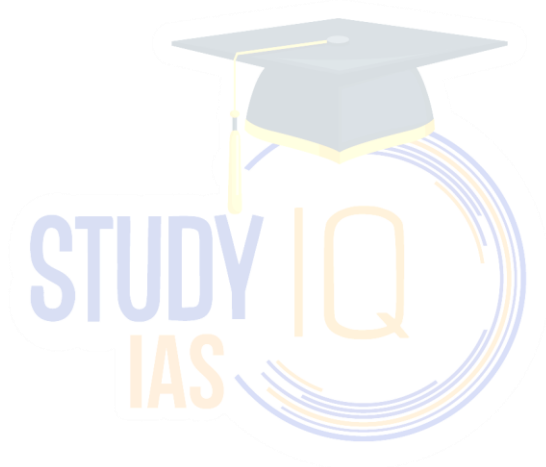
GIM 2014 – 5 Components	Revised GIM Plan – 3 Components
<ol style="list-style-type: none"> <li>1. Forest cover improvement</li> <li>2. Ecosystem restoration</li> <li>3. Urban greening</li> <li>4. Agro/social forestry</li> <li>5. Wetland restoration</li> </ol>	<ol style="list-style-type: none"> <li>1. Forest quality &amp; ecosystem services</li> <li>2. Afforestation &amp; ecosystem restoration</li> <li>3. Livelihood enhancement for forest-dependent communities</li> </ol>

#### Monitoring & Evaluation

GIM 2014	Revised GIM Plan
Ground-level surveys	<b>5-tier monitoring system</b>

Remote sensing via Forest Survey of India (FSI)	National-level GIS-based cell + Dashboard
Planned social audits	Self-monitoring by agencies + <b>Gram Sabha audits</b>
	Satellite-based monitoring (FSI + expert bodies)
	<b>Third-party evaluations</b> for transparency

Source: [IndianExpress](#)



## One Stop Centre Scheme

### Context

One-Stop Centres (OSCs) are in focus after a parliamentary committee flagged concerns over underutilisation of funds and improper functioning.

### About the Scheme

- Launched on **April 1, 2015**, by the **Ministry of Women and Child Development (MWCD)**.
- Aims to support women affected by **violence in private and public spaces**.
- Integrated into the **Sambal sub-scheme** under **Mission Shakti** since 2022–23.
- Provide **immediate and integrated support**: medical, legal, psychological, and shelter.
- Ensure **emergency and non-emergency services** under one roof.
- Offer a **centralised survivor-friendly platform** to reduce distress and delays.



### Key Services Provided

- **Emergency rescue & coordination** with police and ambulance services.
- **Medical aid** through referral to nearest hospitals.
- **Psycho-social counselling** by trained professionals.
- **Legal assistance & counselling** through empanelled legal experts.
- **Temporary shelter** (up to 5 days) for women and their minor children.
- **Video conferencing** facility for court or police statements.

### Target Beneficiaries

- **All women**, including girls below 18 (with Juvenile Justice & POCSO Act provisions).
- Victims of **physical, sexual, psychological, emotional, or economic abuse**.
- Survivors of **domestic violence, trafficking, acid attacks, honour crimes**, etc.

Source: [IndianExpress](https://www.indianexpress.com)

## Performance Grading Index 2.0

### Context

The **Ministry of Education** released the **Performance Grading Index (PGI) 2.0** report for 2022-23 and 2023-24, ranking States/UTs on school education.




### About Performance Grading Index (PGI) 2.0

- **Purpose:** A data-driven assessment tool that evaluates the quality of school education across Indian States and Union Territories.
- **Launch Timeline:** Introduced in 2017; PGI 2.0 is a revised version aligned with the **National Education Policy (NEP) 2020** and **Sustainable Development Goals (SDGs)**.
- **Publisher:** Released by the **Ministry of Education**, Government of India.
- **Coverage:** Measures performance across **6 key domains** and **73 indicators**, including:
  - Learning Outcomes
  - Access
  - Infrastructure & Facilities
  - Equity
  - Governance Processes
  - Teacher Education & Training
- **Grading System:** Scores out of **1000 points**, categorised into **10 grades** from **Daksh (highest)** to **Akanshi-3 (lowest)**.

Categories	Domain	Indicators	Total Weight
1. Outcomes	Learning Outcomes and Quality (LO)	12	240
	Access (A)	7	80
	Infrastructure & Facilities (IF)	15	190
	Equity (E)	16	260
2. Governance Management (GM)	Governance Processes (GP)	15	130
	Teacher Education & Training (TE&T)	8	100
<b>Total</b>		<b>73</b>	<b>1000</b>

### Key Highlights from PGI 2.0 (2023-24)

- **Top Performer:**
  - **Chandigarh** secured the highest score with **703 points**, falling in the **Prachesta-1** category.
  - Strongest performance seen in **infrastructure** and **governance**.
- **Lowest Performer:**
  - **Meghalaya** ranked lowest with **417 points**, graded as **Akanshi-3**.
  - Major issues noted in **learning outcomes** and **access**.
- **No State in Top Four Grades:**
  - **No State/UT** qualified for **Daksh (951–1000)** or **Utkarsh** grades.
  - Reflects systemic issues in achieving excellence in education.
- **Overall State Progress:**
  - **24 States/UTs** showed improvement in scores.
  - However, **12 States/UTs** recorded a decline, indicating **uneven growth**.
- **Infrastructure Improvement:**

 Scores (% of total points)	 Score range	 Grade
91% to 100%	941–1000	Daksh
81% to 90%	881–940	Utkarsh
71% to 80%	821–880	Atti-Uttam
61% to 70%	701–820	Uttam
41% to 50%	641–700	Prachesta-1
31% to 40%	581–640	Prachesta-2
21% to 30%	521–580	Akanshi-1
Up to 10%	461–520	Akanshi-2
Up to 10%	401–460	Akanshi-3

- **Delhi, Jammu & Kashmir, and Telangana** demonstrated significant progress in **school infrastructure** and **learning environments**.
- **Learning Outcomes Concern:**
  - **No State** reached **Daksh** in the Learning Outcomes domain.
  - Indicates persistent challenges in **basic literacy and numeracy**, especially at the foundational level.
- **Equity Trends:**
  - The **performance gap** between **SC/ST students** and **general category students** has narrowed slightly.
  - However, **equity remains a concern**, particularly in learning outcomes.
- **Access Gains:**
  - **Bihar and Telangana** led in improving **enrolment** and **retention**, especially among **marginalised and disadvantaged groups**.

Source: [The Print](#)





## News in Short

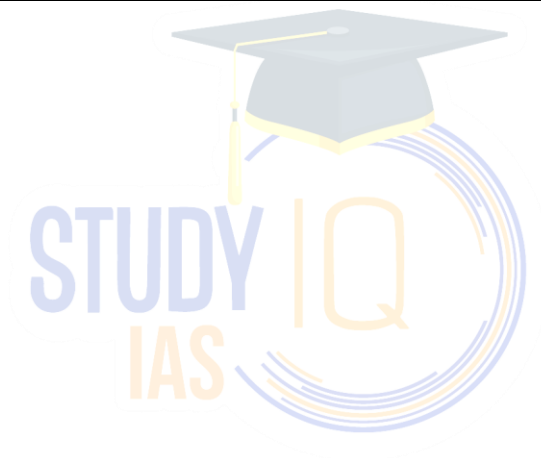
### Mount Lewotobi Laki Laki

**News?** Mount Lewotobi Laki-Laki erupted recently.

**About it**

- **Location:** Flores Island, Indonesia
- **Features:** It is an **active stratovolcano**, known for its conical shape and periodic eruptions.
  - It is part of the highly active **Pacific Ring of Fire**.
- **Volcanic Eruption:** 99% of gas molecules emitted during a volcanic eruption are Water Vapor, CO<sub>2</sub> and SO<sub>2</sub>.
- The remaining 1% is composed of small amounts of **hydrogen sulfide, carbon monoxide, hydrogen chloride, hydrogen fluoride etc.**

**Source:** [AP News](#)



## Place in News

### Venezuela



**News?** The **Dancing Devils of Chuao** took part in Venezuela's **Corpus Christi** celebration, a tradition recognized by **UNESCO** in **2012** as **Intangible Cultural Heritage**.

#### About Venezuela

- **Location:** Northern coast of **South America**
- **Capital:** **Caracas**
- **Geographical Boundaries**
  - **North:** Caribbean Sea & Atlantic Ocean
  - **East:** Guyana
  - **South:** Brazil
  - **West/Southwest:** Colombia
- **Physical Features**
  - **Andes Mountains** in the north
  - **Orinoco River Basin** with vast **Llanos (plains)**
  - **Lake Maracaibo** – Largest lake in South America
  - **Angel Falls** – World's **highest waterfall**
- **Major Rivers**
  - **Rio Negro** (2,250 km) – Tributary of Amazon; shared with Colombia & Brazil
  - **Orinoco River** (2,101 km) – 3rd longest river in South America
- **Islands and Archipelagos (Caribbean):** Margarita Island, La Blanquilla, La Tortuga, Los Roques, Los Monjes
- **Natural Resources:** Holds the world's largest oil reserves

**Source:** [TheHindu](#)

## Editorial Summary

### Repatriation and Local Integration of Sri Lankan Refugees in Tamil Nadu

#### Context

The recent developments in India and Sri Lanka have reignited attention on the long-standing issue of Sri Lankan Tamil refugees in India.

#### More in News

- With over 90,000 refugees residing primarily in Tamil Nadu since the outbreak of the Sri Lankan civil war in 1983, questions of repatriation, legal status, and local integration remain unresolved.
- Despite humanitarian efforts by the Indian government and civil society, a comprehensive national policy to address their plight is still lacking.

- **Sri Lankan Tamil refugees in India** include two groups:

- Brought as indentured labourers by the British to work on Sri Lankan plantations.
- Fled to India due to the civil war (1983–2009), especially to Tamil Nadu.

#### Recent Incidents related Refugee Repatriation

- The Supreme Court of India recently refused to allow a Sri Lankan Tamil refugee, convicted under the Unlawful Activities (Prevention) Act (UAPA), to settle in India after serving his sentence.
  - The bench remarked, “**India is not a dharamshala to entertain foreign nationals from all over.**”
- A 75-year-old refugee, who returned from India with UNHCR assistance, was arrested at Palay Airport for having left the country “without valid documents.”
  - The arrest, triggered by the automatic application of outdated wartime laws, caused public outcry and concern among the refugee community.
  - Sri Lankan authorities, acknowledging the problem, pledged to amend immigration and emigration laws to facilitate smoother returns for refugees who fled during the conflict.

#### Fact

- **World Refugee Day:** 20 June
  - **2025 Theme:** Solidarity with Refugees

#### Plight of Sri Lankan Tamil Refugees in India

- **Prolonged Displacement:** Most refugees have spent over 30 years in Tamil Nadu, living in 100+ rehabilitation camps under conditions marked by legal ambiguity and limited rights.
- **Lack of Legal Status:** They are neither granted Indian citizenship nor recognised as refugees under Indian law, leaving them in a liminal legal state without passports or voting rights.
- **Barriers to Employment:** Despite receiving education (e.g. over 500 engineering graduates among them), many refugees face employment discrimination due to documentation and legal status issues.
- **Social and Psychological Challenges:** The “refugee” tag restricts social mobility and affects dignity, especially among the younger generation born and raised in India.
- **Limited Policy Framework:** Unlike Tibetan refugees who benefit from the 2014 Tibetan Rehabilitation Policy, Sri Lankan Tamil refugees lack a structured national framework for welfare, employment or integration.
- **Exclusion from Citizenship Amendment Act (CAA), 2019:** CAA, 2019 fast-tracks Indian citizenship for **persecuted non-Muslim minorities** from Pakistan, Afghanistan, and Bangladesh (Hindus, Sikhs, Jains, Parsis, Buddhists, Christians).

- **Excludes Sri Lankan Tamil refugees** despite their persecution and long stay in India.

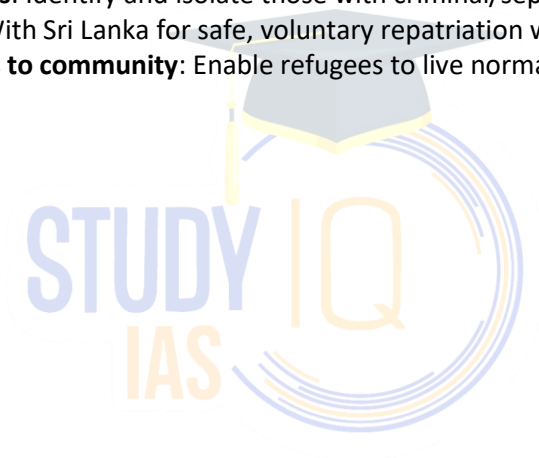
#### India-Sri Lanka Agreements Related to Refugees

- **Sirimavo-Gandhi Pact (1964)**: Provided for the repatriation and grant of Indian citizenship to persons of Indian origin in Sri Lanka. However, this focused on Indian Tamils in Sri Lanka, not Sri Lankan Tamils fleeing civil conflict.
- **Indo-Sri Lankan Accord (1987)**: Signed during the civil war, it included provisions for Tamil rights in Sri Lanka and called for the return of refugees, but implementation was weak.
- **Repatriation Efforts (Till 1995)**: Organised voluntary repatriation was carried out till 1995, but was halted due to ongoing violence in Sri Lanka and safety concerns.
- **UNHCR Involvement**: The UN High Commissioner for Refugees has facilitated voluntary repatriation in recent years but without a robust agreement to protect returnees' rights, as recent detentions highlight.

#### Way Forward

- **Frame a national refugee law**: To ensure uniformity in rights and treatment.
- **Extend CAA or a special provision**: For Sri Lankan Tamil refugees on humanitarian grounds.
- **Adopt a rehabilitation policy**: Like the Tibetan Rehabilitation Policy (2014) for long-term integration.
- **Screen for security risks**: Identify and isolate those with criminal/separatist intent.
- **Bilateral agreement**: With Sri Lanka for safe, voluntary repatriation with dignity where desired.
- **Shift focus from camps to community**: Enable refugees to live normal lives in society.

Source: [The Hindu](#)



## Why India should address its propulsion gap

### Context

- India's ambitious aerospace journey, marked by the development of platforms like the **Advanced Medium Combat Aircraft (AMCA)**, is being hailed as a major step towards military indigenisation.
- However, the country's persistent **propulsion gap** — its overdependence on foreign aircraft engines — remains a serious strategic vulnerability.
- The historical failure of the **HF-24 Marut**, and more recently the setbacks with the **Kaveri engine**, underscore this critical weakness.

### Why India Should Urgently Address Its Propulsion Gap

- **Strategic Autonomy & National Security:** Relying on foreign engine suppliers leaves India vulnerable to **geopolitical pressure**, **supply chain delays**, and **technology denial regimes**, which can cripple national defence preparedness.
- **Lessons from History:** Indigenous platforms like the **Marut** and **Tejas (LCA)** suffered due to the **lack of a suitable domestic engine**, forcing reliance on imports and compromising full combat potential.
- **Delays in Force Modernisation:** **Delayed engine deliveries** (e.g., GE F404 for LCA Mk1A) push back timelines for induction, training, and deployment, directly impacting the IAF's operational readiness amid falling squadron strength.
- **Export Constraints:** Aircraft powered by **foreign engines require third-party clearances** for exports — limiting India's defence diplomacy and industrial outreach.
- **Naval and Armoured Dependency:** Engine dependence isn't limited to aircraft — India's **warships and tanks** also run on imported power packs, compromising holistic self-reliance in defence.
- **Barrier to 'Atmanirbhar Bharat':** Without indigenous propulsion, slogans of self-reliance remain hollow. Engines are the **heart of any combat platform**; without them, true independence is incomplete.

Source: [The Hindu](#)

## Opportunity for India to integrate more with Global Supply Chains

### Context

If supply chains are rejigged during the second Trump presidency, India may have an opportunity to integrate more deeply with global value chains.

### Why a Second Trump Presidency Matters

- **Tariff-Centric Policy:** Trump is likely to impose **broad-based tariffs**, including proposed **60%+ on Chinese goods**.
- **Disruption of China-centric Supply Chains:** High U.S. tariffs will make importing from China expensive, **pushing global firms to diversify sourcing**.
- **Incentive for 'China+1' Strategy:** Multinational corporations will seek **alternative manufacturing hubs** to reduce dependence on China.

### How This Creates an Opportunity for India

- **Favorable Geopolitics:** India is **not targeted** by U.S. tariffs and is seen as a **friendly partner** in global trade.
- **Large and Skilled Workforce:** India has a **cost advantage** (low wages) and a growing pool of **engineering and technical talent**.
- **Existing Government Schemes:** PLI (Production Linked Incentives), Make in India, and improved ease of doing business **position India as an attractive alternative**.

### Sectors Likely to Benefit in India

- **Electronics Manufacturing:** Smartphones, semiconductors, display units (Apple, Foxconn already shifting).
- **Mid-tech Labour-Intensive Sectors:** Textiles, footwear, toys, furniture — sectors where **China's dominance could be challenged**.
- **Auto Components & EVs:** Wiring harnesses, battery modules — growing sectors where India can plug into value chains.

### India's Strengths in Capturing the Shift

- **Low Labour Costs:** Manufacturing wages in India are among the **lowest in Asia**.
- **Existing Manufacturing Ecosystems:** For electronics (Tamil Nadu), textiles (Gujarat, Tamil Nadu), auto parts (Maharashtra, Haryana).
- **Improved Global Perception:** India is increasingly viewed as a **reliable, democratic partner**.

### What India Must Fix to Fully Seize the Opportunity

- **Lower Import Tariffs:** Reverse recent protectionist hikes (e.g., increased import duties on certain goods like steel and edible oils) to make it easier to join **global supply/value chains**.
- **Trade Agreements:** Fast-track FTAs with **U.S., EU, UK**, and Indo-Pacific allies to **ease exports**.
- **Ease of Doing Business:** Streamline **land acquisition, labour laws, power supply, and customs clearance**.
- **Infrastructure Development:** Improve **port connectivity, freight corridors, and plug-and-play industrial zones**.
- **Workforce Skilling:** Align vocational training with **electronics, textiles, auto parts** industry needs.

### Risks India Should Watch Out For

- **Competition from Vietnam, Indonesia, Mexico:** These countries already benefit from earlier shifts and are **better integrated** in Global Value Chains (GVCs).
- **Policy Uncertainty:** Frequent tariff changes and unclear regulations could **deter foreign investors**.
- **Infrastructure Bottlenecks:** Slow logistics and unreliable utilities may **hurt scalability**.

### Conclusion

India has a **strategic window of opportunity** due to the potential reshaping of global trade under a second Trump presidency. To become a **preferred alternative to China**, India must act fast with **deep trade and domestic reforms**, especially in **mid-tech export sectors**. If executed well, this shift could significantly boost India's role in global value chains, driving growth, exports, and employment.

Source: [Indian Express](#)

