

**EDUCATION GS PAPER I**
**Why India's education system fails marginalised communities?**

Recent reports highlight systemic failures in India's education system, disproportionately affecting **marginalised communities (SC/ST/OBC)**.

- The Supreme Court and activists demand reforms to bridge **caste and class-based disparities** in access to quality education.

**How Indian Education Fails Marginalised Communities?**

- **Structural Inequality:** Government schools in rural/urban slums lack infrastructure, trained teachers, and digital resources.

E.g. Only **12%** of rural schools have functional libraries (ASER 2023).

- **Bias in "Merit":** Competitive exams (JEE/NEET) favour English-medium, urban, and coaching-trained students.

E.g. **90%** of IIT toppers come from elite coaching hubs like Kota.

- **Social Discrimination:** Caste-based exclusion persists in campuses (hostel segregation, microaggressions).

E.g. **Rohith Vemula's suicide** exposed institutional casteism in Hyderabad University.

- **Low Representation:** SC/ST students form **<10%** of PhD enrolments in top institutions (IITs/IISc).

E.g. Zero ST faculty in 7 IITs (2018 govt. data).

- **Economic Barriers:** Poor families prioritize livelihoods over education; dropout rates spike post-Class 10.

E.g. 32% of Dalit girls drop out by secondary school (NSSO).

**Initiative taken by Government:**

- **SHREYAS Scheme:** Supports OBC, EBC, and DNT students with scholarships and coaching for higher education.
- **National Fellowship for SC/ST/OBC Students:** Gives financial aid for MPhil and PhD studies in Indian universities.
- **Mid-Day Meal Scheme:** Provides free meals in schools to boost enrollment and attendance.

It especially benefits children from SC, ST, and poor families.

- **Ambedkar Interest Subsidy Scheme:** Offers interest subsidy on education loans for overseas studies to OBC/EBC students.
- **Beti Bachao Beti Padhao (BBBP):** Promotes education and empowerment of the girl child, especially in backward areas.

**Consequences of Systemic Exclusion:**

- **Perpetuates Poverty:** Limited access to quality education traps marginalised communities in poverty; over 80% of manual scavengers are Dalits.
- **Skewed Representation:** Upper-caste dominance persists in elite institutions like IITs, where 90% of faculty belong to privileged groups.
- **Social Unrest:** Student-led protests, such as against JNU fee hikes, expose deep cracks in equitable access to higher education.
- **Economic Loss:** Education inequality leads to a \$56 billion annual GDP loss, as per World Bank estimates.
- **Mental Health Crisis:** Marginalised students suffer from higher dropout rates due to institutional discrimination and isolation.

**Reforms Needed for an Inclusive System:**

- **Redefine Merit:** Evaluate exam performance in the context of socio-economic disadvantages to ensure fairer outcomes.
- **Expand Reservations:** Implement affirmative action in faculty hiring and extend it to private sector educational institutions.
- **Boost Infrastructure:** Modernise rural schools with smart classrooms, internet access, and well-trained educators.
- **Anti-Discrimination Cells:** Establish effective grievance redressal units with strict penalties for caste-based bias and harassment.
- **Vocational Integration:** Incorporate skill-based learning and career-linked training as outlined in NEP 2020 to improve employability.

### Conclusion:

India's education system must transform into an equalizer, not an exclusionary tool. Policy reforms, social accountability, and inclusive pedagogy are urgent. As Ambedkar asserted, *"Education is the milk of the tigress—drink it, or perish without it."*

## GS PAPER2-INTERNATIONAL RELATIONS-BILATERAL, REGIONAL AND GLOBAL GROUPINGS AND AGREEMENTS INVOLVING INDIA AND/OR AFFECTING INDIA'S INTERESTS

### India should lower tariffs and boost global trade ties

U.S. President Donald Trump imposed reciprocal tariffs on various countries, including India, causing uncertainty in global trade. In response, India reduced some tariffs and initiated talks for a bilateral trade deal. This article explores whether India should further reduce tariffs and how it should respond to U.S. trade moves.

#### Impact of Tariffs on Economic Growth

1. **Lower Tariffs Promote Efficiency:** Economists agree that **lower tariffs reduce consumer prices and push domestic industries to become more efficient.** For example, if a car costs Rs.5 lakh but a 20% tariff raises its price to Rs.6 lakh, the consumer pays more, while the inefficient local producer gains.
2. **Uniform Tariff Rates Are Better:** It is better to have a **single or very few tariff rates.** Multiple and uneven rates distort decision-making in businesses and reduce overall efficiency in the economy.
3. **Example from India:** High tariffs in India have protected inefficient producers. Economists argue that if an Indian product, like a car, cannot compete without tariff protection, it should not be produced under such a system.
4. **Effect on Global Trade:** Tariffs **disrupt global supply chains.** They lower efficiency and slow down overall economic activity by increasing costs across countries.

#### Purpose and Effectiveness of Trump's Tariffs

1. **Reason for the Tariffs:** The **main goal was to pressure countries** to lower their trade barriers. Trump's administration believed this was necessary to fix trade imbalances and boost U.S. manufacturing.
2. **Effectiveness in Question:** The strategy led some countries to negotiate. But it also created uncertainty in global trade. Economists noted that this approach was likely chosen because **the WTO system has become slow and ineffective.**
3. **Long-Term Impact Is Unclear:** While the tariffs forced some changes, they also **damaged global trade relations.** The overall strategy lacked clear goals and may not bring lasting results.

### Non-Tariff Barriers – A Bigger Concern

1. **Difficult to Identify:** Non-tariff barriers (NTBs) like safety rules and quality standards are hard to measure. For example, **Europe's strict sanitary standards** on grapes can indirectly act as trade barriers.
2. **Used Widely:** Almost every country, including India, uses NTBs. These **affect nearly all sectors** and are often not visible like tariffs.
3. **Harmful to Trade:** NTBs **raise compliance costs**, delay entry into markets, and are **more restrictive than tariffs** in some cases.
4. **Complex Regulations:** They often involve **lengthy procedures** and **vary between countries**, making trade difficult, especially for small exporters.

### Best Path for India's Trade Policy

1. **Reduce Tariffs Gradually:** India should lower tariffs step by step. Example: **Yashwant Sinha's reforms in the 1990s** reduced peak tariffs annually and helped attract investment.
2. **Address Non-Tariff Barriers:** India should simplify standards and remove hidden restrictions that protect local firms unfairly.
3. **Negotiate Free Trade Agreements:** India should sign FTAs with key economies like the **U.S., EU, UK, and Japan**. This would open markets and improve global competitiveness.
4. **Ensure Policy Predictability:** Announcing tariff cuts in advance will help industries **plan better and invest with confidence**.

### Conclusion:

India must **shift from protection to efficiency**. Gradual liberalisation, tackling non-tariff barriers, and stronger trade partnerships can make India more competitive and better integrated into the global economy.

## PRELIM FACTS

### 1. Vibrant Villages Programme-II

The Union Cabinet has approved Vibrant Villages Programme-II (VVP-II) with a financial outlay of Rs.6,839 crore for the period 2024-25 to 2028-29, covering border villages beyond Northern borders to ensure security, development, and national integration.

#### About Vibrant Villages Programme-II (VVP-II):

- **What is VVP-II?**
  - VVP-II is a **Central Sector Scheme** (100% Centre-funded) focused on **comprehensive development** of strategic villages **near international land borders** (ILBs), other than Northern borders already covered under VVP-I.
- **About Vibrant Villages Programme**
  - **VVP-I launched:** February 2023
  - **Ministry in Charge:** Ministry of Home Affairs (MHA)
  - **Vision Aligned with:** *Viksit Bharat@2047* and *'Safe, Secure & Vibrant Borders'*
- **Objectives of VVP-II:**
  - Enhance quality of life in border villages.
  - Create livelihood opportunities for border residents.
  - Ensure national security by involving locals as *eyes and ears* of border forces.
  - Curb trans-border crimes and promote border integrity.
  - Strengthen connectivity and governance in strategic regions
- **Key Features of VVP-II:**
  - **Coverage:** 17 States/UTs including Arunachal Pradesh, Assam, Punjab, Gujarat, J&K, Ladakh, etc.

- **Village Action Plans (VAPs):** Developed with community participation.
- **Basic Services Saturation:** Focus on 4 key areas – all-weather roads (via PMGSY-IV), telecom, TV access, and electrification.
- **Livelihood Opportunities:** Boost rural income through cooperatives, SHGs, tourism, and handicraft promotion.
- **Infrastructure Development:** Includes SMART classrooms, village facilities, and cluster-based projects.
- **Governance Support:** A Cabinet Secretary-led committee to ease rules for effective implementation.
- **Cultural and National Integration:** Organizing fairs, festivals, and official visits to promote national unity and cultural vibrancy.

## 2. Meenakari Craft

During his visit to Bangkok for the 6th BIMSTEC Summit, Prime Minister of India gifted exquisite Indian handicrafts to the Thai Prime Minister and her spouse, including artifacts showcasing the traditional Meenakari craft.

### **About Meenakari Craft:**

- **What is Meenakari?**
  - Meenakari is the art of **enamelling metal or ceramic surfaces** with vivid colors and detailed patterns.
  - It involves **fusing coloured powdered glass** onto surfaces at high temperatures to create intricate and durable designs.
- **Historical Origins**
  - Originated in **Safavid Iran**, perfected by **Mughals in India**.
  - The word *Meenakari* is derived from *Meena* (heaven) and *Kari* (to do), meaning **“placing paradise onto an object.”**
  - Introduced in India during the **Mughal era**, further refined in the **20th century** with the help of Iranian artisans.
- **Indian Regions Practicing Meenakari:**
  - **Jaipur (Rajasthan):** Renowned hub; known for **red, green, and white Mughal-style motifs**.
  - **Gujarat & Lucknow:** Each region reflects its **distinct local style**.
- **Core Characteristics:**
  - Uses **precious metals** like gold and silver, sometimes copper or brass.
  - Features **geometric, floral, and animal patterns**.
  - Applied to jewelry, vases, figurines, crockery, decor, and even furniture.
  - Finished products often exhibit a **glassy, polished look** with vibrant contrast.
  - Combines **traditional motifs with modern utility**.

## 3. Binturong

Rare Binturong spotted by the **Wildlife Trust of India's Garo Green Spine project** team in the **Narang Wari Village Reserve Forest (VRF)** in Meghalaya's **Garo Hills**.

### **About Binturong**

- They are the **largest member** of the **civet family (Viverridae)**. They are also known as the **bearcat**.
- They are **primarily nocturnal** animals.
- **Physical feature:** They are one of two carnivorous species with a **prehensile tail which helps** in climbing. (The other is the **kinkajou**).



- **Distribution and habitat:** They prefer **tropical rainforests** and **dense forest cover**. They are found in wide range from **northeast India to Southeast Asia**. In India, they have been recorded in **Assam's Manas National Park** and also in **Kaziranga National Park** in **2024**.
- **Ecological significance:** They play a vital role in **forest regeneration**, aiding in **seed dispersal** and supporting the **survival** of many other species.
- **Conservation:**
  - **IUCN status – Vulnerable**
  - **CITES – Appendix III**
  - **Schedule I** of the Wild Life (Protection) Act, 1972
- **World Binturong Day** is held every **second Saturday of May**.

### ANSWER WRITING

**Q. India's air pollution crisis reflects deeper structural issues beyond just environmental degradation. Examine the socio-economic and governance-related challenges in effectively addressing air pollution at the national level.**

Air pollution in India is a severe challenge, with 84 of the world's 100 most polluted cities located in the country. The Air Quality Life Index (AQLI) reports that PM 2.5 pollution reduces life expectancy by over 5.3 years in India. Beyond environmental damage, this crisis underscores urban planning failures, industrial mismanagement, and socio-economic disparities, demanding systemic reforms.

#### **Deeper Structural Issues Beyond Environmental Degradation**

- **Governance Capacity Deficit:** Air pollution is often seen as a technical issue rather than a multi-sectoral governance challenge, limiting effective policy making and enforcement.  
**For example:** Many **municipal bodies lack funds and autonomy** to implement pollution control measures, leading to poor enforcement of construction dust regulations in **Delhi NCR**.
- **Economic Growth vs. Sustainability:** Rapid industrialization and urbanization drive pollution, but stringent air quality laws may hinder economic growth, leading to policy dilution.
- **Urban-Rural Divide in Pollution Control:** Most air quality monitoring and mitigation efforts focus on urban centers, while rural areas remain neglected despite their contributions from biomass burning.  
**For example:** In Punjab and Haryana, **stubble burning persists** due to a lack of viable alternative disposal incentives for farmers, worsening winter smog.
- **Institutional Misalignment:** Multiple agencies, municipal bodies, state pollution boards, and central ministries, work in silos, causing inefficiencies in policy execution.  
**For example:** The **National Clean Air Programme (NCAP)** struggles with **fund utilization**, with only **60%** of allocated funds used **between 2019-2023** due to bureaucratic hurdles.
- **Technological Over-Reliance:** India increasingly depends on AI dashboards and smog towers, but basic pollution sources like old vehicles and biomass burning remain unaddressed.  
**For example:** The Delhi government installed **smog towers**, but studies found **they had negligible impact** on air quality compared to **vehicle restrictions and waste management**.

#### **Socio-economic Challenges in Addressing Air Pollution**

- **High Cost of Pollution Control:** Transitioning to cleaner energy and transport demands significant investment, which is unaffordable for many small businesses and industries.

**For example:** Upgrading to **Bharat Stage VI (BS-VI) fuel** cost oil companies over Rs.35,000 crore, making it harder for small transporters to switch to compliant vehicles.

- **Informal Economy's Role:** A large part of India's economy, brick kilns, roadside vendors, and small-scale manufacturing, operates outside environmental regulations, worsening pollution.

**For example: Tanneries in Kanpur** discharge pollutants into the **Ganga** and burn **leather scraps**, but strict enforcement is difficult due to their **economic significance**.

- **Lack of Public Awareness and Behavior Change:** Many individuals still rely on solid fuels for cooking and open burning of waste due to lack of awareness or alternatives.

**For example:** Despite **Pradhan Mantri Ujjwala Yojana (PMUY)** distributing over 9.6 crore LPG connections, many families continue using firewood due to refill costs

- **Health Burden and Economic Productivity:** Pollution-related respiratory diseases increase healthcare costs, reduce workforce efficiency, and impact GDP.

**For example: India loses nearly 1.36% of its GDP annually** due to pollution-related health costs, affecting productivity and economic output.

### **Governance-related Challenges in Addressing Air Pollution**

- **Weak Policy Enforcement:** Existing pollution laws are rarely implemented strictly, leading to recurring violations in industrial zones and vehicular emissions.

**For example:** Delhi's **Graded Response Action Plan (GRAP)** is often reactive rather than preventive, failing to prevent severe smog episodes.

- **Fragmented Institutional Responsibilities:** Multiple agencies, MoEFCC, CPCB, State Pollution Control Boards, and Urban Local Bodies, work with **unclear jurisdiction**, leading to poor execution.

**For example:** The **Delhi-Gurugram-Faridabad pollution crisis** requires cross-state coordination, but states often blame each other instead of implementing joint solutions

- **Underutilization of Clean Air Funds:** Air quality programs like NCAP suffer from low fund utilization due to bureaucratic hurdles and weak local administration capacity.

- **Political and Industrial Resistance:** Strict air pollution policies face pushback from industrial lobbies and political groups prioritizing economic growth over environmental concerns.

**For example:** Despite dire air quality, coal-fired thermal plants in Singrauli continue operations due to political and industrial pressure.

### **Way Ahead**

- **Strengthen Local Governance and Funding:** Municipal bodies should get direct control over clean air funds and decision-making power for local air quality measures.

**For example:** Cities like **Ahmedabad** have set up **Air Information & Response (AIR) Plans**, improving localized response and fund allocation.

- **Adopt Targeted Emission-Reduction Metrics:** Shift from monitoring air pollution levels to tracking actual emission reductions from industries, transport, and household sectors.

**For example: California's cap-and-trade system** reduced industrial pollution by linking emission limits to economic incentives for compliance.

- **Integrate Rural and Urban Strategies:** Air pollution mitigation must extend beyond metros, including rural biomass alternatives and agricultural waste management.

**For example: Brazil's community-led waste systems** helped reduce open burning, showing the importance of grassroots participation.

- **Encourage Public-Private Partnerships:** Governments must collaborate with industries, NGOs, and research institutions to develop cost-effective clean technologies.

**For example: FAME II policy** supports **electric vehicles** by providing subsidies, increasing adoption among public transport operators.

- **Enhance Behavioral Change:** Comprehensive air pollution literacy campaigns can encourage eco-friendly habits, like carpooling and waste segregation.

**For example: The Swachh Bharat Mission** succeeded by **changing public attitudes** towards cleanliness through **nationwide engagement efforts**.

Addressing India's air pollution crisis requires robust policy enforcement, technological innovation, and community-driven solutions. Strengthening governance frameworks, promoting sustainable urbanization, and accelerating clean energy adoption can create lasting change. A coordinated effort between the government, industries, and citizens is essential to ensure cleaner air and a healthier future for all.

**MCQ**

- Consider the following statements with respect to the Sangama Dynasty:
  - Deva Raya I was the founder of the dynasty.
  - The Sangama dynasty was the first ruling dynasty of Vijayanagara empire.
  - Mysuru was the capital of the Sangama dynasty.

How many of the statements given above are correct?

  - Only one**
  - Only two
  - All three
  - None
- Consider the following statements regarding the Axiom Space missions:
  - The mission aims to monitor Earth's climate from space.
  - Axiom Space missions are launched aboard SpaceX Crew Dragon.

Which of the statement(s) given above is/are correct?

  - 1 only
  - 2 only**
  - Both 1 and 2
  - Neither 1 nor 2
- Consider the following statements:
  - Naini lake is located in Himachal Pradesh.
  - Naini lake is a natural, kidney-shaped lake.
  - Naini lake is a type of oxbow lake.

How many of the statements given above are correct?

  - Only one**
  - Only two
  - All three
  - None
- Which of the following tribal communities are primarily associated with celebrating Sarhul festival?
  - Bhil and Santhal
  - Munda and Ho**
  - Garo and Khasi
  - Gond and Baiga
- What is a key feature of Recirculating Aquaculture Systems (RAS)?
  - Requires extensive use of antibiotics to ensure water quality
  - Depends on natural water bodies for filtration
  - Allows free-flowing water in open ponds
  - Utilizes mechanical and biological filtration to recycle water**
- Consider the following statements regarding biofuels derived from rice straw:
  - Biofuels reduce reliance on fossil fuels by using renewable resources.
  - Bioethanol and biogas are examples of fuels derived from rice straw.
  - The process of biofuel production completely eliminates greenhouse gas emissions.

How many of the above statements is/are correct?

  - Only one
  - Only two**
  - All three
  - None

- (d) None
7. Consider the following statements about how PM Vidyalaxmi differs from other schemes:
1. It offers interest subvention only for NAAC-accredited institutions.
  2. The scheme simplifies loan applications through the Vidyalaxmi portal.
  3. Eligible institutions are selected based on NBA rankings.
- Which of the above statements is/are correct?
- (a) 2 only**
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3
8. Consider the following statements regarding Article 293 of the Indian Constitution:
1. The Centre can impose conditions on loans granted to states.
  2. A State can borrow externally with the prior consent of the Union.
  3. States can borrow on the security of their Consolidated Fund.
- How many of the above statements is/are correct?
- a) Only one
- b) Only two**
- c) All three
- d) None
9. Consider the following statements regarding Coal India Limited (CIL):
1. It is the world's largest single coal producer.
  2. It produces around 80% of India's overall coal production.
  3. It was conferred the 'Green World Environment Award 2024' in the CSR category.
- How many of the above statements is/are correct?
- a) Only one
- b) Only two
- c) All three**
- d) None
10. Which one of the following declarations led the formation of Arctic Council?
- a. Rovaniemi Declaration
  - b. Stockholm Declaration
  - c. Helsinki Declaration
  - d. Ottawa Declaration**