

Today's Prelims Topics

Supreme Court's Stand on Death Penalty in 2024

Context

The Supreme Court (SC) did not confirm a single death sentence for the **second consecutive year** in 2024.

Death Penalty and the "Rarest of Rare" Doctrine

- The **Supreme Court (SC)** in the **Bachan Singh v. State of Punjab (1980)** case established the principle that the **death penalty** should only be imposed in the "**rarest of rare**" cases.
- The Court emphasized that death sentences should be imposed after considering both **aggravating** and **mitigating** circumstances surrounding the crime.
- **Aggravating Circumstances (Factors that may lead to the death penalty):**
 - **Pre-planned murder:** If the crime is carefully planned and executed with extreme brutality.
 - **Exceptional depravity:** If the murder involves extraordinary cruelty.
 - **Murder of public servants:** If the victim is a public servant or someone serving in the armed forces, and the crime occurs in the line of duty.
- **Mitigating Circumstances (Factors that may reduce the sentence):**
 - **Extreme mental or emotional disturbance:** If the accused was experiencing severe psychological distress during the crime.
 - **Age of the accused:** Very young or old defendants may be exempt from the death penalty.
 - **Threat to society:** Whether the accused poses an ongoing danger to society.
 - **Possibility of reform:** If there is a reasonable expectation of the accused's reform.
 - **Actions under duress:** If the accused was compelled by others to commit the crime.

Evolving Interpretations of Mitigating and Aggravating Factors

- **Age as a Factor:** In previous rulings, like **Ramnaresh and Ors v. State of Chhattisgarh (2012)** and **Ramesh v. State of Rajasthan (2011)**, the Supreme Court considered the young age of the accused (below 30) as a factor suggesting they could be reformed.
 - In the **RG Kar case**, **the accused** is 35 years old, which is considered an age where reform is still possible, but not as a mitigating factor.
- **Nature of the Offence:** The **SC** has emphasized comparing the case at hand to others with similar offenses to determine the appropriateness of the death sentence.
 - In **Machhi Singh v. State of Punjab (1983)**, the Court considered the **collective conscience** of society to determine if a crime is shocking enough to warrant the death penalty.
- **Possibility of Reform:** In **Bachan Singh**, the Court emphasized that there should be **clear evidence** proving the accused is beyond reformation before imposing a death sentence.

Sentencing Procedure Reform (Manoj Case, 2022 & Other Judgments)

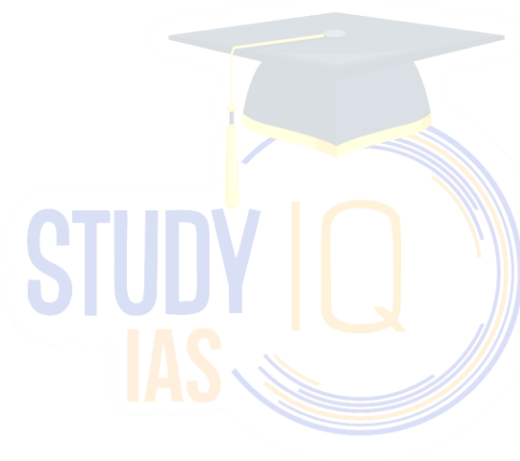
- In **Manoj & Others v. State of Madhya Pradesh (2022)**, the Supreme Court ruled that courts must **consider reports on the accused's background**, including:
 - Mental health evaluations.
 - Jail conduct reports.
 - Family and socio-economic background.
 - Possibility of rehabilitation.

Death Penalty Stats - 2024

- **Supreme Court - Total Cases Heard: 6**
 - **5 Death Sentences Commuted** to life imprisonment & **1 Acquittal**.
- **High Courts - Total Death Sentence Cases Decided: 87**
 - Confirmed Death Sentences: 9 (highest since 2019, when 26 were confirmed).
 - Commutations to Life Imprisonment: 79
 - Acquittals: 49
 - Cases Sent Back to Trial Court: 1
- **Trial Courts: Total Death Sentences Awarded in 2024: 139**
 - Murder Cases: 87 (62%)
 - Murder involving Sexual Offences: 35 (25%)
- **Top 3 States with Highest Death Sentences in 2024:** Uttar Pradesh: 34, Kerala: 20 & West Bengal: 18.
- **Total Death Row Prisoners by End of 2024: 564** (Highest since **2000**).

Source:

- [Indian Express - No death penalty](#)



Why La Nina did not bring down Temperature

Context

The Copernicus Climate Change Service (C3S) reported that **January 2025 was the hottest January on record.**

What is La Niña?

- La Niña is one of the three phases of the **El Niño-Southern Oscillation (ENSO)**, a climate phenomenon that influences global weather patterns.
- **Phases of ENSO:**
 - **Neutral Phase**
 - The **eastern Pacific Ocean** (near South America) is **cooler** than the **western Pacific** (near Indonesia).
 - Trade winds push **warm surface water towards Indonesia**, allowing cooler waters from below to rise.
 - **El Niño (Warm Phase)**
 - Trade winds **weaken**, reducing the movement of warm waters toward Indonesia.
 - As a result, **the eastern Pacific becomes warmer than usual.**
 - This generally leads to **higher global temperatures.**
 - **La Niña (Cool Phase)**
 - Trade winds **become stronger**, pushing **larger amounts of warm water westward.**
 - This causes **colder-than-normal waters** in the **eastern Pacific.**
 - Typically results in lower global temperatures.
- **La Niña's General Effects on Temperature**
 - **El Niño increases global temperatures**, while **La Niña cools them.**
 - However, **regional effects vary**, and some areas may experience both warming and cooling.

Why Did La Niña Not Cool Temperatures in January 2025?

- **Weak La Niña Development:** Not all La Niña phases **have the same intensity.**
 - The **ongoing La Niña cycle is weak**, which reduces its overall cooling effect.
- **Increased Greenhouse Gas (GHG) Emissions:**
 - Despite La Niña, the **rate of increase in atmospheric carbon remained high in 2024 and January 2025.**
 - Normally, a strong La Niña brings **more rain, leading to increased plant growth.**
 - More plant growth means **higher carbon absorption**, reducing heat-trapping gases.
 - However, this effect was **not strong enough this time.**
- **Decline in Aerosol Concentration:**
 - **Aerosols** (suspended particles in the atmosphere) have a cooling effect by:
 - **Scattering solar radiation back into space.**
 - **Influencing cloud formation**, which affects how much sunlight is absorbed or reflected.
 - Due to **clean air policies in some regions**, aerosol concentrations have **decreased.**
 - This **weakened the cooling effect**, allowing temperatures to remain high.

Source:

- [Indian Express - La Niña](#)

Bombay Blood Group

Context

Recently doctors at MIOT International, Chennai, successfully performed a cross-blood kidney transplant on a 30-year-old male with the rare Bombay blood group (HH blood group).

About Bombay Blood Group

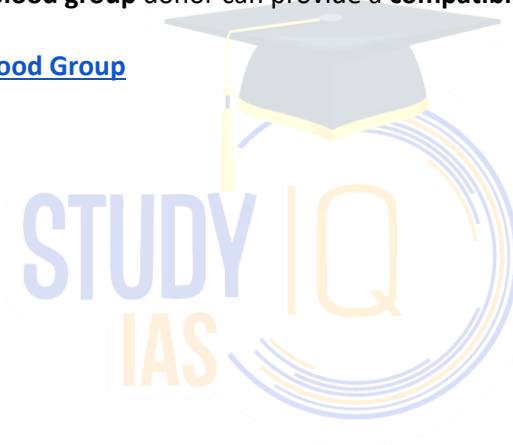
- It is a rare blood group, 1st discovered in **Mumbai in 1952 by Y.M. Bhende.**
- **Prevalence:**
 - 1 in 4 million globally (~0.0004%).
 - 1 in 1 million in Europe.
 - 1 in 10,000 in Mumbai.

Why Is the Bombay Blood Group Unique?

- Normal individuals have the **H antigen**, which forms the base for **A and B blood antigens.**
- **Bombay blood group individuals lack the H antigen** due to a **gene mutation**, preventing the formation of A or B antigens.
- As a result, they **cannot receive blood from any ABO blood group**, including **O group**, which contains the H antigen.
- Only another **Bombay blood group** donor can provide a **compatible** transfusion or organ.

Source:

- [The Hindu - Bombay Blood Group](#)



Bill introduced to resolve disputes involving aircraft, engines

Context

Recently the Minister for Civil Aviation has tabled the **Protection and Enforcement of Interests in Aircraft Objects Bill, 2025** in the **Rajya Sabha**.

Cape Town Convention (CTC) - 2001

- CTC is an international treaty that standardizes transactions involving:
 - Movable property such as aircraft, engines, and helicopters
 - Legal protection for creditors, financiers and lessors
 - Rules for asset recovery during airline defaults or insolvencies

India's Status in CTC

- Signed in 2008 but not ratified, so provisions are not legally binding.
- The Protection and Enforcement of Interests in Aircraft Objects Bill, 2025 aims to bridge this gap.

Key Provisions of the Bill

- **Legal Implementation of CTC in India:**
 - **Section 3:** The Convention and Protocol shall have the force of law in India.
 - The **Directorate General of Civil Aviation (DGCA)** will be the regulatory authority for implementation.
- **Responsibilities of Debtors (Airlines):**
 - Airlines must **maintain and submit records of dues related to aircraft and engines**.
 - Ensures **transparency in financial transactions** between airlines and lessors.
- **Rights of Creditors (Lessors & Financiers):**
 - Creditors can **exercise asset recovery rights** under CTC.
 - Before taking action, the **DGCA must be notified** about any airline **default**.
- **Handling of Aircraft During Airline Insolvency:**
 - The **resolution professional** can **keep aircraft assets for 60 days**, provided that **usage and maintenance charges** are paid.
 - This provision is **controversial** as the **aircraft leasing industry** prefers **immediate asset repossession**.
- **Exclusion from the Insolvency and Bankruptcy Code (IBC), 2016:**
 - As per **Ministry of Corporate Affairs notification (April 2024)**, aircraft **should not be part of insolvency proceedings**.

Source:

- [The Hindu - Bill introduced to resolve disputes involving aircraft](#)

Rupee Depreciation and Its Impact on Indian Corporates

Context

The Indian rupee has depreciated **by 5% since April 2024**, increasing the cost of external commercial borrowings (ECBs).

Why Foreign Loans Have Become Costlier?

- Earlier, when the **interest rate differential between India and the US was 5% (in 2020)**, foreign loans were attractive.
- Now, with the **US Federal Reserve hiking interest rates** and **the dollar appreciating**, this advantage has disappeared.
- Companies that did **not hedge** against rupee depreciation are facing increased repayment burdens.
- **E.g.** A company with \$500 million in ECBs would see an additional ₹2,500 crore burden if the rupee weakens by 5% (assuming ₹75 per USD as the base).

Impact on Different Sectors

- **Exporters (Beneficiaries of Rupee Depreciation):**
 - Export-oriented industries like **IT, pharmaceuticals, textiles and automobiles** benefit as their exports become cheaper and competitive globally.
- **Importers (Facing Higher Costs and Squeezed Margins):**
 - Import-dependent sectors like **oil & gas, electronics, and pharmaceuticals** face **rising input costs**.
 - Some firms are also **shifting to domestic financing** to avoid forex exposure.

Source:

- [Indian Express - Overseas loans](#)

Maharashtra move to stop funding eggs in MDM sparks concerns

Context

The Maharashtra government has decided to withdraw ₹50 crore in funding for eggs and millet-based sweet dishes in State-run schools under the **Mid Day Meal (MDM) Scheme**.

About Mid Day Meal Scheme (MDM)

- **MDM was launched in 1995** as the **National Programme of Nutritional Support to Primary Education (NP-NSPE)** & was Renamed as **Mid Day Meal (MDM) Scheme** in 2001.
- In **2021**, MDM was merged into the **Pradhan Mantri Poshan Shakti Nirman (PM-POSHAN) Scheme**.
- **Key Features of MDM:**
 - **Free cooked lunch** for schoolchildren in **Classes 1 to 8** in **government and government-aided schools**.
 - Jointly funded by the Central and State Governments:
 - 60% of costs borne by the Union Government
 - 40% covered by the State Governments
 - Meals must follow **nutrition guidelines** under the **National Food Security Act (2013)**.
- **Inclusion of Eggs in MDM Across India:**
 - **Eggs are a rich source of protein, vitamins, and minerals.**
 - **16 States** currently **serve eggs** as part of the Mid Day Meal Scheme.
 - States that **introduced eggs in MDM** have seen **improved child nutrition** and **higher attendance** in schools.

Pradhan Mantri Poshan Shakti Nirman (PM-POSHAN) Scheme

- **Launched in:** September 2021.
- This initiative replaces the previous Mid-day Meal Scheme and is set to run from 2021-22 to 2025-26 with a financial outlay of Rs 1.31 trillion.
- **Aim:** To provide one hot cooked meal to children in Government and Government-aided schools.
- **Objectives:**
 - **Addressing Malnutrition:** Aims to reduce stunting, under-nutrition, anaemia, and low birth weight among children.
 - **Improving Educational Attendance:** Encourages regular school attendance among disadvantaged children by providing nutritious meals.
 - **Holistic Approach:** Promotes a lifecycle approach focusing on the first 1,000 days of a child's life, emphasising adequate nutrition during pregnancy and early childhood.

Source:

- [The Hindu - MDM](#)

News in Shorts

Gastroparesis

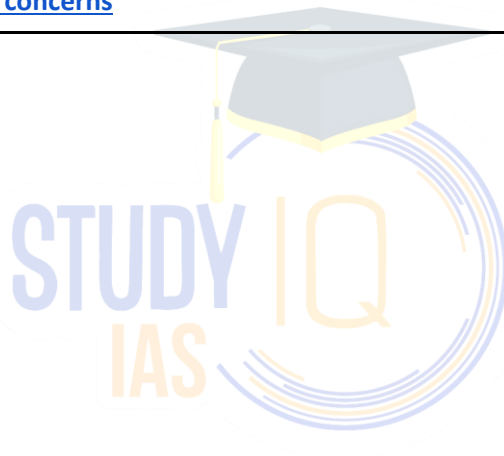
- Unsupervised use and overdose cases of weight loss drugs are leading to Gastroparesis.

About Gastroparesis

- Gastroparesis is a medical condition where the stomach muscles are **partially paralyzed**, leading to **delayed gastric emptying**.
- This means food remains in the stomach for longer than normal, causing **digestive problems** without any physical blockage.
- Gastroparesis occurs due to **damage to the vagus nerve**, which controls stomach muscles.
- **Causes:**
 - **Medical Conditions:** Diabetes (Most Common Cause), Neurological Disorders & Connective Tissue Disorders etc.
 - Medical Treatments: **Weight Loss Drugs (Semaglutide, Tirzepatide)**, Opioids & Antidepressants etc.

Source:

- [Indian Express - Gut concerns](#)



Editorial Summary

India as a bridge between Global North and South

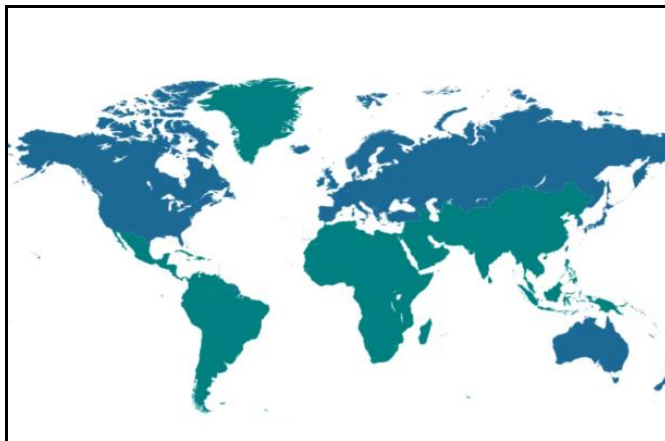
Context

India is increasingly taking a central role in shaping the Global South in the 21st century, particularly through initiatives such as the Voice of the Global South Summits and its G20 presidency.

About Global South

- It refers to developing and underdeveloped nations, primarily located in Africa, Asia, Latin America, and the Caribbean.
- These countries share common historical, economic, and geopolitical characteristics, often linked to colonial history, economic dependency, and developmental challenges.

Difference Between Global North and Global South



Aspect	Global North (Developed)	Global South (Developing/Underdeveloped)
Economy	Advanced, industrialized	Developing, agrarian, and industrializing
Living Standards	High HDI, low poverty	Low HDI, high poverty rates
Technology	Innovation hubs, high R&D spending	Low technology adoption, dependency on imports
Governance	Stable democracies and strong institutions	Political instability, weaker institutions
Global Power	Dominates world economy & institutions	Limited influence in global decision-making

India's Positioning As A Link Between Global North And Global South

India is positioning itself as the **leader and representative** of the Global South by:

- **Advocating for Global South concerns** at North-dominated forums (G20, UN, WTO).

- E.g., India **successfully pushed for the inclusion of the African Union as a permanent member of G20**, ensuring better representation of the Global South in global decision-making.
- **Maintaining economic ties with both blocs** through diversified trade and FTAs.
 - India signed a **Comprehensive Economic Partnership Agreement (CEPA) with UAE (2022)**, a key Global South economy, while simultaneously negotiating an **FTA with the European Union**, ensuring balanced trade relations with both blocs.
- **Sharing technology and development expertise** with both developed and developing nations.
 - E.g., India exported **UPI (Unified Payments Interface) technology to France (Global North) and Sri Lanka & Mauritius (Global South)**, demonstrating its role as a tech provider for both.
- **Balancing strategic alliances (Quad, BRICS, NAM) without alienating any side.**
 - E.g., While being part of the **Quad (aligned with US, Japan, Australia)**, India maintained **strong ties with Russia (BRICS partner)** by continuing oil imports while advocating for peaceful dialogue, showcasing its balanced diplomacy.

Challenges For India

- **Diverse Interests:** The Global South is a diverse region with varying economic, political, and social interests, making it difficult to align into a unified stance
- **China's Dominance:** India faces stiff competition from **China's Belt and Road Initiative (BRI)** in Africa and Asia. Many developing nations have deeper economic ties with China.
- **Diplomatic Balancing Act:** Balancing strategic partnerships with powers such as the USA and Russia while representing the Global South can be diplomatically challenging.
- **Lack of Dedicated Institutions for Global Development:** Unlike China's **AIIB (Asian Infrastructure Investment Bank)** or Western-led **World Bank**, India lacks a global development financing institution.
- **Short-term vs. Long-term Engagement:** India's initiatives like **Indian Technical and Economic Cooperation (ITEC) focus on short-term training**, but long-term partnerships for institutional capacity-building are lacking.

Steps India Must Take

- **Equitable Development Cooperation:** India needs to reinforce its call for an alternate paradigm of development cooperation that is not solely top-down.
 - India should be open to learning from other Global South countries to address its domestic challenges.
- **Human Resource Capacity Building:** India needs to focus on building human resources and capacity, especially to tackle future sustainability challenges.
- **Focus on Key Areas:** India should concentrate on digital infrastructure, climate and energy solutions, as well as water and food security.
- **Establishing Robust Systems:** India should establish norms, standards, and systems to work with partner countries and create its own robust domestic systems for international cooperation.
- **Promoting Inclusive Global Governance:** India should facilitate changes in established international institutions and build domestic capacity.

Sources:

- [The Hindu: India as a bridge between Global North and South](#)
- [India Briefing: Tracking Countries That Accept India's UPI Digital Payment System](#)

India, France and AI

Context

French President Emmanuel Macron has invited Prime Minister Narendra Modi to co-chair the Artificial Intelligence (AI) Action Summit in Paris.

Aims of the AI Summit

- **Built on Previous AI Summits:** Following the UK (Bletchley Park) and South Korea (Seoul), the Paris Summit aims to further AI governance and collaboration.
- **Ensure Safe and Responsible AI:** Reinforcing principles of AI that are human-centric, trustworthy, and inclusive.
- **Focus on Five Main Themes:**
 - **Public Interest AI:** Using AI for societal benefits.
 - **Future of Work :** Addressing AI's impact on jobs.
 - **Innovation and Culture:** Encouraging AI-driven innovation.
 - **Trust in AI:** Enhancing transparency and accountability.
 - **Global AI Governance:** Coordinating efforts through UN, OECD, GPAI, G7, and G20.
- **Promote AI for Global South:** Ensuring AI benefits are accessible to developing nations.
- **Launch Concrete Initiatives:** Strengthening AI regulations, ethics, and inclusivity.

India's Focus at the AI Summit

- **IndiaAI Mission:** ₹10,371 crore initiative promoting “Making AI in India, Making AI for India.”
- **GPAI Leadership:** As lead chair of GPAI, India aims to make it a global AI governance hub.
- **Bridging the AI Divide:** Ensuring AI accessibility for all nations, particularly the Global South.
- **Global South Priorities:** Advocating for developing nations in AI policymaking.
- **Inclusive AI Governance:** Developing international AI standards with a focus on ethics, transparency, and accessibility.

Reasons Behind Inviting India as Co-Chair in the AI Summit

- **Recognition of India's Growing AI Leadership:** India is emerging as a major player in AI and digital technology, with initiatives like the **IndiaAI Mission and National AI Strategy**.
 - As a **founding member and 2024 lead chair of the Global Partnership on AI (GPAI)**, India has been actively shaping global AI governance.
- **India's Strategic Partnership with France:** India and France share a strong strategic, technological, and diplomatic partnership across defence, climate, space, and emerging technologies.
 - They have co-launched global initiatives like the International Solar Alliance (ISA) and the Coalition for Disaster Resilient Infrastructure (CDRI).
- **Balancing Global AI Power Dynamics:** The global AI landscape is dominated by the US and China, creating a need for a neutral, democratic, and inclusive AI governance model.
 - India, with its democratic values and digital inclusivity approach, offers an alternative AI development model that resonates with both the Global South and Global North.
- **India's Focus on AI for the Global South:** India advocates for democratizing AI and bridging the AI divide between developed and developing nations.

India-France Ties

Strategic & Defence Cooperation

- **Defence Partnership:** Annual **Defence Dialogue** (Defence Minister level) and **High Committee on Defence Cooperation** (Secretary level) to review collaboration.
- **Key Defence Deals & Projects:**
 - **Rafale Jets:** India has already procured 36 Rafale fighter jets from France, with ongoing discussions for **26 Rafale-M fighter jets** for the Indian Navy.
 - **P-75 Scorpene Project:** India is procuring **three additional Scorpene-class submarines** for the Navy.
 - **Joint Development of Fighter Jet Engines:** Collaboration on developing next-generation engines for fighter planes.
 - **DRDO Office in Paris:** Established in 2023 to enhance technology cooperation.

Technology & Innovation Cooperation

- **AI & Digital Technology:** France supports India's **IndiaAI Mission** and digital transformation initiatives.
- **India-France Innovation Year 2026:** To promote joint research and innovation in emerging technologies.
- **Cybersecurity Collaboration:** Strengthening cooperation in data protection and AI governance.

Economic & Trade Relations

- **India-France CEOs' Forum:** Enhancing business ties in key sectors like energy, manufacturing, and technology.
- **Supply Chain Resilience:** Strengthening Indo-Pacific trade connectivity and reducing dependence on China.
- **Key Areas of Collaboration:**
 - **Renewable Energy** (solar & nuclear).
 - **Critical Minerals** (for batteries & electronics).
 - **Pharmaceuticals & Healthcare** (joint R&D).
 - **Advanced Manufacturing & Startups** (innovation ecosystem).

Space & Nuclear Energy Cooperation

- **Space Collaboration:** ISRO and CNES (French Space Agency) work on space exploration and satellite technology.
- **Nuclear Energy:**
 - **Civil Nuclear Agreement:** Collaboration on peaceful nuclear technology for India's energy security.
 - **International Thermonuclear Experimental Reactor (ITER):** India is actively participating in the world's largest fusion energy project in France.

People-to-People & Diplomatic Engagement

- **New Indian Consulate in Marseille:** Strengthening diplomatic presence and services for the Indian diaspora.
- **Higher Education & Research:** Expanding student exchange programs and university collaborations.
- **Marseille as a Communication Hub:**
 - Marseille is a key global node for **undersea internet cables**, linking Europe with Asia and Africa.
 - India and France are exploring **digital infrastructure cooperation** in this domain.

Indo-Pacific & Global Cooperation

- **India-France Triangular Development Cooperation:** A new initiative to implement **climate & SDG-focused projects** in third countries in the **Indo-Pacific region**.
- **Climate Action & Sustainability:**
 - **International Solar Alliance (ISA):** Launched in 2015 by India and France to promote solar energy globally.

- **Coalition for Disaster Resilient Infrastructure (CDRI):** Joint efforts in climate-resilient infrastructure.
- **Maritime Security:** Joint naval exercises and strategic cooperation in the Indo-Pacific region.

Source: [Indian Express: India, France and AI](#)

