<u>ForumIAS</u>



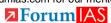
Mains Marathon

4th Week April, 2025

HISTORY
ECONOMICS
POLITY
SCIENCE AND TECHNOLOGY
GEOGRAPHY AND ENVIRONMENT

INDEX

context. Analyze the key challenges that generative AI poses to India's existing copyright framework, with specific reference to issues of authorship, ownership, and fair use. Discuss how these challenges could affect creative industries and technological innovation in India, and suggest suitable legal and policy interventions.
"The World Trade Organization (WTO), conceived as a cornerstone of the multilateral trading system, is facing unprecedented challenges to its relevance and effectiveness." Critically examine the factors that have contributed to the WTO's current predicament. Discuss the reforms necessary to restore its centrality in promoting global trade and resolving trade disputes, with special emphasis on the concerns of developing countries
Critically analyze the relationship between cross-border infiltration and terrorism in the context of India's security challenges. Discuss the effectiveness of existing measures to counter infiltration, and suggest additional strategies to address this persistent threat to national security
Critically examine the potential of events like WAVES 2025 to catalyze the growth of India's audiovisual entertainment sector. Discuss the key challenges and opportunities for Indian creators and entrepreneurs in this rapidly evolving landscape, and evaluate the role of government initiatives in fostering their success
Critically examine the enduring relevance of the principles of the Bandung Conference in the context of the contemporary challenges and opportunities faced by the Global South. Discuss how these principles can inform the Global South's approach to fostering a more equitable and multipolar world order
Critically examine India's unsustainable agricultural system and suggest the way forward for achieving a revolution of clean energy and ecological restoration
Critically analyze the evolving challenges to globalization and their impact on India's economic growth. Evaluate the effectiveness of India's strategies in building resilience and leveraging new opportunities in this changing global landscape
Critically analyze the role and significance of the office of the Deputy Speaker in the Lok Sabha. Discuss the constitutional provisions and conventions governing their election, powers, and responsibilities. Evaluate the reasons for the current tussle over the election of the Deputy Speaker, and suggest measures to ensure the smooth and effective functioning of this institution in India's parliamentary democracy. (500 words)
India has been a victim of proxy wars and terrorism for several decades. Analyze the key lessons learned by India in countering these threats, and discuss how these lessons have shaped its evolving counter-terrorism strategies
"With a new Prime Minister in Canada, there is optimism for a potential reset in Indo-Canadian relations, offering benefits to both nations." Critically examine the factors that have recently strained these relations and discuss the potential avenues and challenges in revitalizing this partnership 18



The advent of generative AI has brought forth a "copyright conundrum," particularly in the Indian context. Analyze the key challenges that generative AI poses to India's existing copyright framework, with specific reference to issues of authorship, ownership, and fair use. Discuss how these challenges could affect creative industries and technological innovation in India, and suggest suitable legal and policy interventions.

Introduction

Generative AI (GenAI), capable of producing text, images, music, and other creative outputs, has raised fundamental questions about intellectual property rights. In India, the existing copyright framework under the **Copyright Act**, 1957, crafted in a pre-AI era, struggles to address the emerging complexities of authorship, ownership, and fair use in AI-generated works. This "copyright conundrum" poses significant implications for India's creative industries and innovation landscape.

Challenges to India's Copyright Framework

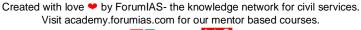
- **1. Authorship Dilemma:** Under Section 2(d) of the **Copyright Act, 1957**, "author" refers to a human creator. However, AI models like ChatGPT or Midjourney autonomously generate content, raising the question—can **non-human entities be authors**? Indian law, unlike jurisdictions like the UK (where the author of computergenerated works is the person who made arrangements), has **no explicit provision** for AI-generated works, creating legal uncertainty.
- **2. Ownership Ambiguity:** Even if the AI user is considered the "author," it is unclear whether they own the copyright, especially when the content is generated based on **training data they neither curated nor own**. Platforms hosting GenAI tools (e.g., OpenAI, Adobe Firefly) may **claim rights over outputs**, leading to **conflict between users**, **developers**, **and content platforms**.
- **3. Fair Use and Training Data:** Generative AI models are trained on vast datasets scraped from the internet, including **copyrighted materials**, often without consent. India's "fair dealing" clause (Section 52) allows limited uses (criticism, review, research), but it does not explicitly cover data scraping for AI training. This raises potential violation of copyright, especially when outputs mimic the **style or substance** of original creators, as seen in global lawsuits (e.g., Getty Images v. Stability AI).

Impacts on Creative and Innovation Sectors

- **1. Creative Industries:** Artists, writers, musicians face the **threat of devaluation** of their work as AI can generate imitative or derivative works rapidly. There is a **loss of attribution, credit, and income**, particularly for **creators** whose work is used in training data without permission.
- **2. Innovation Ecosystem:** Startups leveraging GenAI tools face **legal uncertainty** over the use and monetization of AI-generated content. The fear of **infringing copyright** could stifle research, **hamper AI entrepreneurship**, and deter foreign investment in India's digital innovation landscape.

Way Forward: Legal and Policy Interventions

1. Amend the Copyright Act, 1957: Define **AI-generated works** and clarify authorship/ownership. Introduce provisions similar to **Section 9(3)** of the UK Act where the author is the person who made arrangements for generation.





- 2. Establish Licensing Frameworks for Training Data: Develop compulsory or voluntary licensing **models** for training datasets, ensuring creator remuneration and transparency.
- 3. Develop Fair Use Guidelines for AI: Expand the scope of fair dealing to include data mining and model training under reasonable limits.
- 4. Promote Copyright-Respecting AI Tools: Encourage development of GenAI platforms trained on licensed or open-access data (e.g., Adobe Firefly model).
- 5. Institutional Reforms: Empower bodies like Copyright Office and DPIIT to issue guidelines, model **contracts**, and resolve disputes in AI copyright cases.

Conclusion

India stands at the cusp of an AI-driven creative revolution. However, without timely legal reform, generative All could undermine both artistic integrity and technological progress. A balanced copyright regime that protects creators while fostering AI innovation is essential to ensure India's leadership in the global digital economy.

The phrase "Judicial Despotism" is increasingly invoked in contemporary debates concerning the Indian judiciary. Critically examine the arguments for and against this assertion, evaluating recent judicial pronouncements and actions. Discuss the potential consequences of such a trend for India's democratic fabric and governance mechanisms.

Introduction

The term "Judicial Despotism" refers to a scenario where the judiciary assumes excessive powers, often stepping into domains reserved for the legislature or executive, potentially disrupting the constitutional balance of powers. While India's judiciary has historically played a crucial role in protecting constitutional rights, its recent actions have raised concerns of **overreach and unilateralism**.

Arguments Supporting Judicial Despotism

- 1. Encroachment on Policy Domains: The Supreme Court's intervention in the management of COVID-19, including oxygen allocation and vaccine pricing, illustrated a judicial micromanagement of executive **functions**. The **ban on firecrackers**, regulation of liquor shops near highways, and environmental clearances bypassing policy inputs show regulatory encroachment.
- 2. Opaque Collegium System: Despite criticism from the Second ARC and Law Commission (230th Report), the Collegium system remains non-transparent, with no publicly stated criteria for appointments or rejections.
- 3. Suo Moto Actions Without Accountability: In 2020, the SC took suo moto cognizance of the migrant workers' plight, but its initial inaction and delayed response drew criticism for selective urgency.
- 4. Delays in Key Constitutional Matters: Cases like abrogation of Article 370, electoral bonds, and CAA challenges remain unlisted or pending for years, raising questions on judicial priorities.





Arguments Against the Notion of Despotism

- **1.** Judicial Intervention Due to Institutional Vacuums: In Vishaka v. State of Rajasthan (1997), the Court framed guidelines to protect women against sexual harassment in the absence of legislation. Similar proactive steps were seen in Right to Food, Right to Education, and Right to Privacy (2017).
- 2. Protection of Individual Liberties:
 - Navtej Singh Johar (2018) decriminalized homosexuality.
 - Joseph Shine (2019) struck down the adultery law—both safeguarding constitutional morality against societal majoritarianism.
- **3. Environmental and Social Justice**: Through cases like **MC Mehta v. Union of India**, the Court has safeguarded environmental rights and held industries and governments accountable.

Implications for India's Democracy and Governance

- **1. Erosion of Separation of Powers**: Judicial encroachments may lead to **executive inertia** and **legislative passivity**, weakening **institutional checks and balances**.
- **2. Democratic Deficit**: Judicial overreach bypasses **democratic deliberation**, especially when courts issue **directions akin to legislation or governance**.
- **4. Public Trust Concerns**: Selective interventions and **delayed constitutional reviews** may damage the **credibility and impartiality** of the judiciary.

Conclusion

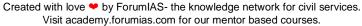
While an assertive judiciary is essential for upholding constitutionalism and protecting citizen rights, unchecked judicial activism may morph into judicial despotism, risking the foundational principles of democratic governance. The need of the hour is judicial accountability, institutional balance, and transparency, especially in the context of India@2047 and the aspiration of becoming a mature constitutional democracy.

"The World Trade Organization (WTO), conceived as a cornerstone of the multilateral trading system, is facing unprecedented challenges to its relevance and effectiveness." Critically examine the factors that have contributed to the WTO's current predicament. Discuss the reforms necessary to restore its centrality in promoting global trade and resolving trade disputes, with special emphasis on the concerns of developing countries.

Introduction

The World Trade Organization (WTO), established in 1995, was envisioned as a robust institutional framework to promote free, fair, and rules-based international trade. With 164 members representing over 98% of global trade, it became the backbone of the **multilateral trading system**. However, in recent years, it has faced a crisis of credibility and effectiveness, leading to concerns over its relevance.

Factors Behind WTO's Current Predicament





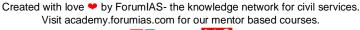
- **1. Paralysis of the Dispute Settlement Mechanism (DSM):** The **Appellate Body**, a key pillar of WTO's enforcement mechanism, has been non-functional since December 2019 due to the United States blocking appointments. This has created a vacuum in legal redressal, forcing members to explore alternatives like the **Multi-Party Interim Appeal Arbitration Arrangement (MPIA).**
- **2. Rise of Protectionism and Unilateralism:** Increasing trade nationalism, especially under the Trump administration, saw unilateral tariff impositions on steel, aluminum, and Chinese imports, undermining WTO's authority. WTO warned in April 2025 that such tariffs could **reduce global trade growth to 0.2%**, far below the projected 2.7%.
- **3. Erosion of the Most-Favoured Nation (MFN) Principle:** Proliferation of **Free Trade Agreements (FTAs)** and **Regional Trade Agreements (RTAs)**, such as RCEP and USMCA, has led to a fragmented trade regime. These preferential pacts dilute the WTO's non-discriminatory trade principles.
- **4. Agricultural Subsidy Disputes:** Developed countries challenge support measures of nations like India, accusing them of exceeding WTO limits. E.g., the U.S. dispute against India's MSP support for rice and wheat. Developing countries argue that historical subsidies by developed nations are overlooked, revealing **systemic bias**.
- **5. Inadequate Representation of New Trade Realities:** WTO rules have not kept pace with emerging sectors like **e-commerce**, **digital trade**, and **climate-linked trade policies**, which are vital for 21st-century economies. China's non-transparent practices, such as **Anti-Suit Injunctions** in IP disputes, also expose gaps in WTO's enforcement and governance.

Reforms to Restore WTO's Centrality

- **1. Revive and Reform DSM:** Unblock the Appellate Body and reform its functioning to address concerns of judicial overreach while ensuring impartial and timely dispute resolution.
- **2.** Balance Special and Differential Treatment (S&DT): Ensure policy space for developing countries under S&DT provisions while discouraging misuse by advanced economies posing as developing ones.
- **3. Update Trade Rules for Contemporary Challenges:** Introduce new frameworks for **digital trade, services, green subsidies**, and **climate measures** that reflect current global economic dynamics.
- **4. Enhance Transparency and Compliance:** Improve notification obligations and compliance monitoring, especially from major economies like China, to ensure rule-based predictability.
- **5. Promote Inclusive Negotiation Mechanisms:** Move away from **consensus-only decision-making**, which stalls progress, and allow plurilateral agreements that can eventually be multilateralized.

Conclusion

The WTO's foundational principles—non-discrimination, transparency, and rule-based trade—remain relevant, especially for smaller and developing nations that rely on multilateralism to protect their interests. While the current challenges are daunting, with targeted reforms and inclusive engagement, the WTO can be revitalized to reclaim its role as the cornerstone of global trade governance.





Critically analyze the relationship between cross-border infiltration and terrorism in the context of India's security challenges. Discuss the effectiveness of existing measures to counter infiltration, and suggest additional strategies to address this persistent threat to national security.

Introduction

Cross-border infiltration remains a **critical security challenge** for India, particularly along **its western** (Pakistan) and eastern (Bangladesh, Myanmar) borders. Infiltration is intrinsically linked to terrorism, as evidenced by Pakistan-sponsored militancy in Jammu & Kashmir (J&K) and Northeast insurgent groups using Myanmar/Bangladesh as safe havens. According to the South Asia Terrorism Portal (SATP), over 70% of terror incidents in India between 2015-2023 were linked to cross-border infiltration.

Infiltration-Terrorism Nexus: Key Issues

- 1. Pakistan-Based Infiltration & Terrorism: Proxy war strategy used by Pakistan's Inter-Services Intelligence (ISI) supports groups like Lashkar-e-Taiba (LeT) and Jaish-e-Mohammed (JeM) to infiltrate militants via LoC/International Border (IB). Example: 2019 Pulwama attack (JeM) killed 40 CRPF personnel; attacker infiltrated via LoC. Menaces of hidden tunnel Networks as BSF has detected 150+ tunnels along India-Pak border since 2010 (MHA Report 2023).
- **2. Northeast Insurgency**: Groups like **NSCN-IM** and **ULFA** exploit **porous India-Myanmar borders**. **Example**: **2021 ambush in Manipur** by NSCN-K militants who crossed from Myanmar.
- 3. Bangladesh Routes: Fake currency, arms smuggling via West Bengal/Assam borders.
- **4. Radicalization & Local Recruitment**: Infiltrators radicalize local youth, as seen in **Kashmir Valley** (e.g., **Hizbul Mujahideen's hybrid militants**).

Effectiveness of Existing Counter-Infiltration Measures

- 1. Border Security Infrastructure: Fencing & surveillance of 553 km of LoC fencing completed; BOLD-QIT (Bangladesh border laser walls). Gap such as riverine stretches in J&K and Northeast remain vulnerable.
- 2. Intelligence & Coordination: Establishment of Multi-Agency Centre (MAC) which Shares real-time intelligence among RAW, IB, state police. Limitation such as delayed inter-state coordination still persist (e.g., 2016 Pathankot attack).
- 3. Diplomatic & Legal Measures: Surgical Strikes (2016) and Balakot Airstrike (2019) have provided deterrence against Pakistan. Laws like Unlawful Activities (Prevention) Act (UAPA), bans infiltrator-linked groups. Challenge of slow judicial process delays convictions.
- **4. Schemes & Tech Initiatives: Comprehensive Integrated Border Management System (CIBMS)**: Uses drones, sensors. **Agniveer Scheme**: Deploys young soldiers in border areas.

Additional Strategies to Strengthen Counter-Infiltration



- 1. Enhanced Border Tech & Manpower: AI-Based Surveillance: Deploy Israeli-style smart fences with motion sensors. **Increase BSF/SSB Personnel**: Reduce **current 1:5 km manpower gap** (*MHA Data*).
- 2. Regional & Global Cooperation: Act East Policy: Strengthen India-Myanmar coordination against NSCN camps. Quad Counter-Terrorism Working Group: Leverage US-Australia intel on Pakistan.
- 3. Community-Led Vigilance: Village Defence Guards (VDGs): Expand J&K model to Northeast. Narcotics **Control**: Crack down on **drug-funded terror** (e.g., Punjab's **BKI network**).
- 4. Cyber & Financial Counter-Terrorism: Monitor Dark Web: Track crypto-funded terror (e.g., LeT's **Bitcoin use**). **Strengthen NIA**: Fast-track **UAPA cases** (e.g., **2023 Delhi ISIS module**)

Conclusion:

While India has made strides in **border fencing**, **surgical strikes**, and **intelligence**-sharing, persistent gaps in tech adoption, inter-agency synergy, and local engagement remain. A "Fortress India" strategy combining advanced surveillance, diplomatic pressure, and community policing—is essential to sever the infiltration-terrorism nexus.

Critically examine the potential of events like WAVES 2025 to catalyze the growth of India's audio-visual entertainment sector. Discuss the key challenges and opportunities for Indian creators and entrepreneurs in this rapidly evolving landscape, and evaluate the role of government initiatives in fostering their success.

Introduction

The Indian Media and Entertainment (M&E) sector, valued at ₹2,422 billion in 2023 (FICCI-EY Report 2024), is poised for remarkable growth, driven by technological innovation and a young, creative demographic. The World Audio-Visual Entertainment Summit (WAVES) 2025 in Mumbai, under the "Create in India, Create for the World" vision, is a landmark initiative aiming to catalyze India's emergence as a global creative powerhouse. In this context, events like WAVES act as catalysts, connecting creators, startups, investors, and policymakers to unlock the full potential of India's creative economy.

Potential of WAVES 2025

- 1. Global Visibility and Market Access: WAVES Bazaar has already registered 4,500 sellers and over 5,900 buyers, providing Indian creators unprecedented global exposure. WAVEX aims to bridge gaps between emerging startups and global investors, accelerating international collaborations.
- 2. Startup Ecosystem Development: Through funding, mentorship, and infrastructure support, WAVEX strengthens M&E startups in fields like animation, gaming, AI, and the metaverse.
- **3. Promotion of Innovation and Technology**: Startups like **Erucanavis Technologies** (Al-driven playable ads) and InscapeXR (immersive learning) reflect how WAVES fosters innovation across sectors beyond traditional entertainment.
- 4. Inclusivity and Diversity: Special focus on women-led startups (e.g., Lapwing Studios, Vygr Media) promotes gender inclusivity within India's creative ecosystem.





5. Soft Power Enhancement: Achievements like DNEG's Oscar-winning VFX for *Dune 2* bolster India's image as a **creative superpower**, aligning with the broader goal of cultural diplomacy.

Key Challenges for Indian Creators and Entrepreneurs

- **1. Funding and Access to Capital**: Despite government efforts, early-stage creative startups struggle to attract consistent venture funding compared to tech startups.
- **2. Skill Gaps and Talent Shortages**: The AVGC Taskforce 2022 highlighted the urgent need to train at least **20** lakh professionals by 2030 in animation, gaming, and immersive technologies.
- **3. Intellectual Property (IP) Protection Issues**: Weak IP enforcement hampers original content creation and monetization.
- **4. Global Competition and Branding**: Competing against established global hubs like Hollywood, Seoul (K-Wave), and Tokyo demands higher quality standards and brand building.
- **5. Technological Disruption**: Rapid shifts to Web 3.0, AI-generated content, and decentralized media ecosystems pose adaptability challenges for traditional players.

Opportunities in the Evolving Landscape

- **1. Emerging Sectors**: Growth in gaming (worth \$2.6 billion by 2025), AR/VR, metaverse content, and AI-driven storytelling opens new frontiers.
- **2. Cultural Export**: Rich Indian storytelling traditions provide unique soft power advantages.
- **3. Government Push**: Initiatives like Startup India, Make in India, and proposed PLI schemes for AVGC reinforce the creative sector.
- **4. Youth Demographic Advantage**: With 65% of the population under 35 years, India has a sustainable talent pipeline.

Role of Government Initiatives

- 1. WAVES 2025 and WAVEX: Structured platforms for funding, mentorship, global partnerships.
- 2. AVGC Taskforce Recommendations: National Centre of Excellence in Animation and Gaming being set up.
- **3. National IPR Policy (2016)**: Framework for IP awareness and protection, though implementation challenges remain.
- **4. Startup India and Digital India Missions**: Provide crucial infrastructure, tax benefits, and ease-of-doing-business improvements for creative startups.
- **5. International Cultural Exchanges**: Through events like G20 Cultural Working Group meets and UNESCO initiatives, India is positioning itself as a soft power leader.

Conclusion



Events like WAVES 2025 symbolize a transformational moment for India's M&E sector. They offer an opportunity to connect creators, innovate fearlessly, and project India's cultural strength globally. However, realizing this vision demands sustained focus on funding ecosystems, skill development, IP protection, and global branding.

Critically examine the enduring relevance of the principles of the Bandung Conference in the context of the contemporary challenges and opportunities faced by the Global South. Discuss how these principles can inform the Global South's approach to fostering a more equitable and multipolar world order.

Introduction

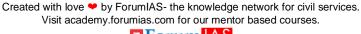
The Bandung Conference of 1955 marked a historic moment where 29 newly decolonized Asian and **African nations** convened to assert sovereignty, demand equality, and promote south-south cooperation. Seventy years on, the core principles of political independence, mutual respect for sovereignty, nonaggression, non-interference, and equality remain deeply relevant amidst today's polarized global environment and the evolving ambitions of the **Global South**.

Enduring Relevance of Bandung Principles

- 1. Political Independence and Sovereignty: Despite decolonization, political domination persists through neo-colonial structures like unequal trade regimes and conditional financial aid. The Bandung call for sovereignty informs the Global South's demand for autonomy in decision-making on issues like climate action and technology governance.
- 2. Non-Interference and Mutual Respect: In an era of proxy conflicts, regime changes, and sanctions, Bandung's emphasis on non-interference gains renewed urgency. Initiatives like BRICS, African Union's Agenda 2063, and India's Act East Policy echo the spirit of peaceful coexistence and mutual development.
- 3. Collective Self-Reliance through South-South Cooperation: South-South trade constitutes nearly 30% of global trade (UNCTAD 2022). Platforms like the New Development Bank and International Solar **Alliance** exemplify the Global South's quest for financial and technological independence.
- **4. Commitment to Multilateralism:** The **Bandung call** for a rules-based global order resonates today as global institutions like the UN face a "crisis of relevance" (PM Narendra Modi, 2024). Demand for UNSC **reforms**, initiated in 1992, remains unfulfilled even after 30 years, underlining persistent inequities.

Contemporary Challenges for the Global South

- 1. Fragmentation of the Multilateral Order: Growing polarization among major powers undermines collective global governance.
- **2. Economic Vulnerability**: COVID-19 pandemic and climate disasters disproportionately affected the Global South; 95% of climate refugees come from these regions (World Bank, 2023).
- 3. Technological Divide: Lack of access to critical technologies in AI, biotechnology, and energy transition widens inequality.





4. Internal Divergence: Diverse interests within the Global South — exemplified by tensions between emerging powers and LDCs — complicate united action.

Opportunities to Foster a Multipolar and Equitable Order

- 1. Forging New Alliances: Strengthen coalitions like BRICS+, IBSA, G77, and foster intra-South connectivity.
- **2. Championing Reform of Global Institutions**: Persistent advocacy for **UNSC expansion** and greater say in WTO, IMF decision-making structures.
- **3. Building Technological Sovereignty**: Collaborative investment in digital infrastructure, renewable energy, and green transitions (e.g., **Global Biofuels Alliance**, G20 India 2023).
- **4. Leadership in Climate Action**: Operationalizing mechanisms like the **Loss and Damage Fund** (COP27) with Global South leadership.
- **5. Promoting People-Centric Development**: Focus on reducing inequality and promoting inclusive growth models inspired by Bandung's humanistic principles.

Conclusion

The Bandung principles are **not relics of the past** but **living guideposts** for the Global South's contemporary struggles and aspirations. By internalizing **sovereignty, solidarity, non-aggression, and multilateral cooperation**, the Global South can lead the reshaping of a **fair, inclusive, and multipolar world order**. As the architects of Bandung envisioned, a stronger, united Global South must rise — for itself, and for the future of global humanity.

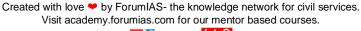
Critically examine India's unsustainable agricultural system and suggest the way forward for achieving a revolution of clean energy and ecological restoration.

Introduction

International Mother Earth Day, celebrated annually on April 22, serves as a stark reminder of the urgent need to restore the planet's health. As the **Environment Pollution Index (EPI) 2024** ranks India **176th out of 180 countries** and the **World Air Quality Report 2024** highlights that **74 of the 100 most polluted cities** are in India, it is evident that India's rapid economic growth has come at significant ecological costs. Particularly, India's **agricultural production system** has become increasingly **unsustainable**, necessitating immediate reforms to harmonize development with environmental conservation.

Unsustainability in India's Agricultural System

- 1. **Depletion of Soil Health**: Almost **two-thirds of Indian soils** have **Soil Organic Carbon (SOC) below 0.5%**, far lower than the optimum 1.5–2% (Rattan Lal, World Food Laureate). This depletes soil fertility, reduces productivity, and endangers long-term food security.
- 2. **Groundwater Over-extraction and Contamination**: In Punjab, Haryana, and Rajasthan, groundwater levels are falling by **more than 1.5 feet annually**. Overuse of chemical fertilisers and pesticides has led to water contamination, affecting human and ecological health.





- 3. **Loss of Biodiversity**: Monoculture practices like the **rice-wheat rotation** in the Green Revolution belt have eroded biodiversity, making agro-ecosystems fragile and vulnerable to pests and climate shocks.
- 4. Policy Distortions: Free electricity, subsidised urea, and open-ended procurement of paddy and wheat have incentivized resource-intensive farming, disregarding ecological costs.

Opportunities and Solutions for Sustainable Development

- 1. **Repurposing Subsidies**: Direct Benefit Transfers (DBTs) to farmers' accounts can replace input subsidies, allowing deregulation of fertiliser and power prices. This reduces wastage, encourages efficient resource use, and cuts environmental degradation.
- 2. Payment for Ecosystem Services (PES): Innovative schemes rewarding farmers for sustainable practices—such as promoting pulses and oilseeds that are nitrogen-fixing and water-efficient can restore soil and biodiversity.
- 3. **Promotion of Agrivoltaics**: Combining agriculture with solar energy production ("agrivoltaics") offers a third source of farm income. If **DISCOMs** purchase solar power from farmers at a 10-15% **premium over thermal power costs**, a revolution of clean energy on farms could be realized. This aligns with the Earth Day 2024 theme of increasing renewable energy by 300% by 2030.
- 4. Crop Diversification and Water-Smart Farming: Shifting away from water-intensive paddy to millets (under the International Year of Millets 2023) and legumes supports climate resilience and nutritional security.

Challenges Ahead

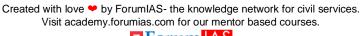
- 1. Behavioral Resistance: Farmers entrenched in traditional practices may resist change without sufficient education and incentives.
- 2. Institutional Inertia: Reforming procurement, subsidy, and irrigation policies faces political and administrative hurdles.
- 3. Technological Access: Small farmers need better access to solar technologies, sustainable inputs, and credit.
- 4. **Market Connectivity**: Without strong procurement systems for diversified crops and solar power, initiatives like PES and agrivoltaics may falter.

Way Forward

- Comprehensive Policy Reforms: Integrating environmental goals into agricultural policies, guided by reports like NITI Aayog's Doubling Farmers' Income, is essential.
- Public-Private Partnerships (PPP): Collaborations can bridge technological gaps and scale sustainable models.
- Localized Solutions: Watershed-based planning, community solar projects, and farmer cooperatives must be promoted.
- Awareness and Education Campaigns: Farmers must be sensitized about the long-term benefits of sustainable agriculture and clean energy adoption.

Conclusion

Gandhiji's words, "The earth is not an inheritance from our forefathers but a loan from our children," resonate deeply today. India's agricultural transition must prioritize ecological sustainability alongside productivity. By recalibrating policies, incentivizing green innovations like agrivoltaics, and mainstreaming ecosystem services,





India can ensure a prosperous, sustainable future for **India@2047**—restoring not just the health of our soils and waters, but also the soul of our civilization.

Critically analyze the evolving challenges to globalization and their impact on India's economic growth. Evaluate the effectiveness of India's strategies in building resilience and leveraging new opportunities in this changing global landscape.

Introduction

Globalization, once the uncontested driver of global prosperity, is undergoing a significant transformation. For India, which benefited immensely from integration into global markets post-1991 reforms, these shifts present both risks and opportunities. With global trade slowing, rising protectionism, and geopolitical realignments, India's path to sustained economic growth must now rely on greater internal resilience and strategic external engagement.

Evolving Challenges to Globalization

- 1. **Rise of Protectionism**: The US, traditionally a champion of free trade, has increased its average effective tariff rate to **28%**, the highest since **1901** (Yale Budget Lab). Trade wars, notably the **US-China conflict**, undermine the principles of comparative advantage and supply chain integration.
- Structural Slowdown in Global Trade: IMF projects global trade growth at just 1.7% (2025) and 2.5% (2026), a significant decline from the historical average of 5.8% (1995-2023). This deceleration is not event-specific (like COVID-19) but rooted in deeper structural shifts.
- 3. **Geopolitical and Economic Uncertainties**: Escalating regional tensions (e.g., post-Pahalgam developments) can negatively impact investment climates and global investor sentiment towards emerging economies like India.
- 4. **Impact on India's Economic Growth**: Slower global trade could lower India's GDP growth by at least **one percentage point**. Export sectors, including manufacturing and merchandise trade, face risks of reduced demand and tighter competition.

India's Strategic Response and Resilience Building

- 1. **Macroeconomic Stability**: Inflation remains low at **3.3**% (March 2025), forex reserves have surged to **\$686 billion**, and the rupee has stabilized. These indicators enhance India's ability to withstand external shocks.
- Service Export Diversification: India's dominance in software exports, business process
 outsourcing (BPO), and global capability centers (GCCs) continues to generate revenue and
 employment.
- 3. **Policy Reforms**: Emphasis on **ease of doing business** through regulatory simplification, single-window clearances, and decriminalization of minor offenses. Strengthening of programs like **Make in India 2.0**, **PLI schemes**, and **Startup India** to boost domestic manufacturing and innovation.
- 4. **Trade Diversification**: India is actively pursuing new **FTAs** with the UAE, Australia, and the European Union to reduce dependency on traditional partners.
- 5. **Digital and Green Economy Initiatives**: Leveraging digital public infrastructure (e.g., **UPI, ONDC**) and investing in renewable energy to tap into future growth sectors.

Critical Evaluation



- 1. While India has demonstrated commendable resilience, challenges remain.
- 2. Regulatory overhauls are uneven across states, and infrastructure bottlenecks persist. Moreover, while services exports are strong, manufacturing exports—critical for job creation—are yet to realize their full potential.
- Global uncertainty requires India not just to "de-risk" but to **deepen domestic reforms**, invest in skill 3. development, and enhance competitiveness across sectors.

Conclusion

The global landscape may be shifting away from hyper-globalization, but India's strategic focus on macroeconomic stability, regulatory reform, digital transformation, and trade diversification positions it well to adapt. However, to fully capitalize on emerging opportunities, India must accelerate structural reforms and embrace a growth model that balances internal resilience with strategic global engagement.

Analyze the significance of the Greenhouse Gases Emissions Intensity (GEI) Target Rules, 2025 in shaping India's climate roadmap. Evaluate the effectiveness of these rules in achieving India's emission intensity reduction targets, and discuss their potential impact on India's economic development and its international commitments under the Paris Agreement.

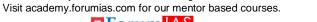
Introduction

In April 2024, the Ministry of Environment, Forest and Climate Change (MoEFCC) notified the draft Greenhouse Gases Emissions Intensity (GEI) Target Rules, 2025, marking a significant step in India's journey towards a low-carbon economy.

These rules are crucial to operationalize the Carbon Credit Trading Scheme (CCTS), 2023, and are aligned with India's Updated Nationally Determined Contributions (NDCs) under the Paris Agreement.

Significance in Shaping India's Climate Roadmap

- 1. Sector-Wide Binding Targets: Covers 282 high-emission industrial entities across sectors like aluminium, cement, chlor-alkali, pulp and paper. Introduces a compliance mechanism with specific GEI reduction targets for 2025-26 and 2026-27. First time: Sector-specific emissions intensity reductions are **legally binding**, moving beyond voluntary actions.
- 2. Market-Led Decarbonization: Facilitates a vibrant carbon credit trading market through measurable targets. Creates a financial incentive for industries to decarbonize or purchase credits. Inspired by global models like the EU Emissions Trading Scheme (EU ETS).
- 3. Alignment with Paris Agreement Goals: Aims to reduce emissions intensity of GDP by 45% by 2030 (compared to 2005 levels), as committed in India's **Updated NDC (2022)**. Supports the larger goal of **net-zero** emissions by 2070 announced at COP26.
- 4. Innovation and Competitiveness: Encourages adoption of clean technologies, energy-efficient processes, and **greener manufacturing**. Will drive **reallocation of capital** towards future-ready, sustainable companies.





Effectiveness in Achieving Emission Intensity Reduction Targets

Strengths:

- **1. Clear compliance mechanism** with penalties through **Central Pollution Control Board (CPCB)** ensures accountability.
- **2. Carbon market platform** offers cost-effective flexibility to industries.
- 3. Data-backed baseline (2023-24) improves target accuracy and monitoring.

Challenges:

- 1. Penalty-driven system may distort true carbon pricing, as pointed out by experts like Atanu Mukherjee.
- 2. Small and medium enterprises (SMEs) may find compliance financially burdensome.
- 3. Monitoring, Reporting, Verification (MRV) mechanisms must be robust to avoid greenwashing.

"Structured cash or credit incentives, rather than penalties, may better drive emission reductions," suggested industry experts.

Impact on India's Economic Development and International Commitments

Positive Impacts:

- 1. **Green jobs** creation through renewable energy and clean tech sectors.
- 2. **Attracting ESG investments** and long-term green capital.
- 3. Strengthens India's soft power by emerging as a climate leader among developing nations.

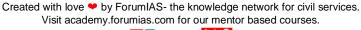
Risks:

- 1. Transition costs for traditional industries could temporarily affect competitiveness.
- 2. Risk of carbon leakage if industries shift production to countries with laxer norms.

Conclusion

The GEI Target Rules, 2025, represent a pragmatic and progressive shift towards balancing industrial growth with climate sustainability. While successful implementation will require market strengthening, capacity building, and adaptive policy mechanisms, the initiative significantly enhances India's credibility in meeting its Paris Agreement goals and building a resilient, low-carbon economy.

As rightly highlighted, "this is not just about meeting targets — it's about building future-ready companies and economies."





Critically analyze the role and significance of the office of the Deputy Speaker in the Lok Sabha. Discuss the constitutional provisions and conventions governing their election, powers, and responsibilities. Evaluate the reasons for the current tussle over the election of the Deputy Speaker, and suggest measures to ensure the smooth and effective functioning of this institution in India's parliamentary democracy. (500 words)

Introduction

The office of the Deputy Speaker of the Lok Sabha is a critical constitutional institution meant to ensure continuity, neutrality, and balance in parliamentary functioning. Although often overshadowed by the Speaker, the Deputy Speaker's role is "neither symbolic nor optional," but a "constitutional imperative" under **Article** 93 of the Constitution.

Constitutional Provisions and Conventions

- 1. **Article 93** mandates the Lok Sabha to choose both a Speaker and a Deputy Speaker "as soon as may be," emphasizing urgency, not discretion.
- 2. **Article 94** ensures that the Deputy Speaker holds office until resignation, removal, or ceasing to be a member.
- 3. **Article 95** empowers the Deputy Speaker to act as Speaker when the Speaker's office is vacant or during the Speaker's absence.
- 4. Conventions dictate that the Deputy Speaker's post traditionally goes to an Opposition party member, fostering bipartisan cooperation (e.g., G.G. Swell, Godey Murahari, Charanjit Singh Atwal).

Functions and Responsibilities

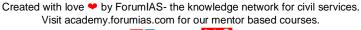
- 1. **Presiding Officer:** Chairs the House in the absence of the Speaker, ensuring procedural continuity.
- 2. **Committee Leadership:** Automatically chairs committees if nominated.
- Neutral Arbiter: Expected to act impartially once elected, upholding the dignity of the House.
- 4. **Crisis Management:** Becomes pivotal during emergencies such as sudden resignation or death of the Speaker (e.g., M.A. Ayyangar post-G.V. Mavalankar's death).

Significance Across Dimensions

- 1. Institutional Stability: Safeguards continuity in leadership and functioning of Parliament.
- 2. Democratic Credibility: Reflects commitment to inclusivity and non-partisan governance.
- 3. **Crisis Preparedness:** Ensures ready leadership during unexpected vacancies.
- 4. Symbol of Bipartisanship: Strengthens the tradition of cooperation and balance in governance.

Current Tussle and Issues

- 1. The post has remained vacant since **2019** (17th Lok Sabha) and continues into the **18th Lok Sabha**, marking an unprecedented constitutional anomaly.
- 2. The **INDIA bloc** demands the post, citing constitutional tradition, while the **NDA** government shows reluctance, claiming "no immediate requirement."
- 3. This standoff has led to accusations of "active sidelining of consensus politics" and undermining of democratic norms.





4. Increasing **polarization** and centralization of power in the ruling party have further eroded the traditional bipartisan character of this institution.

Challenges and Future Concerns

- 1. Constitutional Ambiguity: Lack of a definitive timeline ("as soon as may be") leads to executive
- 2. **Erosion of Parliamentary Conventions:** Risk of partisan appointments or delays compromising neutrality.
- 3. Crisis Vulnerability: Absence of a Deputy Speaker during emergencies could paralyze legislative functioning.

Way Forward

- **Statutory Timelines:** Introduce a deadline (e.g., 60 days post first sitting) for electing the Deputy Speaker.
- Codify Conventions: Institutionalize the practice of offering the post to the Opposition to strengthen bipartisan trust.
- **Judicial Oversight:** Courts could be empowered to ensure adherence to constitutional mandates if unreasonable delay occurs.
- Awareness and Accountability: Civil society and media should highlight constitutional violations to pressure compliance.

Conclusion

The Deputy Speaker's office is a pillar of parliamentary democracy, not an expendable accessory. Neglecting it compromises constitutional integrity and the spirit of inclusive governance. Parliament must reaffirm its commitment to rule-based functioning by filling this vital post promptly, respecting both constitutional provisions and democratic conventions.

India has been a victim of proxy wars and terrorism for several decades. Analyze the key lessons learned by India in countering these threats, and discuss how these lessons have shaped its evolving counter-terrorism strategies.

Introduction

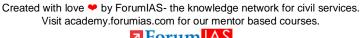
India has faced persistent threats from proxy wars and terrorism since its independence, particularly intensified in Jammu & Kashmir (J&K), Punjab, and the northeastern regions. State-sponsored terrorism, notably from Pakistan, coupled with rising global extremist networks, forced India to evolve from reactive security measures to a comprehensive, multidimensional counter-terrorism strategy.

This evolution is grounded in lessons drawn from bitter experiences, constitutional resilience, and innovative security practices.

Key Lessons Learned

1. Specialization over Generalization: India realized the need for specialized forces after initial security lapses. Creation of units like the Rashtriya Rifles (1990), Special Operations Groups (1993), and upgrading





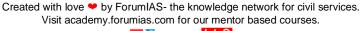
police forces through internal security training (e.g., CRPF) allowed intelligence-driven, precise operations, minimizing collateral damage.

- **2. Moderation, Not Overreaction:** Unlike the US experience in Vietnam, India recognized that excessive force erodes legitimacy. Operations like **All Out (2017)** and community-building exercises like **Operation Sadbhavana** prioritized selective targeting and winning hearts and minds, preserving public trust even during harsh security crackdowns.
- **3. Democracy as the Ultimate Counter-Weapon:** Frequent elections in conflict zones, such as the **J&K Panchayat Elections (2020)**, and sustained civil governance even under President's Rule showcased India's commitment to democratic processes, discrediting separatist narratives and promoting peaceful engagement.
- **4. Economic Development as a Strategic Tool:** Recognizing that alienation fuels insurgency, programs like **Back to Village** and investments in infrastructure (e.g., railway connectivity in Kashmir) strengthened economic inclusion, offering youth viable alternatives to radicalization.
- **5. Intelligence and Technology Integration:** Post-2008 Mumbai attacks exposed serious intelligence lapses, leading to the creation of the **National Investigation Agency (NIA)**, strengthening the **Multi Agency Centre (MAC)**, and investments in **drone surveillance** and **cyber counterterrorism cells** across state police units.
- **6. International Diplomacy and Pressure Tactics:** India adopted a proactive diplomatic strategy to globally isolate terror sponsors. Successful initiatives include **Pakistan's FATF Greylisting**, the **UNSC designation of Masood Azhar under 1267 Sanctions**, and using platforms like the **SCO-RATS** for counter-terror cooperation.
- **7. Legal and Institutional Reforms:** Legislative steps like the **UAPA Amendment Act (2019)** enabled designating individuals as terrorists, enhancing preventive mechanisms. Further, policy shifts like **"hot pursuit" doctrine** after the 2016 **surgical strikes** demonstrated India's resolve to respond assertively.

Shaping Evolving Strategies

- **1. Hybrid Warfare Readiness:** India's National Security Doctrine is now being updated to incorporate responses to **Hybrid Warfare** and **Cognitive Warfare**, learning from conflicts like Ukraine.
- **2. Counter-Financing Focus:** Efforts to plug terror financing have increased, aligning with **FATF standards** and strengthening internal monitoring through **PMLA** and NIA-led crackdowns on funding networks.
- **3. Grassroots Peace Building:** Operations such as **Operation Sadbhavana** are scaled up, along with a focus on **de-radicalization programs** inspired by successful local models like **Maharashtra's Police De-radicalization Project**.
- **4. Technology Modernization:** India is investing in **quantum encryption**, **artificial intelligence surveillance**, and **advanced UAVs** for seamless border management and urban counter-terror operations.
- **5. Global Collaboration:** India is actively leveraging multilateral platforms like **Quad**, **G20**, and **SCO** to set global counter-terrorism agendas and norms.

Conclusion





India's long battle against proxy wars and terrorism has cultivated a **measured**, **resilient**, **and multifaceted counter-terrorism strategy**. Moving forward, the lessons of specialization, moderation, democracy, economic inclusion, technological dominance, legal strengthening, and global diplomacy will be crucial for securing India's internal stability and achieving the vision of **India@2047** as a prosperous, peaceful, and globally respected nation.

"With a new Prime Minister in Canada, there is optimism for a potential reset in Indo-Canadian relations, offering benefits to both nations." Critically examine the factors that have recently strained these relations and discuss the potential avenues and challenges in revitalizing this partnership.

Introduction

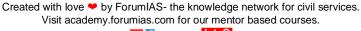
India and Canada share deep-rooted ties based on democratic values, vibrant diaspora connections, and robust economic engagements. However, relations have recently been strained due to political controversies. The election of Mark Carney as Canada's Prime Minister provides an opportunity to reset ties, though significant challenges remain.

Factors Straining Indo-Canadian Relations

- **1. Allegations over Khalistani Separatist Killing:** The diplomatic fallout began with former PM Justin Trudeau's public allegation in 2023 that India was involved in the killing of Khalistani separatist Hardeep Singh Nijjar. India rejected these claims, leading to a tit-for-tat expulsion of diplomats and suspension of visa services.
- **2. Influence of Extremist Elements:** Under Trudeau's leadership, foreign policy towards India was seen as influenced by Sikh extremist factions within Canada, particularly through the political support of Jagmeet Singh's NDP, which openly advocated pro-Khalistan views.
- **3. Diplomatic and Public Hostility:** Vandalism of Hindu temples and gurdwaras with pro-Khalistan graffiti further aggravated tensions, fostering a perception of Canada as a haven for anti-India activities.
- **4. Impact on Trade and Education:** Although bilateral trade remained stable at CAD 13.49 billion in 2023, the diplomatic rift stalled the Comprehensive Economic Partnership Agreement (CEPA). Additionally, Indian student enrollment in Canada dropped by over 40% in 2024, reflecting the strained environment.

Potential Avenues for Revitalization

- 1. Political Reset with Mark Carney: Carney's moderate and pragmatic approach signals a willingness to move beyond the baggage of the Trudeau era. His emphasis on rebuilding ties based on "mutual respect" marks a positive shift.
- **2. Economic Opportunities:** Facing a challenging trade environment with the US under President Trump, Canada seeks to diversify its economic partnerships. India's large market and growing economy offer natural synergy for sectors like pharmaceuticals, agri-tech, and clean energy.





- **3. Strategic Cooperation:** Canada's Indo-Pacific Strategy identifies India as a critical partner in countering China's influence. Enhanced defense, technology, and maritime cooperation can form a new pillar of engagement.
- **4. Strengthening People-to-People Ties:** With nearly two million persons of Indian origin in Canada and significant educational exchanges, nurturing these societal bonds can create a strong foundation for bilateral ties.

Challenges in Revitalization

- **1. Managing Domestic Extremist Influence:** While Jagmeet Singh's electoral defeat and exit from NDP leadership reduce extremist leverage, residual pro-Khalistan sentiments in sections of Canadian society could still pose a hurdle.
- **2. Domestic Constraints in Canada:** Carney's narrow electoral victory means he must balance domestic political pressures while recalibrating foreign policy.
- **3. Global Uncertainties:** Trump's aggressive trade policies and geopolitical unpredictability could indirectly affect Canada's external engagements, including with India.
- **4. Sustained Diplomatic Efforts Needed:** Rebuilding trust will require sustained efforts beyond symbolic gestures, including addressing India's legitimate security concerns.

Conclusion

Mark Carney's election as Prime Minister offers a historic opportunity to reframe Indo-Canadian relations around shared values and mutual interests. However, success will depend on addressing lingering grievances, resisting extremist pressures, and fostering a strategic, economic, and societal partnership. A pragmatic and forward-looking approach from both sides is essential to unlock the full potential of this important relationship.

