



7 PM COMPILATION

3rd and 4th week January, 2026

Features of 7 PM compilation

- ❖ Comprehensive coverage of a given current topic
- ❖ Provide you all the information you need to frame a good answer
- ❖ Critical analysis, comparative analysis, legal/constitutional provisions, current issues and challenges and best practices around the world
- ❖ Written in lucid language and point format
- ❖ Wide use of charts, diagrams and info graphics
- ❖ Best-in class coverage, critically acclaimed by aspirants
- ❖ Out of the box thinking for value edition
- ❖ Best cost-benefit ratio according to successful aspirants

INDEX

Road Safety in India- Reasons and Impact- Explained Pointwise	2
India-EU Relationship – Significance & Challenges – Explained Pointwise	7
Child Trafficking in India – Explained Pointwise	11
India-UAE Relations – Explained Pointwise.....	16
Pax Silica – Importance & Challenges for India – Explained Pointwise.....	20
CBDC – Significance & Challenges – Explained Pointwise	24
Himalayan Ecocide – Reasons & Consequences – Explained Pointwise.....	28
Delimitation Exercise in India- Explained Pointwise	31
Geriatric Care – Explained Pointwise	33
India-EU FTA – Explained Pointwise	38
HIGHLIGHTS: ECONOMIC SURVEY 2025-26	42
Public Health Sector- Significance and Challenges- Explained Pointwise	51
Menstrual Health – Explained Pointwise.....	57

Road Safety in India- Reasons and Impact- Explained Pointwise

The Ministry of Road Transport & Highway (MoRTH) & the NGO SaveLIFE Foundation has released a joint report shedding light on the gaps in road safety in India. India ranks first in the world in road accidents fatalities. Its numbers are also far ahead of the second & third ranked countries (China accounts for just 36% & USA for just 25% of India's total road deaths).

Key Findings of the Report:

- The report highlights India's slow progress toward meeting international goals of reducing road accident fatalities.
- The report also emphasises on the organic connection between road construction, mobility, and the need for a differentiated approach to mitigate road accidents.
- Key observations of the Report:

Road engineering	59% of all road accidents fatalities do not involve any traffic violation, indicating that road engineering is one of the biggest contributory factors for deaths. According to the report, damaged crash barriers, absent or faded pavement marking, unprotected hard structures, damaged or wrong signage, and inadequate illuminations are among the top 20 most common engineering issues on the road.
Crash-prone Sites	<p>Most accidents are concentrated in known locations, including specific road stretches & crash-prone spots (58% of the total deaths were recorded on the crash-prone locations). The report suggested that if the govt schemes & budgets are directed toward such locations, a significant number of deaths could be prevented.</p> <div> <p>● RECURRING PROBLEMS ON THE ROAD</p> <p>42% of all fatalities were recorded on critical corridors.</p> <p>58% fatalities were recorded on critical crash-prone sites.</p> <p>72% of the fatalities were recorded in rear-end, head-on and pedestrian crashes.</p> <p>● Around 8 in 10 victims were hospitalised by means other than the government's 108 ambulance service, or not hospitalised at all.</p> <p>Source: Zero Fatality Districts: A Collaborative Framework to Reduce Road Crash Deaths, for 2023 and 2024</p> </div> <p>Source: Indian Express</p>

States with road accidents	UP (20 districts) > Tamil Nadu (19) > Maharashtra (11) > Rajasthan (8)
-----------------------------------	--

Findings of India Status Report on Road Safety (2024):

Road accidents remain a major public health challenge	Road traffic injuries remain a major public health challenge in India. There has been little progress in reducing fatalities, despite advancements in other sectors. Road traffic injuries were the 13th leading cause of death in India and the 12th leading cause of health loss (measured in Disability-Adjusted Life Years, or DALYs) in 2021.
Indian states unlikely to meet the UN target	Most Indian States are unlikely to meet the United Nations Decade of Action for Road Safety goal to halve traffic deaths by 2030.
Most common victims of road accidents	Pedestrians, cyclists, and motorised two-wheeler riders are the most common victims of road accidents. Trucks are responsible for the highest proportion of impacting vehicles.
Lack of Basic Traffic Measures	India lacks basic traffic safety measures like traffic-calming, markings, and signage. Helmet usage in rural areas is particularly low, and trauma care facilities are inadequate.
Increase in India's road accident fatalities	India has large gap in road safety as compared with other developed countries like Sweden and other Scandinavian nations, which have excelled in road safety governance. An Indian was 40% more likely to die in a road accident than someone in these countries, in 1990. By 2021, this figure had soared to 600%, indicating a sharp rise in road fatalities.

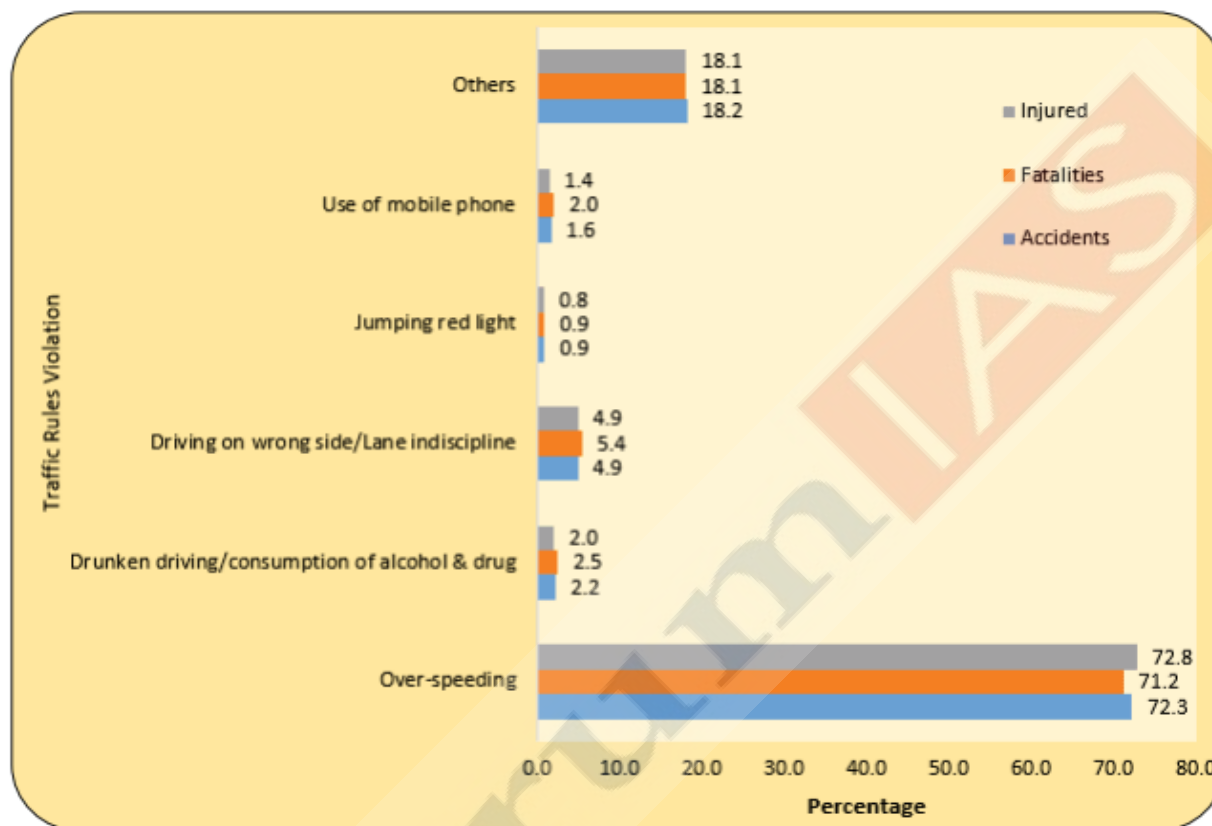
What are the reasons for high number of Road accidents in India?

India's high rate of road accidents is a complex issue resulting from the interplay of multiple systemic, behavioral, and infrastructural factors.

1. Human & Behavioral Factors:

- Cl. Reckless Driving:** Speeding, aggressive overtaking, jumping signals, and lane indiscipline. Over speeding is the major cause and it accounts for 71.2% of the persons killed due to road accidents in India. Driving on the wrong side is the second reason accounting for 5.4% deaths.

Chart 3.1: Road Accidents by type of Traffic Rules Violation during 2022



- b. **Driving Under Influence:** Widespread drink-driving, especially among commercial and private vehicle drivers.
- c. **Driver Fatigue:** Long, uninterrupted shifts for commercial drivers (trucks, buses) leading to loss of concentration.
- d. **Lack of Training & Licensing Lapses:** Corruption in driving tests, poor training standards, and fake licenses.
- e. **Non-use of Safety Gear:** Helmets (especially among two-wheeler riders) and seat belts are often ignored.

2. Vehicular & Mechanical Factors:

- a. **Poor Vehicle Maintenance:** Old vehicles, faulty brakes, worn-out tires, and inadequate lighting.
- b. **Overloading:** Especially in trucks, buses, and three-wheelers, affecting stability and braking.
- c. **Poor Safety Standards:** Many vehicles lack basic safety features like airbags, ABS, or crashworthy structures. Crash tests carried out by the Global New Car Assessment Programme (NCAP) in 2014 revealed that some of India's top-selling car models failed the UN's frontal impact crash test.

3. Road Infrastructure & Design Deficiencies:

- a. **Poor Road Design & Engineering:** Faulty road engineering leading to blackspots, poor designing of junctions, inadequate signage, haphazard planning of state highways and city roads are also some major factors causing road accidents.
 - b. **Mixed Traffic Flow:** High-speed vehicles share space with slow-moving vehicles, cyclists, and even animals on the same road.
 - c. **Uncontrolled Access Points:** Too many entry/exit points on highways without proper merging lanes.
4. **Systemic & Governance Issues:**
- a. **Weak Enforcement of Laws:** Corruption, understaffed traffic police, and inconsistent penalty systems reduce deterrence.
 - b. **Lack of Emergency Medical Care:** Delayed ambulance services and inadequate trauma care increase fatalities.
 - c. **Lack of Golden Hour Treatment:** Lack of rapid trauma care on highways leads to high fatalities.
 - d. **Delayed Implementation of Safety Laws:** The **Motor Vehicles (Amendment) Act, 2019** introduced stricter penalties, but enforcement is uneven across states.

What are the impacts of road accidents in India?

1. **Loss of Life and Disability:** India has one of the world's highest numbers of road accident fatalities (over **1.5 lakh deaths annually**). Survivors often suffer severe, life-altering disabilities (spinal cord injuries, amputations, brain damage).
2. **Economic Burden:** The World Bank estimates road accidents cost India **3-5% of its GDP annually**. This includes:
 - o **Medical Costs:** Immediate emergency care, long-term treatment, and rehabilitation.
 - o **Loss of Productivity:** Victims' lost income and reduced earning capacity, plus caregivers' lost work time.
 - o **Administrative & Legal Costs:** Police, insurance, and court expenses.
3. **Gender-Specific Impact-** According to World Bank's report "Traffic Crash Injuries and Disabilities: The Burden on Indian Society 2021", about 50% of Indian women were severely affected by the decline in their household income after a crash.
4. **Increased Poverty:** Medical expenses and loss of income push millions of households below the poverty line each year.
5. **Overburdened Courts:** Millions of accident-related cases clog the judicial system, leading to long delays in compensation.

What measures have been taken in India to reduce road accidents?

1. **Formulation of National Road Safety Policy (NRSP), 2010:** The policy was formulated based on the recommendations of **S. Sundar Committee**. Some important highlights are:

- a. Establishment of Road Safety Information Database.
- b. Periodical review of road design standards and Vehicle safety standards.

c. Creation of a National Road Safety Council to supervise matters related to road safety.

2. Establishment of District Road Safety Committees (DRSC): Established under the Section 215 of the Motor Vehicle Act of 1988. These have been entrusted with creation of a district road safety plan and an emergency medical plan.

3. Passage of Motor Vehicles (Amendment) Act 2019: GoI has tried to enhance the road safety measures through this act.

- a. Creating a National Road Safety Board to advise the government on traffic management.
- b. Higher fines for traffic rule violations.
- c. Recalling defective vehicles which are dangerous for the environment and people.
- d. Creation of a 'Solatium Fund' for victims of hit-and-run accidents.
- e. Punishment to the owner for violations committed by Juvenile.
- f. Automated testing for driver's licence and fitness certificate (FC).
- g. Protection of Good Samaritans from civil and criminal liability.

Read More- Motor Vehicles (Amendment) Act 2019

4. Other technical initiatives: Further more, other technical initiatives have been taken which are mentioned below:

- a. Front and side crash tests for new car models.
- b. New cars are required to have airbags fitted as standard.
- c. Installation of Roadside Safety Crash barriers and speed warning boards.
- d. Rectification of identified Black spots.

Some global initiatives for Road Safety:

Brasilia Declaration on Road Safety (2015): India is a signatory to the Declaration.

The countries plan to achieve Sustainable Development Goal 3.6 i.e., to halve the number of global deaths and injuries from road traffic accidents by 2030.

Decade of Action for Road Safety (2021-2030): The UN General Assembly adopted resolution "Improving Global Road Safety" with the ambitious target of preventing at least 50% of road traffic deaths and injuries by 2030.

What measures must further be adopted to reduce road accidents in India?

1. Indian Vehicles safety features must conform to global best standards: The European Union's General Safety Regulation which prescribes features like advanced emergency braking technology and intelligent speed assistance must be adopted in India.

2. Implementation of the important recommendations of the KS Radhakrishnan panel on Road Safety: The important ones are:

- (a) Compulsory audit on road safety by the state governments.

(b) Creating awareness among people on road safety rules, insurance policies.

(c) Providing enough compensation to victims on time.

3. Separation of lanes for different types of Vehicles: There should be separation of lanes for 2-Wheelers and heavy vehicles.

4. Strict implementation of the existing rules: The enhanced fines for traffic rules violations will also help in reduction of road accidents in India.

5. Database for fatal crashes: A national database for fatal crashes should be established. The central and the state governments must undertake efforts towards it.

Conclusion: The approach to road safety has to be proactive, rather than reactive. The public has as much role to play as the Government. A concerted and focused effort from both the government and the citizens can help bring down road accidents and help save precious lives.

Read More: [The Indian Express](#)

UPSC Syllabus: Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

India-EU Relationship – Significance & Challenges – Explained Pointwise

The India-EU trade agreement, which is expected to be signed on January 26, is considered to be most comprehensive & mutually advantageous agreement for both the sides. The India-EU trade agreement has been decades in the making. Both have finally come close to signing the agreement after talks were re-launched in 2022. Negotiations were started in 2007, but abandoned in 2013. In this context, let us try to understand the significance & challenges of India-EU relationship & what can be the way forward to take this relationship to its desired potential.



What is the SIGNIFICANCE of India-EU relations?

1. **Major Trading Partner:** The EU is India's **2nd largest trading partner** (after the US), with annual bilateral trade in goods nearing \$137 billion in 2024-25. The EU is also India's number one export destination. India is the EU's **10th largest trading partner**.
2. **Foreign Direct Investment (FDI):** The EU is a major investor in India, accounting for 17% of total FDI inflow, contributing to significant employment opportunities. Between 2015 & 2022, the FDI from EU to India grew by 70%, with France's investment alone increasing by >370%.
3. **Shared Values:** Both India and the EU are the world's largest democracies and are committed to a rules-based international order, multilateralism, and shared values such as democracy, rule of law, and human rights. This forms a strong foundation for their strategic cooperation.
4. **Counterbalance to a Unipolar or Bipolar World:** Both India and the EU are major poles in a multipolar world order. They share an interest in ensuring that global governance is not dominated by a single power or a tense bipolar rivalry (U.S.-China). Their partnership promotes a more balanced and rules-based international system.
5. **Supply Chain Diversification:** Post-pandemic and Ukraine war, both seek to de-risk and diversify supply chains away from over-concentration in China ("China +1" strategy). They are natural partners for this, with India's manufacturing capabilities ("Make in India") and the EU's technology and capital.
6. **Bilateral Trade and Investment Agreement (BTIA) Negotiations:** Ongoing negotiations for a comprehensive FTA are expected to boost market access for Indian goods and services, facilitate investment, lower trade barriers, and further integrate India into European and global value chains. The FTA also aims to support resilient supply chains, digitalization, and sustainable trade.
7. **Climate and Clean Energy Leadership:** Both, India & EU, are committed to fighting climate change and promoting sustainable energy solutions. Cooperation in green hydrogen, solar energy, and energy efficiency supports India's ambitious renewable energy targets and decarbonization efforts.
8. **China Factor:** Both India and the EU view China's increased assertiveness—military, economic, and technological—as a central strategic challenge.

What are the CHALLENGES to the India-EU relationship?

1. **Stalled Free Trade Agreement (FTA) Negotiations:** The **Bilateral Trade and Investment Agreement (BTIA)** talks started in 2007, paused in 2013, and have seen slow, difficult restarts. This is the single most symbolic hurdle. The key sticking points include:
 - a. **Market Access:** The EU wants lower tariffs on automobiles, wines, spirits, and dairy products. India seeks greater access for its professionals (mode-4 services) and easier visa regimes.
 - b. **Geographical Indications (GIs):** The EU strongly protects GIs (like Champagne, Parmesan), which can conflict with generic names used in India (e.g., "Scotch Whisky").
 - c. **Data Localization & Digital Trade:** India's data privacy and localization rules are a major concern for EU digital firms.
 - d. **Sustainable Development:** EU insists on linking trade to strict labor and environmental standards, which India views as potential non-tariff barriers.
2. **Carbon Border Adjustment Mechanism (CBAM):** This new tax on carbon-intensive imports (like steel, cement, aluminum) is seen by India as discriminatory and a de facto trade barrier that could hurt its exports.

3. **Technology Transfer and Digital Regulations:** While India seeks greater technology transfer, concerns over data privacy, digital sovereignty, and cybersecurity regulations (like the EU's GDPR) create hurdles for Indian businesses.
4. **Visa and Mobility Issues:** Indian students and professionals face strict **visa, work permit, and mobility regulations** in the EU, limiting people-to-people and business links.
5. **Defence and Strategic Divergences:** India's dependence on Russian defence systems limits deeper collaboration with Europe on advanced military technology for e.g. Despite projects like submarine collaborations with France and C-295 Aircraft with Spain, EU-India defense ties lag behind those with the US or Russia.
6. **Ukraine-Russia Conflict:** This is the most acute recent divergence. The EU's primary strategic focus is countering Russia and supporting Ukraine. India, while calling for peace, has maintained a neutral stance, increased oil imports from Russia, and avoided voting against it at the UN. This has created strain and trust deficits, with the EU concerned about India's close ties with Russia.
7. **China Factor:**
 - a. **Trade with China:** Despite concerns, both, India & EU, retains substantial economic links with China. China is the EU's largest trading partner, well ahead of India. India also maintains significant trade with China (China was India's largest source of imports in 2024).
 - b. **Different Threat Perceptions:** For India, China is a direct neighbor and military competitor, whereas for the EU, the China question is entwined with economic security and global standards, with Russia still representing a higher immediate security threat.

What have been the INITIATIVES to bolster the India-EU relationship?

1. **Resumption of Free Trade Agreement (FTA) Negotiations:**
 - a. After a 9-year hiatus, negotiations for a comprehensive Free Trade Agreement (FTA), a stand-alone Investment Protection Agreement (IPA), and a Geographical Indications (GI) Agreement were formally restarted in 2021. This is the most significant economic initiative.
 - b. The FTA covers goods, services, investment protection, and geographical indications. It aims to boost market access, facilitate resilient supply chains, support digital and green transitions, and align with modern regulatory standards.
2. **India-EU Trade and Technology Council (TTC):** Launched in 2022, this is a major geopolitical upgrade, placing India on a similar footing as the US and EU. It has three working groups:
 - a. **Strategic Technologies & Digital Governance:** Collaboration on 5G/6G, AI, semiconductors, digital public infrastructure.
 - b. **Green & Clean Energy Technologies:** Focus on solar, hydrogen, circular economy, battery storage.
 - c. **Trade & Investment Resilience:** Deepening supply chain cooperation and addressing barriers.
3. **High-Level Dialogue on Trade and Investment:** This ministerial-level dialogue provides political guidance to the bilateral trade and investment relationship, ensuring regular discussions and addressing market access issues and trade barriers.
4. **India-EU Strategic Partnership – A Roadmap to 2025:** Adopted in 2020, this roadmap guides joint action and aims to further strengthen the strategic partnership across various sectors, including trade, climate change, security, and sustainable development.

5. **Indo-Pacific Oceans Initiative (IPOI) and Maritime Security Strategy:** India has joined the EU's IPOI and Maritime Security Strategy, highlighting shared strategic priorities in maintaining a free, open, and inclusive Indo-Pacific. Joint naval exercises, such as those in the Gulf of Guinea and Gulf of Aden, further enhance maritime security cooperation.
6. **Clean Energy and Climate Partnership (CECP):** Established in 2016 and recently updated for its third phase (2025-2028), the CECP focuses on deeper cooperation in Green hydrogen, Offshore wind energy, Energy efficiency etc. India was an exclusive country partner at **European Hydrogen Week** in 2024, and the EU was a key partner at the International Conference on Green Hydrogen in Delhi in 2024.
7. **Research & Development Cooperation:** Agreements for R&D cooperation in peaceful uses of nuclear energy and India's associate membership in CERN (European Organisation for Nuclear Research) signify deepening scientific collaboration.
8. **India-EU Connectivity Partnership (2020):** A joint initiative to promote **rules-based, transparent, and sustainable connectivity** projects in regions like South Asia, Africa, and the Indo-Pacific, seen as an alternative to China's Belt and Road Initiative (BRI).
9. **India-Middle East-Europe Economic Corridor (IMEC):** While not exclusively an India-EU initiative, IMEC is a significant project that aims to strengthen connectivity between India and Europe via the Middle East, enhancing trade routes and energy security. The IMEC has the potential to become the modern age Silk Road linking geographies not only in trade, but also in enterprise, energy & innovation. It is an answer to the Indo-Pacific's demand for infrastructure that is transparent, sustainable & sovereign in spirit.

What can be the WAY FORWARD?

1. **Accelerating FTA Negotiations with Flexibility:** Both sides need to adopt a flexible and pragmatic approach to finalize the FTA, addressing sensitive sectors gradually and enhancing regulatory alignment through mutual recognition agreements. This includes finding solutions for issues like market access, intellectual property rights, and sustainability standards.
2. **Enhancing Technology Cooperation:** Continued focus on establishing dedicated frameworks for technology transfer, ensuring balanced access, and strengthening collaboration in emerging technologies like AI, semiconductors, and cybersecurity. Facilitating data-sharing agreements that balance privacy protection with business innovation needs is also vital. Europe's leadership in deep tech, digital manufacturing & semiconductors dovetails with India's dynamism in software, digital public good (e.g. UPI) & scalable platform. Together, they can lead in clean energy innovation, biotechnology, ocean sustainability, food security & resilient healthcare systems.
3. **Addressing Climate and Energy Policy Concerns:** Developing a joint roadmap for implementing green energy solutions, aligning policies on renewable energy investments, and finding solutions for issues like the Carbon Border Adjustment Mechanism (CBAM) to prevent adverse impacts on Indian exports. Increased funding and technology-sharing for green hydrogen and carbon-neutral initiatives are also important.
4. **Deepening Security and Defence Cooperation:** Exploring opportunities for joint production of military equipment, enhancing maritime security in the Indo-Pacific, and strengthening cybersecurity and intelligence sharing. India's interest in joining projects under the EU's Permanent Structured Cooperation (PESCO) and negotiating a Security of Information Agreement (SoIA) further indicates this direction.

5. **Strengthening Multilateral Engagement:** Both India and the EU should continue to work together in multilateral forums like the UN, G20, and WTO to address global challenges and promote shared values, aiming to reform institutions to better reflect 21st-century realities.
6. **Human Mobility:** A comprehensive mobility agreement for students, scientists & scholars will enrich talent pools, ease Indian unemployment issue & fertilise bilateral innovation. In the age of ideas, cross-border thinkers are as valuable as cross-border capital.

CONCLUSION:

India & EU needs to harness the immense potential of their partnership by collaborating on critical & emerging technologies, build resilient supply chains & bolstering strategic & security cooperation. They need to promote mutual trust, shape global governance & champion the shared values of democracy, rule of law & multilateralism.

Read More: [The Indian Express](#), [Wikipedia](#)
UPSC GS-2: International Relations

Child Trafficking in India – Explained Pointwise

Child trafficking remains a grim reality in India. According to the latest NCRB data, in 2022, ~3100 children below the age of 18y were rescued from getting trafficked. Between Apr 2024 & Mar 2025, 53000 children were rescued from child labour, trafficking & kidnapping across India. The SC in recent K.P. Kiran Kumar Case has given strict guidelines to prevent such offences, and held that trafficking grossly violates children's fundamental right to life under Article 21 of the Constitution.

What is child trafficking?

- **Palermo Protocol (UN Protocol to Prevent, Suppress & Punish Trafficking in Persons, Especially Women & Children):** Defines child trafficking as the “recruitment, transportation, transfer, harbouring or receipt of a child for the purpose of exploitation,” crucially noting that *consent is irrelevant for children*, meaning it's trafficking even without force, fraud, or coercion, as a child cannot legally consent to exploitation.
- **Section 143 of BNS 2023:** Whoever, for the purpose of exploitation, recruits, transports, harbours, transfers, or receives, a person or persons by:
 - using threats; or
 - using force, or any other form of coercion; or
 - by abduction; or
 - by practicing fraud, or deception; or
 - by abuse of power; or
 - by inducement, including the giving or receiving of payments or benefits, in order to achieve the consent of any person having control over the person recruited, transported, harboured, transferred or received, commits the offence of trafficking.

What are the causes of child trafficking?

Socio-Economic & Cultural Factors	<ul style="list-style-type: none"> • Extreme Poverty: This is the most significant driver. Desperate families in impoverished regions (often rural or urban slums) may be deceived by traffickers' false promises of a good job, marriage, or education for their children. Sometimes, families are complicit in selling children due to dire economic circumstances. • Debt Bondage: Intergenerational debt traps families, and children are forced into labor to pay off the debt, effectively becoming property of the creditor. • Gender Discrimination: Deep-seated patriarchy devalues girls, leading to their trafficking for forced marriage, domestic servitude, and sexual exploitation. Sex selection and female foeticide also create skewed gender ratios, fueling the trafficking of women and girls for brides. • Caste-Based Discrimination: Marginalized communities, particularly Scheduled Castes and Scheduled Tribes (Dalits and Adivasis), face systemic exclusion from resources and justice, making them easy targets for traffickers who operate with impunity in these communities. • Child Marriage: Although illegal, the practice persists, often acting as a facade for trafficking where girls are "married off" and then forced into exploitation.
Governance Failures	<ul style="list-style-type: none"> • Weak Law Enforcement: Corruption within police and local authorities, lack of training to identify trafficking, and low prosecution rates allow trafficking networks to operate with minimal risk. Often, victims are treated as criminals. For e.g. the conviction rate in trafficking related cases was only 4.8% between 2018 & 2022 in India. • Porous Borders & Migration: India's long, porous borders with Nepal, Bangladesh, and Myanmar are hotspots for cross-border trafficking. Internal migration for work also leaves children unprotected and invisible to systems. • Poor Birth Registration: Millions of children, especially in marginalized communities, are not registered at birth. This lack of legal identity makes them "invisible" and prey to traffickers.
Demand-side Factors	<ul style="list-style-type: none"> • Demand for Cheap, Exploitable Labor: In sectors like agriculture, brick kilns, garment workshops, and domestic work, there is a high demand for submissive, cheap labor that children provide. • Demand for Child Brides: In regions with skewed sex ratios or cultural practices, there is a demand for young girls as brides. • Organized Begging Rings: Children are maimed or drugged to become more "effective" beggars, driven by profits for organized criminal gangs.

Other Factors	<ul style="list-style-type: none"> • Natural Disasters & Climate Change: Floods, droughts, and crop failures devastate livelihoods, forcing distressed migration and breaking down community protections. • Armed Conflict & Instability: Insurgency in certain regions (e.g., parts of Northeast India) displaces families and creates lawless zones where trafficking thrives. • Social Media: Spread of social media & online platforms has contributed to child trafficking in recent times. Children are brainwashed & recruited in the name of jobs or opportunities for 'modelling'.
---------------	---

What are the rights of the children?

1. Constitutional Rights:

- i. **Right to Equality (Article 14):** Equality before the law and equal protection.
- ii. **Right Against Discrimination (Article 15):** Prohibits discrimination based on religion, race, caste, sex, or place of birth. Allows special provisions for children.
- iii. **Right to Life and Personal Liberty (Article 21):** Includes the right to live with dignity, education, and protection.
- iv. **Right to Education (Article 21A):** Free and compulsory education for children aged 6-14 years.
- v. **Protection Against Exploitation (Articles 23-24):**
 - **Anti-Trafficking (Article 23):** Protects children from being trafficked or forced into bonded labor.
 - **Prohibition of Child Labor (Article 24):** No child below the age of 14 can be employed in any factory, mine, or hazardous occupation.
- vi. **Right to Early Childhood Care (Article 45):** State shall provide early childhood care and education for all children until age 6.

2. Legislative Rights:

- i. **Juvenile Justice (Care and Protection of Children) Act, 2015:** The Juvenile Justice (JJ) Act, 2015 handles two categories of children:
 - **Children in Need of Care and Protection (CNCP):** Those who are abandoned, orphaned, or victims of abuse. They are entitled to rehabilitation through Child Welfare Committees (CWC).
 - **Children in Conflict with Law (CCL):** Children who commit crimes.
- ii. **Right of Children to Free and Compulsory Education (RTE) Act, 2009:**
 - Ensures free, compulsory education for children aged 6-14.
 - Prohibits discrimination, capitation fees, and screening.
- iii. **Protection of Children from Sexual Offences (POCSO) Act, 2012:**
 - A gender-neutral law specifically designed to protect children from sexual abuse, harassment, and pornography.
 - It mandates child-friendly courtrooms, prevents the victim from coming face-to-face with the accused, and ensures the child's identity is kept confidential.

Created with love ❤ by ForumIAS- the knowledge network for civil services.

Visit academy.forumias.com for our mentor based courses.

iv. Child Labour (Prohibition and Regulation) Act, 1986 (Amended in 2016):

- Prohibits employment of children under 14 in all occupations and processes.
- Adolescents (14-18 years) barred from hazardous work.

v. Prohibition of Child Marriage Act, 2006:

- Prevents child marriage and protects victims.
- Sets the legal age for marriage at **18 for women** and **21 for men**.

vi. Commission for Protection of Child Rights Act, 2005: Establishes National and State Commissions for Child Rights to monitor safeguards.**What have been the Supreme Court's views on rights of the children?**

1. **Laxmi Kant Pandey vs. Union of India (1984 & onwards):** While primarily on inter-country adoption, this series of judgments laid down strict guidelines to prevent the trafficking of children in the guise of adoption, emphasizing "best interests of the child" as the paramount consideration.
2. **Vishal Jeet vs. Union of India (1990):** SC held that trafficking & child prostitution are serious socio-economic problems & hence a preventive & humanistic approach is essential to deal with them.
3. **MC Mehta vs. State of Tamil Nadu (1996):** The Court issued guidelines with the view to prohibiting employment of children in hazardous industries.
4. **Bachpan Bachao Andolan vs. Union of India (2011):** A watershed moment. The Court recognized "the right of children to be free from trafficking and forced labor" as a fundamental right under Article 21. It issued detailed guidelines for:
 - **Rescue and Rehabilitation:** Mandating the creation of a rehabilitation fund for immediate care.
 - **Railway Protocol:** Directing Railways to cooperate in identifying and rescuing trafficked children.
 - **Central Database:** Emphasized the need for a national database of missing children.

What are the various initiatives that have been taken to prevent child trafficking?**1. Legal Framework:**

- **Immoral Traffic (Prevention) Act, 1956 (ITPA):** Criminalizes trafficking for commercial sexual exploitation.
- **Juvenile Justice (Care and Protection of Children) Act, 2015**
- **Protection of Children from Sexual Offences (POCSO) Act, 2012**
- **Child Labour (Prohibition and Regulation) Act, 1986**

2. Institutional Mechanisms:

- **National Commission for Protection of Child Rights (NCPCR) and State Commissions (SCPCRs):** Monitor child rights violations and recommend actions.
- **Anti-Human Trafficking Units (AHTUs):** Specialized police units in districts to investigate trafficking cases. Over 750 AHTUs have been established.
- **Child Welfare Committees (CWCs) and Juvenile Justice Boards (JJBs):** Statutory bodies for care, protection, and justice for children.
- **Integrated Child Protection Scheme (ICPS):** A centrally sponsored scheme that supports child protection services, including rehabilitation.

3. **Childline (1098)**: This toll-free emergency service is now integrated with the **National Emergency Number 112**. It acts as the “eyes and ears” for reporting children in distress.
4. **TrackChild & Khoya-Paya**: These portals, now unified under **Mission Vatsalya**, allow police and citizens to upload data on missing and “sighted” children. The system uses AI to match photos of children found in one state with those reported missing in another.
5. **Ghar Portal (Go Home and Re-Unite)**: Specifically designed to track the digital repatriation of children in the Juvenile Justice system, ensuring they are sent back to their home districts and monitored post-restoration.
6. **Operation AAHT**: The Indian Railways is the primary conduit for trafficking syndicates. **Operation AAHT**, led by the Railway Protection Force (RPF), is the most effective transit-point intervention. Since 2022, this operation has rescued over **2,300 children** and apprehended nearly 700 traffickers.

What should be the way forward?

1. **Strengthen Legal & Policy Frameworks:**
 - **Strict enforcement of existing laws** like the **Juvenile Justice Act, 2015**, **POCSO Act, 2012**, and **Trafficking of Persons (Prevention, Care and Rehabilitation) Act, 2021**.
 - **Fast-track courts** for trafficking cases to ensure timely justice and reduce delays.
 - **National database and tracking system** for missing children with real-time coordination between states.
2. **Enhance Law Enforcement & Border Control:**
 - **Specialized anti-trafficking units** in every district with trained personnel (including women officers).
 - **Strengthen cross-state and cross-border coordination** with Nepal, Bangladesh, Myanmar, etc., using technology and intelligence sharing.
 - **Regular monitoring** of trafficking hotspots (railway stations, bus stands, border areas, orphanages, shelter homes).
3. **Awareness & Community Mobilization:**
 - **Grassroots campaigns** in rural/tribal areas to educate parents and children about trafficking tactics (fake job offers, marriage traps, etc.).
 - **Engage local NGOs, Panchayati Raj institutions**, and youth groups as watchdogs.
 - **Helpline integration** (e.g., **Childline 1098**) with prompt response and rescue mechanisms.
4. **Rehabilitation & Reintegration**: The Supreme Court has mandated the implementation of the **BIRD Report (2023)** recommendations to prevent re-trafficking:
 - **Immediate RTE Enrolment**: Every rescued child must be enrolled in a school within 15 days of rescue.
 - **Family Restoration**: Rescued children are provided with long-term vocational training, and an adult member of their family is prioritized for a government job to ensure the child isn't pushed back into the same cycle of poverty.
5. **Technology & Data-driven Interventions:**
 - **Use of AI and data analytics** to identify trafficking patterns and hotspots.
 - **Digital identity and birth registration** for all children to track missing cases.
 - **Platforms like “TrackChild”** to be integrated with police and child protection agencies.

UPSC GS-2: Social Justice

Read More: [The Hindu](#)

India-UAE Relations – Explained Pointwise

The President of the United Arab Emirates (UAE) has recently visited New Delhi. Both the countries have agreed upon a range of bilateral agreements & outcomes – from defense to space & LNG. This visit holds significant importance particularly against the backdrop of growing military tension in the Gulf region.



Agreements signed during the 2026 visit:

- 1. Strategic Defense Partnership:** Signed a Letter of Intent (LoI) to establish a formal framework for defense industrial collaboration, cybersecurity, and joint technology development.
- 2. Space Ecosystem:** An LoI between IN-SPACe (India) and the UAE Space Agency was signed to develop joint infrastructure, including launch complexes, satellite fabrication facilities, and joint space missions.
- 3. 10-Year LNG Deal:** A \$3 billion agreement was signed between HPCL and ADNOC Gas. The UAE will supply 0.5 million tonnes of LNG per annum to India for 10 years, starting in 2028.
- 4. Civil Nuclear Push:** Following India's new SHANTI Law (2025), both nations agreed to explore partnerships in advanced nuclear technologies, specifically focusing on Small Modular Reactors (SMRs) and large nuclear reactors.
- 5. Digital Embassies:** Both sides agreed to explore the establishment of "Digital/Data Embassies" to store sovereign data across borders under mutually recognized sovereignty arrangements.
- 6. Supercomputing Cluster:** An agreement between C-DAC (India) and G42 (UAE) was reached to set up a supercomputing cluster in India as part of the AI India Mission.

Created with love ❤ by ForumIAS- the knowledge network for civil services.

Visit academy.forumias.com for our mentor based courses.

7. **Agri-Export Boost:** An MoU was signed between APEDA (India) and the UAE Ministry of Climate Change to streamline food safety and technical standards, facilitating easier export of Indian rice and produce.
8. **House of India:** Announced the establishment of a permanent cultural space called the 'House of India' in Abu Dhabi to showcase Indian art and heritage.

Evolution of India-UAE Relations:

Historical & Maritime Foundations (Pre-1971)	<ul style="list-style-type: none"> • The bond predates the formation of the UAE. For centuries, the Malabar coast and the Arabian Peninsula were linked by maritime trade. • Indian seafarers exchanged spices, textiles, and precious stones for dates and pearls. • Until 1966, the Gulf Rupee (issued by the Reserve Bank of India) was the official currency in the region, illustrating the deep economic integration.
Diplomatic Birth & The "Oil-Labor" Era (1971-2014)	<ul style="list-style-type: none"> • Following the unification of the UAE in 1971, formal diplomatic ties were established in 1972. • The relationship was primarily defined by two factors: India's need for crude oil and the UAE's need for labor to build its infrastructure. • This era saw a massive influx of Indian blue-collar workers.
The Strategic Leap (2015-Present)	<ul style="list-style-type: none"> • The visit of PM Narendra Modi in 2015 marked a "renaissance" in bilateral ties. • Comprehensive Strategic Partnership (2017): The relationship was formally elevated during MBZ's visit as the Chief Guest for India's Republic Day. • The signing of the Comprehensive Economic Partnership Agreement (CEPA) in 2022 transformed the economic landscape.

Significance of India-UAE Relations:

Geopolitical Significance	<ul style="list-style-type: none"> • Bridge to the Arab World: The UAE, under its visionary leadership, is a pivotal state in the Gulf Cooperation Council (GCC) and the wider Islamic world. Strong ties with the UAE enhance India's standing and diplomacy across the Middle East.
----------------------------------	---

	<ul style="list-style-type: none"> ● Balancing Act in a Multipolar Region: Both nations share a preference for strategic autonomy. The partnership helps balance other regional powers and provides India a stable, influential partner amid complex regional dynamics (e.g., Iran-Saudi tensions). ● Counter-Balancing: The partnership provides India with a stable anchor in West Asia, especially as a counterweight to shifting dynamics like the 2025 Saudi-Pakistan defense pact. ● Multilateral Forums: The UAE is a key partner for India in mini-laterals like the I2U2 Group (India-Israel-UAE-USA) and within BRICS and the UN. This amplifies India's voice on global issues.
Economic & Trade Significance	<ul style="list-style-type: none"> ● Trade Powerhouse: The UAE is India's 3rd largest trading partner (after US and China) and 2nd largest export destination. Bilateral trade reached \$100 billion in FY 2024-25, aided by the landmark Comprehensive Economic Partnership Agreement (CEPA) signed in 2022. ● Investments: UAE sovereign wealth funds are major investors in India across infrastructure, renewable energy, technology, and logistics. The UAE committed to a \$75 billion investment in India's infrastructure, signaling a move from being just a trade partner to a long-term stakeholder. ● Gateway to West Asia & Africa: The UAE's world-class logistics hubs (like Jebel Ali Port) serve as a critical trade and connectivity corridor for Indian goods to the Middle East, Africa, and Europe.
Energy Security	<ul style="list-style-type: none"> ● The UAE is a stable and reliable energy supplier for India, meeting a significant portion of its crude oil and LNG needs. ● Growing collaboration in renewable energy, with UAE investing in India's massive solar energy sector.
Diaspora & Remittances	<ul style="list-style-type: none"> ● The 3.5 million-strong Indian community in the UAE (~35% of its population) is the largest expatriate group and the backbone of the UAE's workforce, contributing significantly to its economy and society. ● The UAE is the largest single-source of remittances to India (over \$15-18 billion annually), vital for India's foreign exchange reserves and household incomes in states like Kerala, Tamil Nadu, and Uttar Pradesh. ● The community acts as a living bridge, fostering deep people-to-people ties and cultural understanding.

Strategic & Security Cooperation	<ul style="list-style-type: none"> ● Counter-Terrorism & Intelligence: Close cooperation on counter-terrorism, deradicalization, and intelligence sharing is crucial for regional stability and for addressing mutual security threats. ● Defense Ties: Regular joint military exercises (air force 'Desert Eagle', naval exercises), port calls, and defense dialogues. The UAE is a key security partner in the volatile Gulf region. ● Maritime Security: Collaboration to secure vital sea lanes in the Western Indian Ocean and the Gulf, which are lifelines for India's energy and trade flows.
Cultural & Soft Power	<ul style="list-style-type: none"> ● The inauguration of the BAPS Hindu Mandir in Abu Dhabi is a historic symbol of religious tolerance and deep cultural respect, significantly boosting India's soft power.

Challenges in India-UAE Relations:

1. Economic & Trade Frictions:

- **Non-Tariff Barriers (NTBs):** Despite the CEPA, issues like stringent product standards, certification hurdles, and customs procedures can act as de facto barriers for Indian exporters.
- **Trade Imbalance:** While trade volume is huge, the balance often tilts toward the UAE (due to oil & gold imports). Increasing Indian exports to correct this is a work in progress.
- **Oil Dependency:** While the relationship is diversifying into renewables and nuclear (under the SHANTI Law), the bulk of trade is still anchored in hydrocarbons. This makes both economies vulnerable to global oil price shocks and the accelerating global shift toward green energy.

2. Geopolitical Tightrope:

- **Balancing Relations with Pakistan:** The UAE maintains close ties with Pakistan. While the UAE has clearly prioritized its relationship with India, it expects India to manage tensions with Pakistan responsibly, as instability affects the entire region.
- **Engagement with Iran:** India maintains significant economic and strategic interests in Iran (Chabahar Port, energy). The UAE, while now engaging diplomatically with Iran, remains historically suspicious. India's balancing act requires nuanced diplomacy.
- **The "New Middle East" Dynamics:** The UAE's normalization of ties with Israel (Abraham Accords) and its deepening ties with China (a strategic competitor for India) add layers of complexity.

3. Diaspora-related Issues:

- **Visa and Labor Reforms:** The UAE's evolving labor laws (like the "Emiratization" policy) and visa regulations, while progressive, can create uncertainty for the large Indian workforce, especially blue-collar workers.

- **Rights and Welfare:** Ensuring fair working conditions, timely wages, and legal protection for Indian workers remains a constant diplomatic priority, especially for low-skilled laborers vulnerable to exploitation.

UPSC GS-2: International Relations

Read More: [The Indian Express](#)

Pax Silica – Importance & Challenges for India – Explained Pointwise

In January 2026, the U.S. Ambassador to India, Sergio Gor, in his arrival speech invited India to join the Pax Silica initiative. In this regard, let us understand what Pax Silica is & its importance as well as challenges – especially from India's perspective.

What is Pax Silica?

- Pax Silica is a U.S.-led geopolitical and economic initiative launched in December 2025 aimed at securing the global supply chain for semiconductors and Artificial Intelligence (AI).
- 'Pax' in Latin means Peace & 'Silica' is a key compound used in chip manufacturing – thus, together they suggest that the supply chain for new technologies should promote peace & prosperity.
- The term implies a potential shift in power from petrostates to "silica states" because of the growing global dependence on high-purity silica sand (especially quartzite) for the 21st-century economy, and the potential for this dependency to shape international relations, similar to how oil ("Pax Petrolia"/"Pax Americana") did in the 20th century.
- The Pax Silica Declaration noted that the initiative seeks to reduce coercive dependencies, secure global tech/AI supply chains, and build trusted digital infrastructure.

Who are the major participants in Pax Silica?

- **Formal Signatories:** These nine nations have formally committed to the Pax Silica Declaration, aligning their export controls, investment screening, and supply chain security protocols:
 1. **United States:** The lead architect and convener
 2. **Japan:** A primary partner in semiconductor materials and advanced manufacturing equipment.
 3. **South Korea:** A critical hub for memory chip production
 4. **Singapore:** A global leader in semiconductor fabrication and logistics
 5. **Israel:** A powerhouse for AI software, defense technology, and specialized R&D
 6. **United Kingdom:** A major player in AI research and semiconductor design (ARM)
 7. **Australia:** The "resource anchor," providing critical minerals like lithium and rare earths
 8. **Qatar:** Brings significant sovereign wealth and energy resources for data centers
 9. **United Arab Emirates (UAE):** Strategic partner in energy, capital (via funds like MGX), and regional tech infrastructure.

- **Observers:** These entities attend the summits and collaborate on specific projects but have not yet signed the full operational declaration:
 1. **The Netherlands:** It is a crucial partner through ASML (the world's only producer of EUV lithography machines).
 2. **Taiwan:** Despite its dominance in advanced chip manufacturing (TSMC), it remains an observer to manage the complex geopolitical sensitivities with China.
 3. **European Union (EU):** Participates in discussions but maintains a separate industrial policy, though individual member states (like the Netherlands) engage more directly.
 4. **Canada:** Contributing through its critical mineral reserves and AI research hubs.
 5. **OECD:** Acts as an advisory guest on global standards and economic impact.
- **India:** The U.S. Ambassador to India announced that India will be formally invited to join in February 2026. India is seen as the vital "alternative manufacturing base" and a source of skilled human capital for the alliance.

What are the objectives of Pax Silica?

1. **Secure supply chains:** Build resilient supply chains from critical minerals and energy inputs through advanced manufacturing, semiconductors, and AI infrastructure.
2. **Reduce dependencies:** Reduce coercive dependencies and protect materials and capabilities foundational to artificial intelligence.
3. **Economic cooperation:** Create coordinated investment and policy alignment among partner nations.
4. **Counter non-market practices:** Address non-market practices that undermine innovation and fair competition, including overcapacity and dumping.
5. **Maintaining the "18-Month Moving Gap":** A core strategic objective of Pax Silica is to institutionalize a permanent lead over competitors. The policy allows for the sale of older-generation technology to rivals to fund the R&D for the next generation, ensuring that the members of Pax Silica always remain at least 18 months ahead.

What is the importance of Pax Silica?

1. **Countering China's Dominance:** China accounts for approximately 69% of global rare-earth mining and nearly 90% of global refining, including a near monopoly over heavy elements essential for high-performance magnets. Pax Silica represents an effort to counter this dominance by creating alternative, trusted supply chains among aligned nations.
2. **Reducing Critical Supply Chain Vulnerability:** Covid pandemic demonstrated the limitations of supply chains that are heavily reliant on a single country. Pax Silica aims to reshore or friend-shore these supply chains to prevent economic and national-security risks from over-reliance on geopolitical rivals.
3. **Securing Semiconductor Sovereignty:** The CHIPS and Science Act is part of this broader "Pax Silica" vision – bringing advanced semiconductor manufacturing (which starts with silicon wafers) back to the U.S. and allied countries.

4. **Defining the “Silicon Age”:** The term itself reflects a historical transition. While Pax Americana was built on oil, steel, and naval dominance, Pax Silica is built on:
 - a. **Compute Power:** High-end processing is now the “currency” of global influence.
 - b. **The Full Stack:** Unlike previous chip alliances, it covers the entire lifecycle: from critical minerals (mining/refining) to semiconductors (design/fabs) and AI infrastructure (data centers/energy).
5. **Trusted Ecosystems:** By aligning export controls and investment screening among members, it ensures that sensitive technologies (like EUV lithography machines) do not reach strategic rivals.
6. **Importance for India:**
 - a. **Alternative Manufacturing Hub:** Pax Silica views India as the primary alternative to China for large-scale manufacturing and a massive source of human talent.
 - b. **Domestic Boost:** Joining the bloc will accelerate India’s Semiconductor Mission, providing access to advanced “know-how” and coordinated global investments.

What are the challenges of joining Pax Silica for India?

1. **Dilution of Strategic Autonomy:** Pax Silica isn’t just a trade forum; it demands alignment on export controls and investment screening. India has historically resisted being part of “blocs” that dictate who it can trade with (e.g., maintaining ties with Russia or recalibrating with China).
2. **Policy Sovereignty:** As a developing country, India has relatively young semiconductor & AI ecosystems compared with those of other Pax Silica countries. Consequently, India will seek to protect its semiconductor & AI ecosystems by granting domestic firms preferential treatment through subsidies, govt procurement, and calibrated import regulations. But, to be a “trusted partner,” India may have to align its domestic electronics and AI regulations with U.S.-led standards, which could limit its ability to create “India-first” industrial policies or preferential subsidies for local firms.
3. **Supply Chain Retaliation:** Despite its “Semiconductor Mission,” India remains heavily dependent on China for legacy chips, electronic components, and processed minerals. Analysts warn that China could weaponize its licensing conditions on rare-earth magnets (crucial for EVs and electronics) as a response to India joining Pax Silica – similar to what it did in 2025 when China suspended the supply of rare-earth magnets to India, negatively impacting the country’s automobile & electronics industry.
4. **The “Capability-Leverage” Gap:** India was initially left out of the inaugural Pax Silica summit because it lacked “indispensable” technology. Unlike Taiwan (fabrication) or the Netherlands (machinery), India is currently seen as a “useful participant” (for talent and market) rather than a “critical player.” India’s AI & semiconductor ecosystems are also well behind those of Pax Silica countries.
5. **The Expectation Gap:** The member countries of Pax Silica, in addition to their technological strengths, are US allies & high income countries. If India decides to join the Pax Silica, it will be the first developing country & also the first non-US ally to join the initiative. This may create an ‘expectation gap’ between India & the other members of Pax Silica.

- 6. Digital Sovereignty:** The Digital Personal Data Protection (DPDP) Act mandates that critical citizen data stay in India. However, Pax Silica encourages seamless data flows between “trusted partners.”.

What can be the way forward?

1. Build Domestic Capability:

Upstream Raw Material Security	<ul style="list-style-type: none"> • Map and develop domestic quartz/silica sand resources (e.g., in Rajasthan, Tamil Nadu, Karnataka) with high purity, while establishing strategic stockpiles. • Invest in beneficiation and purification technologies to upgrade low-grade silica, reducing import dependency.
Midstream Manufacturing Push	<ul style="list-style-type: none"> • Scale up polysilicon and wafer production (for solar and electronics) through PLI-like incentives, joint ventures with tech leaders, and low-cost financing. • Establish specialized silicon industrial parks with reliable power, water, and logistics – critical for energy-intensive silicon refining.
Downstream Integration	<ul style="list-style-type: none"> • Become a global hub in solar module assembly and advance into high-value semiconductor fabrication (leveraging the India Semiconductor Mission). • Focus not just on chips but on compound semiconductors (GaN, SiC) for EVs, defense, and telecom.

- 2. “China+1” with Indian Advantage:** Position India as a reliable alternative in the Friendshoring/China+1 strategies of the US, EU, Japan, and Taiwan. Use free-trade agreements (e.g., with Taiwan, Australia) to secure technology transfer and materials access.

3. Strategic Alliances:

- Join mini-lateral initiatives like the Mineral Security Partnership (MSP) to access global critical minerals (including high-purity silica resources).
- Deepen collaboration with Quad on supply chain resilience, R&D in advanced materials, and securing seabed/mining rights.

4. Invest in R&D and Skilling for Next-Gen Technologies:

- Fund research into silicon recycling/recovery from PV panels and e-waste, and alternative substrates (e.g., perovskite-silicon tandem cells).
- Create specialized training programs in materials science, semiconductor process engineering, and advanced manufacturing via partnerships with IITs, global universities, and industry.

5. **Strategic Autonomy with Alignment:** In order to secure its strategic autonomy, India needs to maintain ties with both Western “Pax Silica” blocs and resource-supplying Global South nations, avoiding over-dependence on any one camp.
6. **Diplomatic Leverage:** Use India’s market size and strategic location to negotiate tech transfers (e.g., from Taiwan, Japan) and attract FDI in silicon-based industries.

Conclusion: India should look forward to transform itself from a silicon & high tech consumer to a producer and innovator. This requires combining – Industrial policy (like the China model), Global partnerships (like Japan’s resource diplomacy) & Tech leapfrogging (like Taiwan’s semiconductor focus). By doing this, India will establish itself as a key node in the resilient, diversified global silicon economy while boosting energy security, high-tech employment, and geopolitical influence.

UPSC GS-2: International Relations

Read More: [The Hindu](#)

CBDC – Significance & Challenges – Explained Pointwise

The RBI has recently recommended to the Central Government that the interlinking of Central Bank Digital Currencies (CBDCs) of BRICS countries be included in the agenda of the BRICS 2026 Summit, which is to be hosted by India. Previously, India has pushed for international cooperation & standardization on cryptocurrencies during its presidency of G-20 in 2023. In this regard, let us understand the CBDC as a concept.



What is CBDC?

- CBDC i.e. Central Bank Digital Currency is a digital form of a country's official currency (like the digital dollar, digital euro, digital yuan, etc.) issued and regulated directly by the central bank, rather than by commercial banks or private entities.
- Types of CBDC:
 - Retail CBDC = Designed for the general public, households, and businesses for everyday transactions (buying groceries, paying bills).
 - Wholesale CBDC = Restricted to financial institutions (banks) for large-value settlements, such as interbank transfers or government bond trading.
- Examples:
 - China: Digital Yuan (e-CNY) – Already in advanced pilot stages
 - Eurozone: Digital Euro – Under investigation by the European Central Bank
 - USA: Digital Dollar – Still in research and discussion phases
- The RBI has historically been very conservative about private cryptocurrencies, repeatedly calling for a ban, and progressive about CBDC, arguing that they have multiple uses.

What are the key features of CBDC?

1. **Sovereign Guarantee:** Unlike money in a private bank account, a CBDC is a direct liability of the central bank. It is considered "risk-free" because it is backed by the government.
2. **Legal Tender:** It must be accepted for all payments, just like physical cash.
3. **Digital-Only:** It exists purely in electronic form, though it may be accessible via digital wallets, cards, or apps.
4. **Non-Interest Bearing:** CBDCs do not earn interest, ensuring they act as a medium of exchange rather than a speculative investment.

Difference between Cryptocurrency & CBDC:

Cryptocurrency	CBDC
Decentralized (no central authority). Created by private entities or algorithms.	Centralized (issued and backed by the nation's central bank). Sovereign liability.
Value is highly volatile, driven by speculation, adoption, and market sentiment.	Value is stable, pegged 1:1 to the physical national currency (e.g., 1 digital rupee = 1 paper rupee).

Primarily uses public, permissionless blockchains (e.g., Bitcoin, Ethereum).	Likely uses permissioned/distributed ledger or advanced centralized database; not necessarily a blockchain.
User-controlled	Central Bank & Government controlled
Transactions are public on the ledger, but identities are hidden behind wallet addresses.	Likely requires identity verification (KYC). Full transaction transparency to the central bank.
Not legal tender	Legal tender

What is the significance of CBDC?

- 1. Financial Inclusion for the “Unbanked”:** CBDC could give unbanked populations access to digital payments via basic digital wallets, without requiring commercial bank accounts. Also, lower transaction costs benefit low-income households and small businesses.
- 2. Monetary Policy and Stability:** CBDCs give Central banks better control over the monetary policy in the following way:
 - **Monetary Policy Transmission:** CBDC can help in better transmission of central bank’s policy actions like changing interest rates.
 - **Programmability:** Money can be “programmed” for specific uses (e.g., a subsidy that can only be spent on food or fuel), ensuring that public funds are used as intended.
- 3. Combating Financial Crime:** Every unit of a CBDC has a digital “fingerprint,” because of which it is much harder to counterfeit or use for illegal activities compared to physical cash. Thus, CBDC has:
 - **Traceability:** It allows authorities to track money laundering, tax evasion, and terrorism financing more effectively.
 - **Digital Transparency:** While this raises privacy concerns for some, it ensures that the “shadow economy” is brought into the light of regulation.
- 4. Cross-border Payments:**
 - **Cross-border payments** are slow and expensive at present, involving multiple “correspondent banks” and high fees (sometimes over 6%). CBDCs can settle transactions instantly, at any time, without waiting for bank opening hours.
 - By removing middleman banks, CBDC can help in reducing the the cost of remittances drastically.
 - CBDC payments would also help India to make its payments to Russia & Iran easier because SWIFT framework is currently not available for either country.
- 5. Offline Transactions:** One of the hardest technical challenges is making digital money work without the internet (like cash does). While “hardware wallets” are being tested, ensuring they can’t be “double-spent” while offline is difficult.

6. **Fiscal Policy Efficiency:** CBDC allows instant distribution of subsidies, or benefits with reduced leakage or fraud. Thus, help in reducing the corruption in the administration.

What are the risk & challenges involved in CBDC?

1. **Bank Disintermediation ("Run Risk"):** If people feel a CBDC is "safer" than a bank account, they might move all their savings from commercial banks to the central bank. This could trigger or accelerate bank runs, destabilizing the banking system.
2. **Impact on Credit Creation:** Commercial banks rely on deposits to fund loans. A large-scale shift to CBDC could shrink banks' deposit bases, potentially raising lending costs and reducing credit availability for households and businesses.
3. **Loss of Financial Privacy:** Unlike physical cash, all CBDC transactions are inherently digital and traceable. While designed to combat illegal activity, this creates a potential for state surveillance of citizens' financial lives.
4. **Cybersecurity risks & Systemic Failure:** A centralized or semi-centralized CBDC system becomes a single point of failure. A technical glitch, cyberattack, or power outage could cripple a nation's entire digital payment system.
5. **Digital Divide:** If CBDC becomes the primary payment method, it could exclude populations with limited digital access or literacy (elderly, rural poor).
6. **Tariff Threat:** US President Donald Trump has already warned the BRICS countries of additional tariffs if they move away from dollar-based international monetary system. With 50% tariffs already in place, India needs to plan how to accommodate the additional tariffs.

What should be the way forward?

1. **Phased Implementation:** Many countries are prioritizing "Wholesale CBDCs" (for bank-to-bank transfers) because they offer immediate efficiency gains in cross-border trade without the massive privacy and tech risks of a public-facing currency. For public use, the focus is on starting with small, restricted pilot groups to test "load capacity" and offline functionality before a full national rollout.
2. **Privacy by Design:** Privacy concerns can be addressed by adopting:
 - a. **Privacy-Enhancing Technologies:** The most successful CBDC frameworks are adopting Privacy-Enhancing Technologies (PETs).
 - b. **Tiered Privacy:** Small, daily transactions (like buying a coffee) could be made anonymous, similar to cash.
 - c. **Threshold Monitoring:** Only large or suspicious transactions would trigger regulatory oversight to prevent money laundering.
 - d. **Sunset Clause for Data:** Mandate automatic deletion of transaction data after a short period for routine payments, preserving auditability for crime prevention but limiting mass surveillance.
3. **Offline Functionality:** Developing "hardware-based" solutions (like smart cards or specialized phone chips) that allow transactions to occur during internet outages.
4. **Universal Access Design:** Ensure interfaces are simple, accessible for the disabled and elderly, and usable on basic feature phones.

Conclusion: The ultimate test of a successful CBDC will be to make the monetary system more efficient & inclusive without making it more fragile & authoritarian. Navigating this carefully is the most challenging aspect of the central bank digital currency.

Read More: [The Hindu](#)
UPSC GS-3: Economics

Himalayan Ecocide – Reasons & Consequences – Explained Pointwise

Recently, the Uttarakhand Forest Department approved the felling of nearly 7000 Deodar trees in the Dharali-Harsil region for the Char Dham road-widening project – diverting 43 Ha of forest land for the project, with 10 Ha meant for muck dumping. With nearly 331-days of continuous climate impact, >4000 deaths attributed to climate-induced disasters like cloudburst, landslides, avalanches & flash floods in 2025 alone in the Himalayan states of Himanchal Pradesh & Uttarakhand – such a decision by the govt has been termed as the Himalayan ecocide i.e. the destruction of Himalayan ecosystem.



How fragile the Himalayan ecosystem is?

- 1. Young and Unstable Mountains:** The Himalayas are geologically young and still rising, making them prone to severe erosion, landslides, and earthquakes. Because the Indian tectonic plate continues to push into the Eurasian plate at a rate of approximately 5 mm per year, the mountains are literally still “growing.” This constant movement makes the region one of the most earthquake-prone zones in the world (Zones IV and V on seismic maps).
- 2. Steep Slopes and Rugged Terrain:** The dramatic vertical relief leads to rapid runoff of water and sediments, limiting soil formation and stability. Even minor disturbances can trigger slope failures.

3. **Cryosphere Sensitivity:** The region is the “Third Pole,” holding the world’s largest volume of ice outside the polar regions. Glaciers, permafrost, and snow are acutely sensitive to even small changes in temperature.
4. **High Altitude and Low Resilience:** Organisms in high-altitude ecosystems are specialized to narrow climatic ranges. Even small temperature shifts can push species beyond their survival limits, with nowhere higher to migrate.

What are the reasons behind rising fragility of Himalayas?

Climate Change (The Greatest Threat)	<ol style="list-style-type: none"> 1. Rapid Warming: The Himalayas are warming at a rate significantly higher than the global average (3 times the global average). 2. Glacial Retreat: Glaciers are melting at an alarming pace, affecting long-term water storage and river flows. 3. Permafrost Thaw: Permafrost that holds rocks together is melting very fast. This makes high-altitude peaks literally crumble, contributing to disasters like the 2021 Chamoli debris flow.
Human Pressures	<ol style="list-style-type: none"> 1. Deforestation: Oak and Deodar forests act as natural sponges, absorbing rainwater and anchoring the soil with deep roots. Massive clearing for resorts and highways has stripped this armor. Without trees, the thin topsoil is washed away instantly during a “cloudburst,” turning rain into a “debris flow” of mud and boulders. 2. Unsustainable Tourism: Massive influxes of tourists (like in Ladakh, Nepal, or Himachal) strain limited water resources, generate unmanageable waste, and lead to trail erosion and pollution. 3. Unsustainable Infrastructure: Large-scale road construction, dam building, and mining trigger landslides, alter river ecosystems, and fragment wildlife corridors. For e.g. To widen roads for projects like the <i>Char Dham Pariyojana</i>, hills are cut vertically rather than using safer, stepped “benching.” This removes the base support of the slope, leading to over 800 active landslide zones along newly built highways. 4. Muck Dumping: Debris from construction is often illegally dumped into riverbeds. This raises the river level, so when even a moderate rain occurs, the river overflows much faster, causing “man-made” flash floods.

What could be the consequences of Himalayan ecocide?

1. **Water Security Threat:** The Himalayas are the source of 10 major Asian river systems (Ganges, Indus, Brahmaputra, Yangtze, etc.), supporting ~1.5 billion people. Changes in snowmelt and glacier melt disrupt the timing and volume of this “water tower,” threatening agriculture, hydropower, and drinking water.
2. **Biodiversity Loss:** The Himalayas are a global biodiversity hotspot with thousands of endemic species (e.g., snow leopards, red pandas, Himalayan flora). Habitat destruction, invasive species, and climate shifts could trigger irreversible species loss.

3. **Increased Disaster Risk:** A combination of melting permafrost, intense rainfall, and destabilized slopes leads to more frequent and severe landslides, flash floods, and debris flows for e.g. formation of glacial lakes – Meltwater forms unstable lakes behind moraine dams, risking catastrophic Glacial Lake Outburst Floods (GLOFs) that can wipe out communities and infrastructure downstream.
4. **Disruption of Monsoon Systems:** The Himalayas play a crucial role in driving and modulating the South Asian monsoon. Large-scale ecological changes could alter monsoon patterns, leading to unpredicted rainfall, increased drought in some regions & extreme floods in others.
5. **Collapse of Livelihoods:** Millions depend on Himalayan ecosystems for agriculture, pastoralism, and freshwater fisheries, Tourism (trekking, pilgrimage, mountaineering), traditional medicine and non-timber forest products, Himalayan ecocide will lead to loss of livelihood of millions of people.
6. **Mass Migration:** As mountain springs dry up (a phenomenon called “dying springs”) and villages sink due to land subsidence, thousands are forced to migrate. This creates a surge of climate refugees moving into already overcrowded cities like Delhi, Dhaka, and Karachi.
7. **Cultural Loss:** The Himalayas are a cultural and spiritual heartland for multiple religions (Hinduism, Buddhism, indigenous traditions). Loss of sacred landscapes, pilgrimage routes (e.g., Char Dham, Mount Kailash), and traditional knowledge would represent an irreplaceable cultural extinction.

What should be the way forward?

1. **Himalayan-Specific Building Codes:** Implementation of seismic-resilient construction that combines traditional methods (like the *Dhaji Dewari* or *Kath-Kuni* styles) with modern engineering.
2. **Mandatory Carrying Capacity Audits:** Before any large-scale project is approved, a scientific audit must determine if the land, water, and air can support the additional load.
3. **Green Roads:** Moving away from vertical hill cutting to “stepped” or “benched” slopes. Using soil bio-engineering (planting specific native deep-rooted grasses and shrubs to naturally anchor soil) is significantly more effective and cheaper than concrete walls.
4. **Dhara Vikas (Spring Rejuvenation):** Scaling up the “Sikkim Model” of recharging mountain springs through “staggered contour trenching,” which allows rainwater to seep into the ground rather than running off and causing erosion.
5. **The “Bhutan Model”:** Shifting toward a “High Value, Low Volume” tourism strategy. This involves entry permits, daily tourist caps, and “Sustainable Development Fees” that are directly reinvested into local conservation.

Conclusion: Himalayas are not just a geographical entity, it is the very foundation of the subcontinent’s existence. The continuing sequence of disasters in the Himalayas shows the prioritization of short-term, economic gains over long-term disaster resilience. It is high time that we plan & implement genuine, science-based sustainable development policies by keeping in mind the axiom that “*without Himalayas, there is no India*”.

UPSC GS-3: Disaster Management

Read More: [The Hindu](#)

Delimitation Exercise in India- Explained Pointwise

Every democracy must periodically redraw its electoral map to reflect population change. In India, this process is known as delimitation. The **last delimitation happened in 1975**, after which Indira Gandhi put a freeze until 2000. A year later, Parliament again froze the number of members of the Lok Sabha and state assemblies till 2026. The delimitation of constituencies for the Lok Sabha and State Legislative Assemblies is to be carried out on the basis of the **first Census after 2026**. Due to this inordinate delay, several issues related to democracy, demography and federalism await the fifth delimitation exercise.



What is Delimitation? What is the constitutional status behind Delimitation in India?

- Delimitation refers to the process of **redrawing the boundaries of electoral constituencies** to ensure **fair representation** based on **population changes**.
- **Delimitation Commission:** The Delimitation Commission is a statutory body responsible for determining the boundaries of various constituencies in the country for the purpose of elections. It is governed by the **Delimitation Act, 2002** and is conducted by the Delimitation Commission under **Articles 82** and **170** of the Indian Constitution. The objective is to provide equitable representation to all regions while maintaining the principle of **one person, one vote**.

- The last Delimitation Commission (2002-08) only redraw the internal constituency boundaries without reallocating seats among the States. The next Commission would probably reallocate seats among States for the first time since 1976, redraw all constituencies, and create reserved constituencies for women 's 33% quota.

What is the significance of Delimitation Exercise in India?

1. **Political Representation and Electoral Fairness:** Ensures democratic legitimacy through equitable distribution of seats in Lok Sabha and State Assemblies. E.g. The 2002 Delimitation Commission led to a **better voter-per-MP ratio in urban and rural areas** and prevented malapportionment, ensuring each MP represents roughly the same number of citizens.
2. **Upholding Democracy:** Reduces gerrymandering (political manipulation of electoral district boundaries to advantage a party, group, or socioeconomic class within the constituency) , ensuring fair electoral contests. E.g. Supreme Court in **Kuldip Nayar v. Union of India (2006)** upheld the importance of delimitation for fair democracy.
3. **Socio-Economic Equity:** The Delimitation Exercise enhances representation for marginalized communities and Scheduled Tribes. E.g. The J&K Delimitation Commission **allocated more seats to Jammu** to address past disparities.
4. **Strengthening of Federalism:** The Delimitation process ensures equitable representation among states, balancing national unity with regional autonomy. E.g. The **42nd Amendment's population freeze prevented southern states with lower population growth from losing representation**, thereby upholding the spirit of cooperative federalism, crucial for India's unity.
5. **Administrative Efficiency:** The Delimitation exercise ensures a manageable voter-to-representative ratio, aiding governance. E.g. **Mumbai and Bengaluru saw improved electoral administration post the 2002 exercise.**
6. **Electoral Integrity and Governance:** The Delimitation process aligns representation with new demographic realities, as seen in global examples like the **UK Boundary Commission.**

What are the concerns associated with Delimitation Exercise?

1. **Population vs. Development:** Southern states argue that delimitation based solely on population would penalize them for successful family planning and economic development. E.g. **Tamil Nadu's fertility rate is 1.6**, while **Bihar's is 3.0**. According to delimitation projections, if seats were allocated purely by population in an expanded Lok Sabha of approx. 888 members, UP would rise from 80 to 151 seats & Bihar from 40 to 82, while for TN it would increase from 39 to 53 & Kerala from 20 to just 23.
2. **Federalism at Risk:** States with low population growth may feel politically marginalized, leading to North-South divide concerns. There are concerns that the Delimitation Exercise can create federal Imbalance as states with better governance may feel punished for controlling population. E.g. **Sarkaria Commission (1983) warned against excessive centralization of power.**
3. **Manipulation:** There are concerns that political parties may influence constituency boundaries for electoral gains. E.g. **Allegations of bias in the J&K delimitation process (2022).**
4. **Delays and Political Resistance:** There are instances of increased political resistance as seen in the case of **Justice Kuldip Singh-led Commission (2002)** facing pushback from political parties unwilling to lose seats.

5. **Economic Disparities:** Southern states argue that **higher revenue generation** (GST collections, per capita income) should be factored into representation.

What Should be the Way Forward?

1. **Implement Expert Recommendations:** The following commissions have suggested the following reforms for ensuring federal balance and delimitation needs:
 - **Sarkaria Commission (1983):** Suggested a balanced approach between federalism and national unity.
 - **Punchhi Commission (2010):** Proposed equal weightage to population and governance needs.
2. **Ensure Transparency and Independent Oversight:** The Election Commission's autonomy should be strengthened to ensure fair delimitation process.
 - In **Kuldip Nayar v. Union of India (2006)**, SC emphasized the need for fair representation while balancing federal concerns.
 - In **TN Seshan v. Union of India (1995)**, SC highlighted the importance of an independent delimitation body.
3. **Constitutional and Legislative Reforms:** Amend **Articles 81 and 82** to ensure balanced regional representation and introduce proportional representation models used in Germany and Canada.
4. **Policy Suggestions:**
 - **Weighted Representation Model:** Adopt a weighted formula – 80% weight for population, 20% for development indicators such as literacy, health, or sustained fertility control – similar to how Finance Commission uses composite indicators for tax devolution.
 - **Independent Delimitation Commission:** Free from political interference.
 - **Phased Implementation:** A gradual transition to prevent political instability.

Conclusion: Delimitation is a delicate balance between democracy and federalism. While it ensures equal representation, challenges related to regional disparities, population dynamics, and governance issues must be addressed. The Supreme Court and Election Commission must play a proactive role in ensuring transparency and fairness. A balanced approach grounded in constitutional values, expert recommendations, and global best practices – is essential to uphold India's democratic and federal ethos.

Read more– [The Hindu](#)

UPSC Syllabus- GS 2– Issues and challenges pertaining to the federal structure

Geriatric Care – Explained Pointwise

The RBI has recently released a new report on the demographic transition happening in the country. The report links demographic change to the long-term sustainability of regional budgets & envisions graceful ageing of the elderly population.

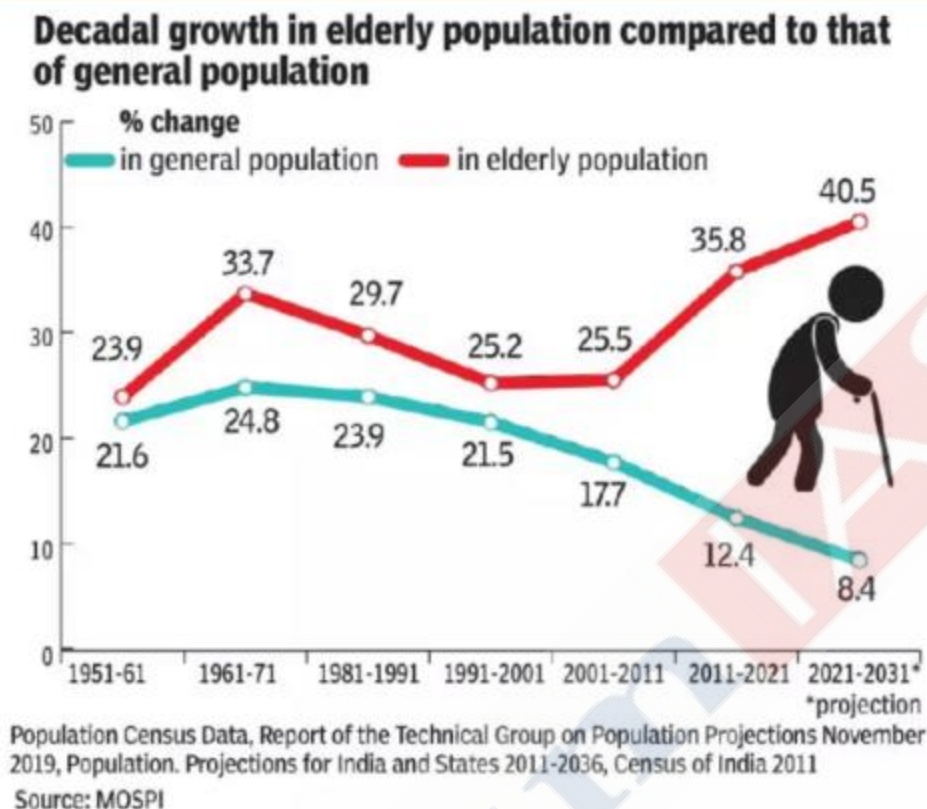
The **care for elderly population in India** is an emerging challenge with the rapid growth in the number of elderly population in India. With all the focus on demographic dividend, India is also witnessing a

silent rise in the elderly population in India. The need of the hour is to provide adequate care for the elderly population in India.



What is the Status of Elderly Population in India?

- The number of elderlies (persons above 60 years) is set to increase from **100 million in 2011** to **230 million in 2036**. By 2050, the elderly population is expected to constitute nearly **one-fifth of the total population**.
- Increase in the old age-dependence ratio: The old age-dependence ratio denotes the number of persons aged 60-plus per 100 persons in the age group of 15-59 years. According to the Ministry of Statistics and Programme Implementation's (MOSPI) '**Elderly in India 2021**' report, the old-age dependency ratio is increasing in India. The old age-dependence ratio has increased from **10.9% in 1961** to **14.2% in 2011**, to **15.7% in 2021** and is projected to increase to **20.1% in 2031** respectively.



Source- MOSPI

- **Inter-State Variation:** The demographic transition is also not even across the States. According to the RBI report, Kerala & TN will be “ageing States” by 2036 because their elderly populations will exceed 22% & 20% respectively. On the other hand, the working age populations of Bihar, UP, Jharkhand will continue to rise beyond 2031, Karnataka & Maharashtra occupy the middle ground – balancing growth with the onset of ageing pressure.

What is the need for taking care of the Elderly Population in India?

1. **Channelization of experience:** Elderly peoples carry an **immense personal and professional experience**. We need to channelize these experiences by taking care of the elderly population.
2. **Generational Link:** The elderly citizens provide a **vital generational link** for the upcoming generation, such as **providing support and stability to families and society at large**. For **ex-Grandparents in joint families** provide a **crucial link for transferring values and morals** to the younger generation.
3. **Social Harmony:** The deep cultural impressions and social experiences of the elderly population in India **provide the necessary buffer** against **intolerance, violence and hate crimes**.
4. **Moral and ethical responsibility:** It is the moral and ethical responsibility of the society to care for its people beyond their prime. This helps in **reciprocating their lifetime of physical, social, emotional, and economic investment** in the society.

What are the Challenges Faced by Elderly Population in India?

Social Challenges	<ol style="list-style-type: none"> 1. Social Neglect: Elderlies are increasingly being neglected by the younger generation due to various social reasons such as western education, globalisation, nuclear family structure. 2. Abuse of the elderly population: Elderlies in India face various forms of abuse such as physical, sexual, psychological or financial. They suffer from emotional harm that emerges from verbal or emotional abuse. 3. Intersection of Caste and Elderly: The lower caste elderly have to keep on working for livelihood even at old age due to financial issues. While for the upper caste elderlies, good jobs become less available and they hesitate to take menial jobs which creates a feeling of 'worthlessness' amongst them. 4. Feminisation of ageing: The life of elderly widows is riddled with stringent moral codes of the society. Social bias against elderly women results in unjust allocation of resources, neglect, abuse, exploitation, gender-based violence, lack of access to basic services and prevention of ownership of assets.
Economic and Financial Challenges	<ol style="list-style-type: none"> 1. Lack of Income & Poor financial status: According to PFRDA report on Financial Security of India's elderly, a large elderly population which remains outside the pension safety net. Furthermore, the pension provided to them remains very low for their proper sustenance. 2. Low funding by the government: India spends only about 1% of its gross domestic product on pensions. India's income support systems in their current form remain incapable of catering to the old age population. 3. Lack of housing and other basic amenities: The housing available to a majority of the senior citizens are sometimes inappropriate and unsuitable to their requirement.
Health Issues and Challenges	<ol style="list-style-type: none"> 1. Rise in age-related chronic illness: According to the Longitudinal Ageing Study of India (LASI) in 2021, One in five elderly persons in India has mental health issues and around 75 per cent of them suffer from a chronic disease. 2. Increasing need for geriatric care: Increased health-related expenses for the treatment of diseases like Non-Communicable diseases, cataract, hearing loss etc. creates financial problem for the elderly population.

What are the Government initiatives for elderly care in India?

National Policy for Older Persons 2011	The policy aims to encourage individuals to make provisions for their own and their spouse during old age, to bring non-governmental organizations for caring for older persons and to provide healthcare facilities to the elderly.
Indira Gandhi National Old Age Pension Scheme (IGNOAPS)	The scheme provide an old-age pension for persons above the age of 60 years belonging to the BPL category.
Rashtriya Vayoshri Yojana (RVY)	The scheme provides Physical Aids and Assisted-living Devices for Senior citizens belonging to the BPL category.
Pradhan Mantri Vaya Vandana Yojana	The scheme aims to provide social security during old age . It also protects elderly persons aged 60 and above against a future fall in their interest income due to uncertain market conditions.
Senior care Ageing Growth Engine (SAGE) Initiative and SAGE portal	It aims to help startups interested in providing services for elderly care.

What should be the Way Forward?

1. Formalization of caregiving economy:

- According to a NITI Aayog report, **healthcare offered at home can replace up to 65% of unnecessary hospital visits** and reduce hospital costs by 20%.
- Well-trained caregivers possessing empathetic outlook towards elderly need to be provided formal and better work place conditions.
- **Recognition of "home" as a place for providing care** and as a "place of work" for caregivers will be the first step towards elderly care.

2. Comprehensive policy on home based care: This policy must include within its ambit the **streamlining of vocational training, nomenclature, roles, and career progression of the caregivers**. It must also streamline the registry of caregivers, ensure transparency and accountability and establish grievance redressal mechanisms.

3. Strengthening pension systems: The government must allocate a special budget for the elderly population to strengthen the pension systems through better funding and coverage.

4. Replication of Switzerland's TIME BANK initiative: Under this initiative, **the younger generation start to save 'time' by taking care of senior citizens**. Later, they can use the saved 'time' when they get old, sick, or in need of someone to take care of them. This initiative must be applied to Indian setup.

5. Raising of retirement age: India should raise the retirement age in the future, in a phased manner so as not to jeopardize opportunities for younger generations.
6. Proactive government policies: The Government **should proactively work on lifestyle modification, non-communicable disease management, vision and hearing problem management, and accessible health care of the elderly population in India.**
7. Silver Economy: Encourage private sector investment in assisted living facilities (with strict quality control), elderly-friendly products, and services.
8. Rationalisation of subsidies: The RBI report recommends the ageing States to rationalize their subsidies to afford rising pension costs & youthful States to invest heavily in human capital.

Conclusion: For most of the India's elderly, the future looks less like 'graceful ageing' & more like financial dependency, unless the State drastically expands social pensions, because without a massive expansion of the public geriatric care, the 'graceful ageing' will be available only to the wealthy.

Read More: [The Hindu](#)

UPSC Syllabus- GS 2- Govt policies for vulnerable section

India-EU FTA – Explained Pointwise

The India-EU Free Trade Agreement (called the Bilateral Trade and Investment Agreement (BTIA)) has been under negotiation since 2007, with talks restarting in 2021 after a long pause. Now after almost 2 decades of negotiation, India & EU have finalized the FTA – which has been referred to as the 'Mother of All Deals'.

What are the important provisions of India-EU FTA?

1. Trade in Goods & Tariffs:

- EU Access for India: The EU will eliminate tariffs on over 99% of Indian exports by value. This is a massive boost for labor-intensive sectors like textiles, apparel, leather, gems and jewellery, and marine products, which will now enter the EU duty-free.
- Indian Access for EU: India will eliminate or reduce tariffs on roughly 92-97% of EU goods.
 - Automobiles: Duties on luxury EU cars (above €15,000) will drop from 110% to 10% over five years under a quota system (250,000 vehicles/year).
 - Alcohol: Tariffs on premium wines will be cut from 150% to 20%, and spirits to 40%.
 - Machinery & Chemicals: Duties of up to 44% on machinery and 22% on chemicals will be mostly eliminated.

2. Services and Professional Mobility:

- Market Access: India secured access to 144 EU services sub-sectors (including IT, finance, and education), while India opened 102 sub-sectors to the EU.
- Professional Mobility: The FTA provides a predictable framework for business travelers, intra-corporate transferees, and independent professionals.
- Students: A new framework guarantees post-study work rights (up to 9 months) and eases the path for Indian students to study in the EU.

- **Social Security:** Both sides agreed to work toward a Social Security Agreement within five years to ensure Indian professionals don't lose their pension contributions while working in the EU.
- 3. Sustainability and Climate:**
 - **CBAM (Carbon Border Adjustment Mechanism):** India secured "Most Favored Nation" (MFN) assurance. While not fully exempt, India will receive technical cooperation and financial assistance (€500 million) to help industries like steel and aluminum reduce their carbon footprint.
 - **Labor Rights:** Both parties committed to core International Labour Organization (ILO) principles, including the abolition of child labor and non-discrimination at work.
- 4. Intellectual Property (IPR) & Technology:**
 - **Traditional Knowledge:** The EU has formally recognized India's Traditional Knowledge Digital Library (TKDL), protecting Indian heritage (like Yoga or Ayurveda) from being patented by foreign firms.
 - **Tech Cooperation:** The deal goes beyond trade to include collaboration on Artificial Intelligence (AI), semiconductors, and clean energy.
- 5. Sensitive Sector Safeguards:**
 - **Agriculture & Dairy:** To protect small-scale farmers, India has completely excluded sensitive items like dairy, wheat, rice, and sugar from liberalization.
 - **Geographical Indications (GIs):** A separate agreement is being finalized to protect iconic products (like Darjeeling Tea or Champagne) from imitations.

• WHO GAINS WHAT, WHAT NEXT



FOR INDIA

	Before FTA	After FTA
Marine sector	upto 26%	0%
Chemical	upto 12.8%	0%
Leather & footwear	upto 17%	0%
Plastic & rubber	upto 6.5%	0%
Textile & apparel	upto 12%	0%
Base metal	upto 10%	0%
Gems & jewellery	upto 4%	0%
Railway, aircraft, ships	upto 7.7%	0%
Furniture & light consumer goods	upto 10.5%	0%
Toys	upto 4.7%	0%
Sports goods	upto 4.7%	0%

FOR EU

	Before FTA	After FTA
Motor vehicles	110%	10% (quota of 250k/yr)
Wine	150%	20% (premium); 30% (medium)
Spirits	up to 150%	40%
Beer	110%	50%
Olive Oil	up to 45%	0%
Kiwis & pears	33%	10% (in-quota)
Machinery & electrical equipment	up to 44%	0% for most products
Aircraft & spacecraft	up to 11%	0% for most items
Iron and steel	up to 22%	0% for most items
Pharma	11%	0% for most items
Processed food (bread, biscuit, pasta, chocolate, pet-food)	up to 50%	0%

- India's labour-intensive annual exports worth \$35 billion benefit immediately
- Signing of the deal expected later this year
- Legal scrubbing to take 4-5 months

- Deal expected to come into effect by early next year
- India will receive same flexibility as US on EU's carbon tax



SOURCE: COMMERCE & INDUSTRY MINISTRY, EUROPEAN UNION

Source: The Indian Express

How does it benefit India?

- 1. Boost to Exports & Economic Growth:** India would gain greater and more predictable market access for its competitive export sectors. This includes:
 - **Textiles and Apparel:** Reduced EU tariffs (currently up to 9-12%) would make Indian garments, home textiles, etc., more competitive against rivals like Bangladesh and Vietnam (who already enjoy duty-free access to the EU under Everything But Arms/EBA scheme).
 - **Agriculture & Processed Foods:** Products like basmati rice, mangoes, grapes, spices, and seafood could see higher exports with simplified regulations and recognition of India's Geographical Indications (GIs).

- Services: Major gains for IT/ITeS, business services, engineering, and R&D. Easier cross-border data flow provisions would be a huge boost.
 - Overall, 6% of India's exports will see tariff reduction – mostly sourced from the labour-intensive sectors – which will help in improving the trade competitiveness of Indian products in the EU market.
- 2. Movement of Skilled Professionals:**
- The FTA will help Indian professionals (engineers, IT experts, consultants, nurses, chefs) to get easier & quota-based temporary work visas & permits.
 - Mutual Recognition Agreements (MRAs) for professional qualifications (e.g., degrees, certifications for accountants, architects). This would allow Indian professionals to work in the EU without retraining.
 - This helps India leverage its demographic dividend, secure high-value remittances, and reduce friction in a traditionally restrictive area for the EU.
- 3. Attracting FDI:** The agreement would boost the investor confidence, encouraging EU companies to set up more manufacturing and R&D hubs in India to serve both the Indian and wider Asian markets ("China+1" strategy). This aligns with Make in India and can create jobs and facilitate technology transfer.
- 4. Consumer Benefits:** Indian consumers and industries would get access to high-quality EU goods at lower prices due to tariff reductions.
- 5. Technology Transfer & Upgradation:** Increased competition and collaboration would push Indian industry to improve quality and innovation. Partnerships in green tech, renewable energy, and digital infrastructure (areas where the EU is a leader) could accelerate India's sustainable development goals.
- 6. Recognition of Indian Heritage:** The EU has officially recognized India's Traditional Knowledge Digital Library (TKDL). This prevents foreign companies from "biopiracy" – patenting traditional Indian assets like Yoga, Neem, or Ayurveda – and ensures these remain protected Indian intellectual property.

How does it benefit EU?

- 1. Access to a Massive, Fast-Growing Consumer Market:** India, with its 1.4 billion people and a rapidly growing middle class, represents one of the world's last untapped large consumer markets. The EU seeks guaranteed, preferential access for its premium goods -especially in sectors like – Automobile & Auto parts, Wines & Spirits, Cheese & Dairy, Machinery, Chemicals etc.
- 2. Countering China's Influence (China-Plus-One):** The EU has a clear "de-risking" and diversification strategy. Deepening ties with democratic India is a geopolitical imperative to reduce economic over-dependence on China and build a reliable strategic partner in the Indo-Pacific.
- 3. Access to Raw Materials & Intermediates:** Reliable access to Indian materials and processed goods (like generic pharmaceutical ingredients, textiles, leather) is crucial for EU industries.
- 4. Boosting EU's Services & Digital Trade:**
 - Financial, Legal, and Business Services: EU banks, insurance companies, and professional service firms seek better access to India's vast and protected services market.
 - Digital Trade: New rules protect software source code from mandatory disclosure and establish high standards for data privacy, providing legal certainty for EU tech firms.

5. **Sustainability Standards:** By including chapters on climate (aligned with the Paris Agreement) and labor rights, the EU ensures that its trade with India adheres to the high environmental and ethical standards demanded by European voters.

What are the challenges that remain?

1. **India's Demands on Agri & Textiles:** India wants greater access for its textiles, garments, and agricultural products (like rice, fruits, shrimp). The EU resists due to sensitive domestic producers (e.g., textile makers in Italy/Portugal, farmers in France/Poland) and non-tariff barriers like stringent Sanitary and Phytosanitary (SPS) measures.
2. **Non-Tariff Barriers:** For Indian exporters, the biggest challenge isn't the tariff anymore; it's the Non-Tariff Barriers like:
 - a. **CBAM (Carbon Tax):** The EU's Carbon Border Adjustment Mechanism is set to enter its full definitive phase. Even with the FTA, Indian steel and aluminum exporters may still have to pay a "carbon cost" or face 15-22% price cuts to stay competitive unless they drastically green their production.
 - b. **EUDR (Deforestation Regulation):** New EU rules (phasing in through late 2026) require proof that products like coffee, rubber, and leather did not come from deforested land. This is incredibly difficult for India's millions of small-scale farmers to document.
 - c. **SPS Norms:** The EU has some of the world's strictest Sanitary and Phytosanitary rules. Many Indian agri-products often face rejection due to pesticide residue levels that are acceptable in India but banned in the EU.
3. **Data Privacy and Digital Friction:** While there is alignment between India's DPDP Act (2023) and the EU's GDPR, full "data adequacy" has not yet been granted. Without a formal "adequacy status" from the EU, Indian IT firms still face a "compliance tax"—expensive legal and technical hurdles to move and process European data in Indian servers.
4. **Ratification Hurdles:** The agreement must be ratified by the European Parliament. Some EU nations with strong agricultural lobbies (like France) may still raise objections to specific provisions, even though sensitive items like beef and sugar were excluded.

UPSC GS-3: Indian Economy
Read More: [The Indian Express](#)

HIGHLIGHTS: ECONOMIC SURVEY 2025-26

HIGHLIGHTS: ECONOMIC SURVEY 2025-26

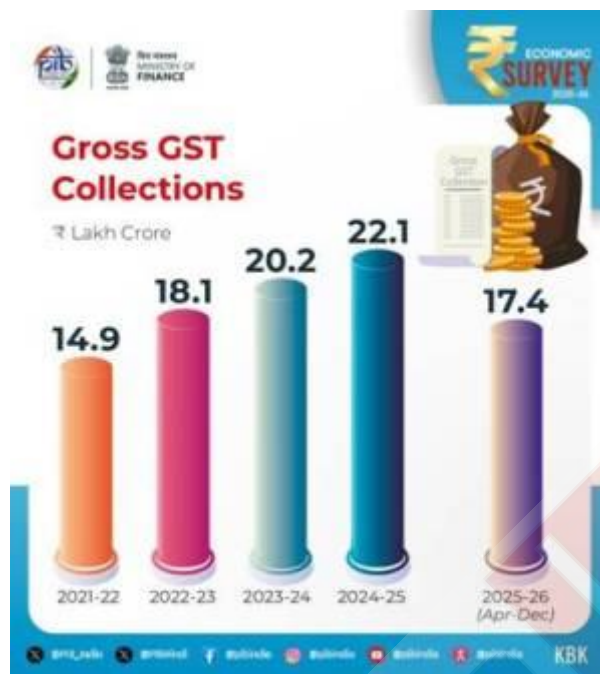
STATE OF THE ECONOMY



Source – PIB

1. The global environment remains fragile, with growth holding up better than expected but risks elevated amid intensifying geopolitical tensions, trade fragmentation and financial vulnerabilities. The impact of these shocks may still surface with a lag.
2. Against this backdrop, India's performance stands out. The First Advance Estimates place FY26 real GDP growth at 7.4 per cent and GVA growth at 7.3 per cent, reaffirming India's status as the fastest-growing major economy for the fourth consecutive year.
3. Private Final Consumption Expenditure grew by 7.0 per cent in FY26, reaching 61.5 per cent of GDP, the highest since 2012 (FY23 also recorded 61.5 per cent share). This growth is supported by low inflation, stable employment, and increasing real purchasing power. Strong agricultural performance has bolstered rural consumption, while improvements in urban consumption, aided by tax rationalization, indicate broad-based demand momentum.
4. Investment activity strengthened in FY26, with Gross Fixed Capital Formation growing by 7.8 per cent and its share remaining steady at 30 per cent of GDP. This momentum was buoyed by sustained public capital expenditure and a revival in private investment activity, as evident from corporate announcements.
5. On the supply side, services remain the main driver of growth. In the first half of FY26, the Gross Value Added (GVA) for services increased by 9.3 per cent, with an estimated 9.1 per cent growth for the entire fiscal year. This trend indicates a broad-based expansion across the sector.

FISCAL DEVELOPMENTS: ANCHORING STABILITY THROUGH CREDIBLE CONSOLIDATION



Source – PIB

1. The government's prudent fiscal management has strengthened credibility and reinforced confidence in India's macroeconomic and fiscal framework. This led to three sovereign credit rating upgrades in 2025 – by Morningstar DBRS, S&P Global Ratings, and Rating and Investment Information (R&I), Inc.
2. Centre's revenue receipts strengthened from an average of about 8.5 per cent of GDP in FY16–FY20 to 9.2% of GDP in FY25 (PA). This improvement was driven by buoyant non-corporate tax collections, which rose from about 2.4 per cent of GDP pre-pandemic to around 3.3 per cent post-pandemic.
3. The direct tax base expanded steadily, with income tax returns filed increasing from 6.9 crore in FY22 to 9.2 crore in FY25. Higher return filings reflect improved compliance, greater use of technology in tax administration, and a growing number of individuals entering the tax net as their incomes rise.
4. Gross GST collections during April–December 2025 stood at ₹17.4 lakh crore, registering a year-on-year growth of 6.7 per cent. GST revenue growth is broadly aligned with prevailing nominal GDP growth conditions. In parallel, high-frequency indicators suggest robust transaction volumes, with cumulative e-way bill volumes during April–December 2025 growing by 21 per cent YoY.
5. The effective capital expenditure of the Central government rose from an average of 2.7 per cent of GDP in the pre-pandemic period to about 3.9 per cent post-pandemic, and to a higher 4 per cent of GDP in FY25.
6. Through Special Assistance to States for Capital Expenditure (SASCI), the Centre has incentivised States to maintain capital spending at around 2.4 per cent of GDP in FY25.
7. The combined fiscal deficit of State Governments stayed broadly stable at around 2.8 per cent of GDP in the post-pandemic period, similar to pre-pandemic levels, but has edged up in recent years to 3.2 per cent in FY25, reflecting emerging pressures on State finances.

8. India reduced its general government debt-to-GDP ratio by about 7.1 percentage points since 2020, even while maintaining high public investment.

MONETARY MANAGEMENT AND FINANCIAL INTERMEDIATION: REFINING THE REGULATORY TOUCH

Monetary aspects

1. India's monetary and financial sectors have exhibited robust performance in FY26 (April-December 2025), underpinned by strategic policy actions and structural resilience across financial intermediation channels.

Banking sector performance

1. A significant improvement has been observed in the asset quality of scheduled commercial banks (SCBs), as evidenced by their GNPA ratio standing at 2.2% in September 2025 and net NPA ratio at 0.5% in September 2025, having reached a multi-decadal low level and record low level, respectively.
2. As of 31 December 2025, the year-on-year growth in outstanding credit by SCBs increased to 14.5 per cent compared to 11.2 per cent in December 2024.

Financial inclusion

1. The Pradhan Mantri Jan Dhan Yojana (PMJDY), launched in 2014, has opened 55.02 crore accounts as of March 2025, with 36.63 crore in rural and semi-urban areas, establishing foundational savings and transaction infrastructure for previously unbanked populations.
2. The Stand-Up India Scheme offers bank loans ranging from ₹10 lakh to ₹1 crore to SC, ST, and women entrepreneurs for establishing greenfield enterprises.
3. The PM Street Vendor's Aatmanirbhar Nidhi (PM SVANidhi) scheme is providing collateral-free working capital loans to street vendors.
4. The Pradhan Mantri Mudra Yojana (PMMY) is financing micro and small enterprises in manufacturing, trading, services, and allied agricultural activities. By October 2025, the scheme had disbursed over ₹36.18 lakh crore across 55.45 crore loan accounts.

Other aspects of the financial sector

1. During FY26 (till December 2025), 235 lakh of demat accounts were added, pushing the total count beyond 21.6 crore. A key milestone was the crossing of the 12-crore mark for unique investors in September 2025, with nearly a fourth of them being women.
2. The mutual fund industry also expanded, with 5.9 crore unique investors as of the end of December 2025, of which 3.5 crore (as of November 2025) were from non-tier-I and tier-II cities, underscoring the diffusion of financial participation beyond traditional urban centres.
3. India's first international financial services centre at GIFT City is creating an enabling ecosystem to attract and channel global capital.

Outlook for the sector

1. The systemic rise in regulatory quality has received international validation through the Financial Sector Assessment Program (FSAP) conducted jointly by the IMF and World Bank in 2025. Both reports noted an increasingly resilient, diversified, and inclusive financial system, with total financial sector assets at nearly 187 per cent of GDP in CY 2024 and capital markets

expanding from 144 per cent of GDP in CY 2017 to 175 per cent in CY 2024. The assessments found that banks and NBFCs possess adequate capital buffers even under severe stress scenarios.

EXTERNAL SECTOR: PLAYING THE LONG GAME



Figure 1. Source – PIB

merchandise exports.

5. Services exports touched an all-time high of USD 387.6 billion in FY25, growing by 13.6 per cent, reinforcing India's position as a global hub for technology and business services.
6. India's current account deficit remained moderate, supported by strong net inflows from services exports and remittances that offset the merchandise trade deficit. In Q2 FY26, India's CAD, at around 1.3 per cent of GDP, compared favourably with several other major economies.
7. India remained the world's largest recipient of remittances, with inflows reaching USD 135.4 billion in FY25, supporting stability in the external account. The share of remittances from advanced economies increased, reflecting a growing contribution from skilled and professional workers.
8. India's foreign exchange reserves increased to USD 701.4 billion as of 16 January 2026, providing import cover of about 11 months and covering over 94 per cent of external debt, thereby strengthening resilience against external volatility.
9. Amid a subdued global investment environment, India continued to attract substantial foreign direct investment, with gross FDI inflows reaching USD 64.7 billion during April-November 2025.
10. India ranked fourth globally in Greenfield investment announcements in 2024, with over 1,000 projects and emerged as the largest destination for Greenfield digital investments between 2020-24.

1. Between CY 2005 & CY 2024, India's share of global merchandise exports nearly doubled from 1 per cent to 1.8 per cent, while its share of global commercial services exports more than doubled from 2 per cent to 4.3 per cent.

2. According to UNCTAD's Trade and Development Report 2025, India ranked among the leading economies in trade partner diversification, ranking third in the Global South and recording a trade diversity score higher than all Global North economies.

3. India's total exports reached a record USD 825.3 billion in FY25, registering a 6.1 per cent year-on-year growth, driven primarily by robust growth in services exports.

4. Non-petroleum exports reached a historic high of USD 374.3 billion in FY25, while non-petroleum, non-gems and jewellery exports constituted nearly four-fifths of aggregate

INFLATION: TAMED AND ANCHORED

1. India recorded the lowest inflation rate since the beginning of the CPI series, with April-Dec '25 average headline inflation coming in at 1.7%. The moderation in retail inflation can primarily be attributed to the general disinflationary trend in food and fuel prices, which together account for 52.7 per cent of India's Consumer Price Index (CPI) basket.
2. Notably, among major Emerging Markets & Developing Economies (EMDEs), India has recorded one of the sharpest declines in headline inflation in 2025 over 2024, amounting to about 1.8 percentage points.

AGRICULTURE AND FOOD MANAGEMENT

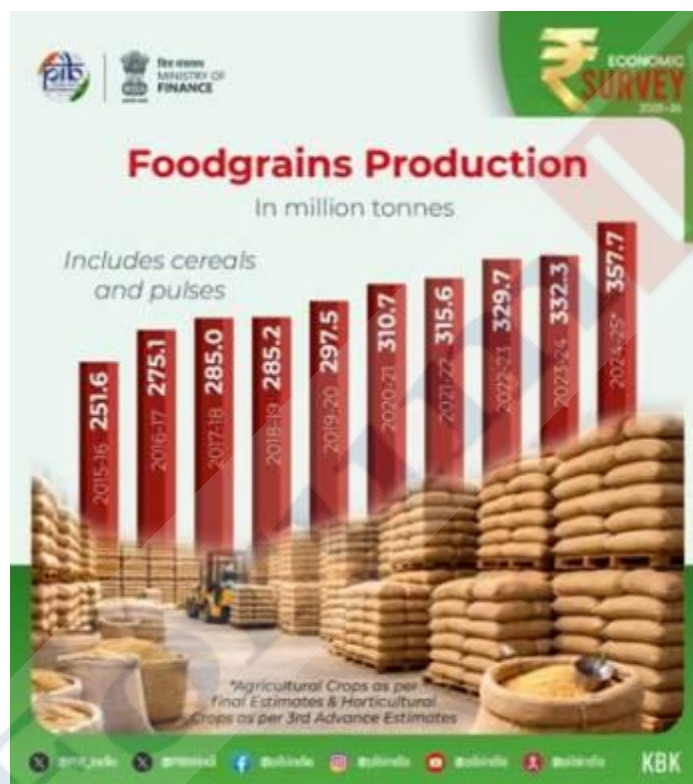


Figure 2. Source – PIB

1. Between FY15 and FY24, the livestock sector witnessed strong growth, with GVA rising by nearly 195 per cent. The fisheries sector has also performed well, with fish production increasing by more than 140 per cent during 2014-2024, compared to the increase from 2004-14.
2. With a good monsoon season, India's foodgrain production is estimated to have reached 3,577.3 lakh metric tonnes (LMT) in Agriculture Year (AY) 2024-25, an increase of 254.3 LMT over the previous year. This growth has been driven by higher output of rice, wheat, maize and coarse cereals (Shree Anna).
3. Despite rising foodgrain output, horticulture, accounting for about 33 per cent of agricultural GVA, has emerged as a key driver of agricultural growth. In 2024-25, horticulture production

reached 362.08 million tonnes (MT), surpassing the estimated food grain production of 357.73 MT.

4. To improve efficiency in agricultural marketing and infrastructure, the Government is implementing the Agriculture Marketing Infrastructure (AMI) sub-scheme under ISAM and the Agriculture Infrastructure Fund (AIF) to strengthen farm-gate facilities and encourage private sector participation. Price discovery has been enhanced through the e-NAM Scheme, which, as of 31 December 2025, has onboarded about 1.79 crore farmers, 2.72 crore traders and 4,698 FPOs, covering 1,522 mandis across 23 States and 4 UTs.
5. Farmers' incomes are supported through assured MSP for mandated crops and PM-KISAN income transfers. In addition, the PM Kisan Maandhan Yojana (PMKMY) provides pension support, strengthening farmers' income security and social protection. Since its inception, under PM-KISAN, more than ₹4.09 lakh crore has been released to eligible farmers in 21 instalments. Under PMKMY, 24.92 lakh farmers are enrolled as of 31 December 2025.

SERVICES: FROM STABILITY TO NEW FRONTIERS

1. Services' share in GDP rose to 53.6 per cent in H1 FY26; Services' share in GVA stood at the highest ever – 56.4 per cent – as per FAE of FY26 which shows the rising weight of modern, tradable and digitally delivered services.
2. India is the world's seventh-largest exporter of services, with its share in global services trade more than doubling from 2 per cent in 2005 to 4.3 per cent in 2024.
3. The services sector continues to be the largest recipient of foreign direct investment inflows, accounting for an average of 80.2 per cent of total FDI during FY23-FY25, up from 77.7 per cent in the pre-pandemic period (FY16-FY20).

INDUSTRY'S NEXT LEAP: STRUCTURAL TRANSFORMATION AND GLOBAL INTEGRATION

1. Industrial activity strengthened in FY26, with Industry GVA growing 7.0% (real terms) in H1, despite subdued and persistent global headwinds.
2. Manufacturing growth accelerated, with GVA expanding 7.72% in Q1 and 9.13% in Q2 FY26, reflecting structural recovery.
3. Production Linked Incentive (PLI) Schemes across 14 sectors have attracted over ₹2.0 lakh crore of actual investment, generating incremental production/sales exceeding ₹18.7 lakh crore and over 12.6 lakh jobs as of September 2025.
4. India's innovation performance has strengthened steadily, with its Global Innovation Index rank improving to 38th in 2025 from 66th in 2019.
5. The India Semiconductor Mission has advanced domestic capabilities, with 10 semiconductor manufacturing and packaging projects approved across 6 States, involving about ₹1.60 lakh crore of investment.

INVESTMENT AND INFRASTRUCTURE: STRENGTHENING CONNECTIVITY, CAPACITY AND COMPETITIVENESS

1. The Government of India's capital expenditure has increased nearly 4.2 times, from ₹2.63 lakh crore in FY18 to ₹11.21 lakh crore in FY26 (BE), while effective capital expenditure in FY26 (BE) is ₹15.48 lakh crore, positioning infrastructure as a key growth driver.
2. National highway infrastructure expanded substantially, with the NH network growing by about 60 per cent from 91,287 km (FY14) to 1,46,572 km (FY26, up to December), and

operational High-Speed Corridors increasing nearly ten-fold—from 550 km (FY14) to 5,364 km (FY26, up to December).

3. Railway infrastructure continued to expand, with the rail network reaching 69,439 route km as of March 2025, a targeted addition of 3,500 km in FY26, and 99.1 per cent electrification achieved by October 2025.
4. India has emerged as the world's third-largest domestic aviation market, with the number of airports increasing from 74 in 2014 to 164 in 2025.
5. The power sector recorded sustained capacity expansion, with installed capacity rising 11.6 per cent (y-o-y) to 509.74 GW as of November 2025, and the demand-supply gap declined from 4.2 per cent in FY14 to nil by November 2025
6. Power sector reforms delivered a historic turnaround, with DISCOMs recording a positive Profit after Tax (PAT) of ₹2,701 crore in FY25 for the first time, alongside a reduction in AT&C losses from 22.62 per cent (FY14) to 15.04 per cent (FY25). Renewable energy constitutes around 49.83 per cent of total power generation capacity as of November 2025, with India ranking third globally in overall RE and installed solar capacity.
7. Tele-density reached 86.76 per cent, and 5G services are now available in 99.9 per cent of districts in the country.
8. Over 81 per cent of rural households have access to clean tap water under the Jal Jeevan Mission, as of October 2025.
9. Space infrastructure strengthened, with India becoming the fourth nation to achieve autonomous satellite docking (SpaDeX), alongside expanded indigenous missions and increased private-sector participation.

ENVIRONMENT AND CLIMATE CHANGE: BUILDING A RESILIENT, COMPETITIVE AND DEVELOPMENT-DRIVEN INDIA

1. During 2025-26 (up to 31st December 2025), a total of 38.61 GW of renewable energy capacity has been installed in the country, which includes 30.16 GW of solar power, 4.47 GW of wind power, 0.03 GW of Bio-Power and 3.24 GW of hydro power

EDUCATION AND HEALTH: WHAT WORKS AND WHAT'S NEXT

1. India today operates one of the world's largest school systems, serving 24.69 crore students across 14.71 lakh schools, supported by over 1.01 crore teachers (UDISE+ 2024-25).
2. India has made notable gains in school enrolment by strengthening infrastructure and teacher capacity, with schemes like Poshan Shakti Nirman and Samagra Shiksha Abhiyan promoting access and equity. Gross Enrolment Ratio (GER) are 90.9 at the primary stage (Grade I to V), 90.3 at the upper primary (Grade VI to VIII), 78.7 at the secondary stage (Grade IX and X) and 58.4 at the higher secondary stage (Grade XI and XII).

Higher education

1. The number of higher education institutions (HEIs) has increased from 51,534 in 2014-15 to 70,018 as of June 2025, significantly improving access. This increase is marked by substantial growth in universities and colleges. The number of premier higher education institutions (HEIs) has expanded significantly between 2014-15 and 2024-25. It now stands at 23 IITs, 21 IIMs, and 20 AIIMS, alongside the establishment of two international IIT campuses in Zanzibar and Abu Dhabi.

2. Under the NEP, the higher education system has undergone several reforms.
 - a. The National Credit Framework (NCrF), which aims to blend academic and skills-based learning, has been adopted by 170 universities.
 - b. The Academic Bank of Credit covers 2660 institutions, with over 4.6 crore IDs issued, including the generation of 2.2 crore APAAR (Automated Permanent Academic Account Registry) IDs with credits.
 - c. 153 universities have introduced flexible entry-exit pathways and biannual admissions to achieve the NEP target of 50 per cent GER by 2035.

Health

1. Since 1990, India has reduced its maternal mortality rate (MMR) by 86 per cent, far exceeding the global average of 48 per cent. A 78 per cent decline in the under-five mortality rate (U5MR) was achieved, surpassing the global reduction of 61 per cent and a 70 per cent decline in the neonatal mortality rate (NMR) compared to 54 per cent globally during 1990-2023.
2. The infant mortality rate (IMR) marked a drop of more than 37 per cent over the past decade, declining from 40 deaths per thousand live births in 2013 to 25 in 2023.

EMPLOYMENT AND SKILL DEVELOPMENT: GETTING SKILLING RIGHT

1. A total of 56.2 crore people (aged 15 years and above) were employed in Q2 FY26, reflecting a creation of around 8.7 lakh new jobs in Q2 compared to Q1 of FY26.
2. The Annual Survey of Industries (ASI), which covers the organised manufacturing sector, results for FY24 highlight the manufacturing sector's resilience, showing a 6 per cent YoY increase in employment over the previous year. This translates to an addition of over 10 lakh jobs in FY24 compared to FY23.
3. The Labour Codes have formally recognised gig and platform workers, expanding social security, welfare funds, and benefit portability.
4. As of January 2026, the e-Shram portal has successfully registered over 31 crore unorganised workers; women account for over 54 per cent of total registrants, substantially strengthening the reach of gender-focused welfare schemes.
5. The National Career Service (NCS) is a one-stop solution connecting job seekers, employers, training providers with over 59 million registered job seekers and 5.3 million job providers across diverse sectors and mobilising approximately 80 million vacancies.

Skill ecosystem

1. The National Scheme for Upgradation of ITIs proposes to upgrade 1,000 government ITIs, including 200 hub ITIs and 800 spoke ITIs, through smart classrooms, modern labs, digital content, and industry-aligned long- and short-term courses.

RURAL DEVELOPMENT AND SOCIAL PROGRESS: FROM PARTICIPATION TO PARTNERSHIPS

1. The World Bank has raised the poverty line from USD 2.15 to USD 3.00 a day, adjusted for the purchasing power of money to 2021 prices. According to the revised IPL, India's poverty rates in 2022-23 were 5.3 per cent for extreme poverty and 23.9 per cent for lower-middle-income poverty.

2. The general government's social services expenditure (SSE) has shown a rising trend since FY22.
3. The SSE stands at 7.9% of GDP in FY 2025-26 (BE) against 7.7% in 2024-25 (RE) and 7% in 2023-24.

Health of the rural economy

1. As of December 2025, the drone survey under SVAMITVA has been completed in 3.28 lakh villages, against a target of nearly 3.44 lakh villages notified for drone survey. 2.76 crore property cards have been prepared for nearly 1.82 lakh villages. Lead Fertiliser Companies distributed 1,094 drones to SHG Drone Didis in 2023-24 using their own resources, with 500 of these drones provided under the Namo Drone Didi Scheme.

EVOLUTION OF THE AI ECOSYSTEM IN INDIA: THE WAY FORWARD

Smaller, task-specific models deployed across sectors allow innovation to diffuse more evenly, reduce entry barriers for firms, and better fit the diversity of India's economic landscape. India's demand for AI is emerging from real-world problems rather than speculative frontier uses. Across healthcare, agriculture, urban management, education, disaster preparedness, and public administration, there is a growing appetite for AI systems that work on local hardware and operate in low-resource settings.

URBANISATION: MAKING INDIA'S CITIES WORK FOR ITS CITIZENS

The Namo Bharat Regional Rapid Transit System illustrates how high-speed regional connectivity can reshape urban and peri-urban labour markets. By sharply reducing travel times between cities and their surrounding regions, such systems expand access to jobs, support polycentric growth, and ease pressure on core metropolitan areas.

FROM IMPORT SUBSTITUTION TO STRATEGIC RESILIENCE AND STRATEGIC INDISPENSABILITY

1. 'Swadeshi' must be a disciplined strategy, as not all import substitution is either feasible or desirable, a disciplined approach to indigenisation is presented through a three-tiered framework that distinguishes critical vulnerabilities with high strategic urgency, economically feasible capabilities with strategic payoffs, and low strategic urgency or high-cost substitution.
2. A National Input Cost Reduction Strategy that treats competitiveness as infrastructure, recognising affordable and reliable inputs.
3. A progression from 'Swadeshi' to Strategic Resilience to Strategic Indispensability, in which intelligent import substitution invests in national strength and ultimately embeds India in global systems, so that the world moves from "thinking about buying Indian" to "buying Indian without thinking."

Public Health Sector- Significance and Challenges- Explained Pointwise

India's public health system struggles with chronic underfunding, privatization, policy failure, and social inequalities. At the same time, the risk factors for disease are steadily rising due to policy gaps & systemic policy failures. The consumption of ultra-processed foods is driving an epidemic of non-communicable diseases, while unchecked air, water, and soil pollution, along with climate change are pushing millions into poverty. In this scenario, the role of public healthcare becomes even more important.

In this article, we will look at what constitutes a public health and the public health sector in India. We

will look at the challenges faced by the public health sector in India. We will also look at the significance of a robust public health sector in India and the ways to achieve it.



Source- WHO

What constitutes Public Health? What is the structure of public health sector in India?

Public Health: According to WHO, “Public health refers to all **organized measures** to **prevent disease, promote health**, and **prolong life** among the population as a whole. Its activities aim to **provide conditions** in which people can be **healthy** and **focus on entire populations**, not on individual patients or diseases.”

Categorisation of Public Health: Public health needs can be broadly categorised into three groups.

Protection against Diseases of Poverty faced by the Poor and Vulnerable	It includes diseases such as tuberculosis, malaria, undernutrition, maternal death , bouts of illnesses due to food and water-borne infections leading to typhoid, hepatitis, and diarrhoeal diseases . These are faced by the poor and the vulnerable.
Protection against Environmental issue related diseases faced by the Middle Class	It includes air, water, waste management, lack of drainage facility, failure to ensure healthy foods and eateries, road traffic accidents, climate change and the rise of chronic illnesses .
Curative Public healthcare	Curative care needs of a population are the most popular needs in public health. Provisioning of curative care is the most critical and controversial policy question in public health.

Levels of Public Health Sector in India:

Primary Healthcare	<p>India's primary health sector consists of sub-centers (SCs) and primary health centres (PHCs), which form the foundation of the public healthcare system.</p> <p>Sub-centers: These are the most peripheral units, serving populations of 5,000 in plain areas and 3,000 in hilly/tribal areas.</p> <p>Primary Health Centers: These are the first point of contact with a qualified doctor, serving populations of 20,000-30,000. Each PHC is expected to have 4-6 beds and provide promotive, preventive, curative and rehabilitative care.</p> <p>The poor and the vulnerable rely on primary healthcare institutions of the public sector for primary-level care. It is the most affordable public health service and is closer to their places of residence.</p>
Secondary Healthcare	<p>The secondary health sector in India consists of Community Health Centers (CHCs), which serve as referral units for PHCs.</p> <p>CHCs are 30-bed hospitals providing specialist care in medicine, surgery, obstetrics & gynaecology, and paediatrics. There is one CHC for every 80,000-120,000 population in plain areas and 40,000-60,000 population in hilly/tribal areas.</p>
Tertiary Healthcare	<p>The tertiary health sector consists of district hospitals, medical college hospitals, and other highly specialized facilities.</p> <p>District Hospitals are 100-300 bed facilities providing specialist care, located at the district level.</p> <p>Medical College Hospitals are tertiary care teaching institutions, located in state capitals and major cities.</p> <p>Specialized Tertiary Healthcare Facilities: These include regional cancer centres, mental health institutes, trauma centres, and other super-speciality hospitals.</p> <p>The tertiary sector provides highly specialized care and acts as a referral point for the secondary and primary levels of the health system.</p>

What are the Government initiatives that have been launched for the development of Public Health Sector in India?

National Rural Health Mission (NRHM) and National Health Mission (NHM)	The NHM and NRHM have focused on strengthening public sector healthcare through architectural correction . Efforts have been undertaken to follow the principles of primary health by strengthening the primary healthcare institutions under these missions. These have led to the development of 1,53,655 sub centres , 25,308 primary health centres (PHC) and 5,396 community health centres (CHC) as per the rural health statistics, 2015.
Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)	It is a publicly funded health insurance scheme (PFHI) that provides financial protection to over 100 million families for secondary and tertiary care hospitalization.
Health and Wellness Centers (HWCs)	The government is working towards transforming primary health centres into HWCs to provide comprehensive primary healthcare services, including preventive and promotive care .
Pradhan Mantri Swasthya Suraksha Yojana	PMSSY aims to enhance tertiary care capacities and strengthen medical education in the country by setting up new AIIMS (All India Institutes of Medical Sciences) institutions and upgrading existing government medical colleges .
Jan Aushadhi Scheme	The Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) aims to provide quality generic medicines at affordable prices through Jan Aushadhi Kendras.
National Digital Health Mission (NDHM)	NDHM aims to create a digital health ecosystem , including health IDs for citizens and the establishment of a national digital health infrastructure.

What are the existing challenges in the public health sector in India?

- 1. Inadequate Access to Healthcare:** Inadequate access to basic healthcare services remains a critical public health issue, particularly in rural and underserved areas. For ex- **Shortage of health Infrastructure** and **health professionals** (shortage of around 600,000 doctors).
- 2. Myopic focus on short-term results:** There has been focus on promotion of initiatives that promise immediate results, such as **opening new hospitals, subsidised treatments, and populist health policies**.

The **neglect** of the **holistic development of primary and secondary healthcare capabilities** has led to deterioration of public health sector in India.

3. Low Healthcare expenditure by the Govt:

- The **government** (Centre and states put together) spends about **1.9% of the GDP**. This is extremely low when compared to other government health expenditure in countries like **China (3%)**, **Thailand (2.7%)**, **Vietnam (2.7%)** and **Sri Lanka (1.4%)**. Bhutan's per capita spending on health was 2.5 times that of India, that of Sri Lanka was 3 times & that of other BRICS nations was almost 14 times that of India in 2021.
- The National Health Policy (2017) had committed to increase the health expenditure by govt to 2.5% of GDP by 2025 – but this basic goal is nowhere near realization.
- During the COVID period, public spending on health had increased, but much of the rise attributed to the States rather than the Union govt. In fact, while the States have sustained such increase in post-COVID period (increased from 0.67% in 2017-18 to 1.1% in 2025-26), the Union govt's spending on health, which increased moderately during the pandemic (from 0.32% of GDP in 2017-18 to 0.37% in 2020-21), has decreased to 0.29% of GDP in 2025-26.

Health is wealth

During the COVID years, public spending on health as a percentage of GDP had increased somewhat, with much of the rise attributed to the States rather than the Union government

CHART 1: Union and State government spending on health (as % of GDP)

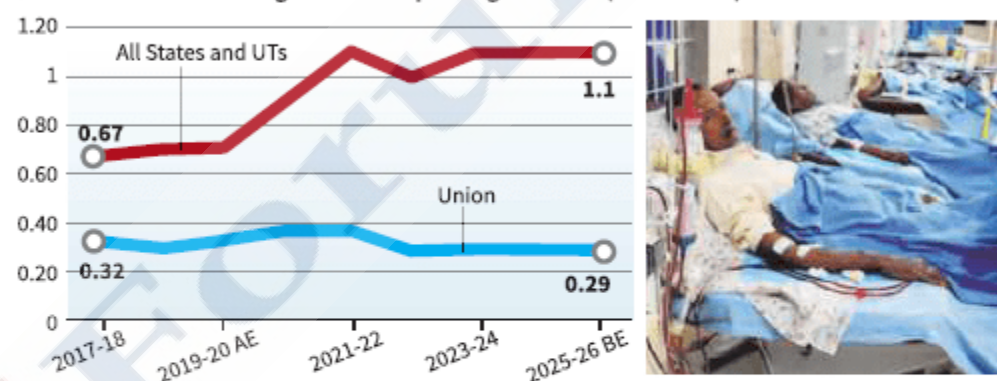
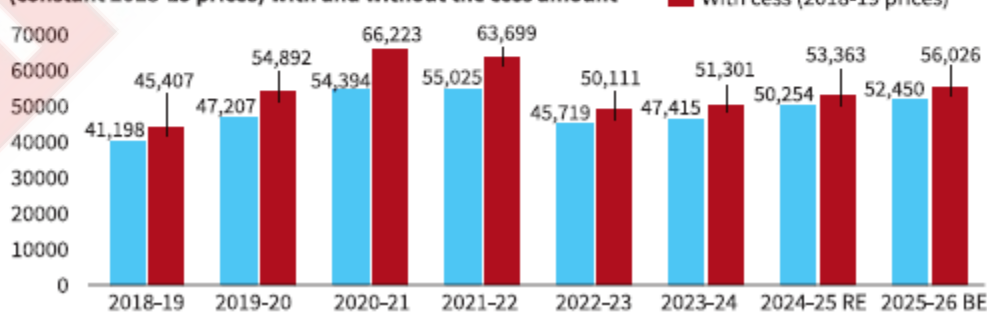


CHART 2: Union government expenditure on health (constant 2018-19 prices) with and without the cess amount



Source: IndiaBudget and in Economic Survey, RBI's State Finance: Study of budgets

Source: The Hindu

- Health & Education Cess, which was introduced in 2018-19 to expand the existing govt spending on health, has not been used to increase the health budget, but instead is being used to supplement the tax resources.
- Almost 75% of the Union govt's spending on health was used to be transferred to the States in 2014-15 for various Centrally Sponsored Schemes like National Health Mission. But this share has consistently declined to reach just 43% in 2024-25 – which is completely insufficient to maintain basic health services.

4. Lack of adequate emphasis on critical areas: There has been lack of adequate attention to critical areas such as **sanitation, disease surveillance, and public health education**, which are important to maintain population health and prevent disease outbreaks. For ex- **Lack of long-term strategies like understanding vector control or developing effective vaccines** in case of dengue.

5. Profit-Driven Pharma Sector: The pharmaceutical industry's profit-driven nature **often sidelines areas such as public health**. There has been a loss of trust towards healthcare providers (private sector due to commercial interests). For ex- **Medical marginalisation of TB patients in India**.

6. Lack of a Comprehensive Approach: India's current public health approach is **physician-centric**, without **adequate focus on expertise from various fields** such as environmental science, sociology, urban planning, and economics.

7. Lack of Preventive Care: Preventive healthcare is undervalued in India, despite its importance in reducing disease incidence and healthcare costs. This is especially significant as India faces a '**triple burden**' of disease, comprising **communicable diseases** (like tuberculosis and malaria), **non-communicable diseases** (such as diabetes and heart disease), and **emerging infectious diseases**.

What are the advantages of robust public health sector in India?

1. Improved the Access to Healthcare: The Lancet in its latest study ranked **India at 145th among 195 countries in terms of quality and accessibility of healthcare**, behind its neighbours China, Bangladesh, Sri Lanka and Bhutan. Thus, there is a need to improve the public health sector by making it more accessible by **improving the quality of medical professionals and infrastructure**.
2. Improved Health Outcomes: Robust public healthcare leads to early detection and treatment of diseases, resulting in improved health outcomes and a decrease in the burden of illness. For ex- **Early detection and treatment of Non-Communicable diseases like Cardiovascular Diseases**.
3. Reduction of Financial Burden: Improved public healthcare services can **alleviate the financial burden** and **improve household financial stability** by reducing the high out of pocket expenditure. For ex- According to the WHO, **55 million people fall into poverty or deeper poverty every year** due to catastrophic expenditures on health.
4. Social Justice: Universal healthcare and publicly funded health system provide timely, effective and free care, irrespective of social class. This in turn promotes social justice and **fulfillment of DPSP principles**.

What Should be the Way Forward?

1. **Increase Public Health Expenditure:** Raise public health spending from the current ~1.9-2% of GDP to at least 2.5-3%, as recommended by the National Health Policy 2017.
2. **Transform Ayushman Arogya Mandirs (formerly HWCs):** Move beyond infrastructure to ensure they are functional, well-staffed, and stocked. Empower them as the first point of comprehensive care.
3. **Robust Human Resources:** Address the massive shortage of doctors, nurses, and especially mid-level providers (Community Health Officers). Decentralize recruitment, improve working conditions, and create clear career pathways. Create a dedicated "All India Service" for public health (similar to the IAS) to manage health administration and policy at the state and district levels.
4. **Leverage Telemedicine and AI:** Use tele-consultation to bridge rural-urban gaps. Explore AI for public health analytics, early diagnosis (e.g., in TB or retinal scans), and optimizing supply chains.
5. **National Commission for Healthcare Cost Management:** The government should appoint a **National Commission to make recommendations for the spending on healthcare systems** and monitor its performance.
6. **Comprehensive Approach:** Effective public health management should **encompass preventive measures, policy formulation**, community health, environmental health, etc.
7. **Universal health coverage:** State governments should **draw up blueprints for universal health coverage** and begin experimenting and innovating with pilot programmes.

Conclusion: The goal for India should be to build a resilient public healthcare system that secures the well-being of its 1.4 billion people & provides Universal Health Coverage (UHC)—quality care for all, without financial hardship.

Read More- [The Hindu](#), [The Hindu](#)

UPSC Syllabus- GS Paper 2 Social Justice – Issues relating to Health.

Menstrual Health – Explained Pointwise

Recently, the Supreme Court in a landmark judgment has declared the right to menstrual health & access to menstrual hygiene management (MHM) measures in educational institutions is a part of the fundamental right to life & dignity under Article 21 of the Constitution.



What is Menstrual Health?

- Menstrual health is a state of complete physical, mental, and social well-being in relation to the menstrual cycle.
- It goes beyond just having a period to encompass everything needed for a person to manage their menstrual cycle with dignity, safety, and good health.

Physical & Biological Well-being	<ul style="list-style-type: none"> ● Regular, predictable cycles ● Access to safe, effective menstrual products
Mental & Emotional Well-being	<ul style="list-style-type: none"> ● Freedom from stigma, shame, and psychological distress associated with menstruation.
Social & Cultural Well-being	<ul style="list-style-type: none"> ● Participation in all aspects of life—education, work, sports, social, and religious activities—without restriction or exclusion due to menstruation. ● Freedom from harmful cultural practices (e.g., segregation, restrictions on food or movement).

Access to Information & Healthcare	<ul style="list-style-type: none"> • Accurate, timely, and age-appropriate education about the menstrual cycle, before the first period (menarche) and throughout life. • Understanding the link between the menstrual cycle and other aspects of reproductive and overall health (e.g., fertility, bone health, iron levels). The World Health Organization (WHO) defines it with four key dimensions:
------------------------------------	---

What is the significance of Menstrual Health?

- 1. A Fundamental Human Right & Matter of Dignity:** Managing menstruation safely, comfortably, and without shame is a basic necessity for half the global population. The inability to do so infringes on fundamental rights to health, education, work, non-discrimination, and human dignity. Recognizing menstrual health is a step toward gender equity.
- 2. School Attendance & Performance:** Lack of products, pain management, and poor sanitation facilities are leading causes of school absenteeism for girls. This disrupts education, lowers academic performance, and increases dropout rates, limiting future economic and social opportunities.
- 3. Essential for Economic Participation & Productivity:** Menstrual health is a major driver of economic participation. Lack of menstrual health support leads to “presenteeism” (working while unwell) or absenteeism, reducing productivity and career advancement. Supportive policies (like sick leave for severe pain) and workplace facilities are key to an inclusive economy.
- 4. Foundation for Reproductive Autonomy:** Understanding one’s cycle is foundational for reproductive health literacy. It empowers individuals to make informed choices about their bodies, recognize fertile windows for pregnancy or contraception, and understand changes throughout life (puberty, postpartum, perimenopause).
- 5. Core to Mental Well-being:** Breaking stigma and shame fosters positive body image, self-confidence, and reduces anxiety and depression linked to menstrual distress.

What are the challenges to Menstrual Health?

- 1. Deep-Rooted Stigma & Taboos:**
 - Menstruation is often shrouded in secrecy, considered “impure” or “dirty,” leading to restrictions on mobility, food, religious participation, and social interaction.
 - In some communities, practices like isolation (e.g., staying in menstrual huts) persist, though declining, perpetuating shame and risk.
- 2. Limited Access to Affordable Menstrual Products:**
 - **Period Poverty:** Many cannot afford commercial pads, tampons, or reusable options, leading to use of unsanitary materials like old cloth, ash, or leaves. These materials are difficult to clean and significantly increase the risk of Reproductive Tract Infections (RTIs).

- **Taxation:** Until recently, menstrual products were taxed as “luxury items” (GST reduced to 0% on some products in 2018, but affordability remains uneven).
- **Supply Chain Gaps:** Rural and remote areas often lack consistent availability of quality products.
- 3. Lack of Private, Safe Toilets:** Many schools, workplaces, and homes lack functional toilets with water, locking doors, and disposal systems, making menstruation management difficult and unsafe.
- 4. Disposal Challenges:** Even in areas with product access, there is often no way to discreetly or safely dispose of used materials, leading to unhygienic environments.
- 5. Lack of Medical Attention:** Menstrual disorders (e.g., PCOS, endometriosis, dysmenorrhea) are often dismissed as “normal pain,” leading to underdiagnosis and suffering.

What the SC said in the recent ruling on Menstrual Health?

- 1. Fundamental Right:**
 - The Court declared that the right to menstrual health is part of the “Right to Life” under Article 21 of the Constitution. Lack of menstrual hygiene management undermines the dignity, privacy & bodily autonomy of a girl child.
 - The right to free & compulsory education under Article 21A includes supply of free sanitary napkins in schools.
- 2. Mandatory Provisions:** It directed all states and Union Territories to provide free biodegradable sanitary napkins and functional, separate toilets in all schools (government and private).
- 3. Menstruation is not a “Gender-specific” Issue:** The judgment clarified that menstruation is not just a “women’s issue” but a human rights issue affecting all genders, including transgender persons and non-binary individuals.
- 4. Binding Directions for All Schools:** The Court issued several mandatory directives for all schools (both government and private) across India, with a three-month deadline for compliance such as:
 - Providing free oxo-biodegradable sanitary napkins to all girl students in Classes 6–12.
 - Ensure functional, gender-segregated toilets with usable water connectivity.
 - Establish “Menstrual Hygiene Management Corners” equipped with, spare innerwear, spare uniforms etc for menstruation related emergencies.
 - Installing safe disposable facilities.

What have been the various initiatives to improve the Menstrual Health?

- 1. PMBJP (Suvidha Pads):** Perhaps the most visible success, the *Pradhan Mantri Bhartiya Janaushadhi Pariyojana* provides “Suvidha” pads (which are oxo-biodegradable) for just ₹1 per pad at over 16,000 Jan Aushadhi Kendras.
- 2. National Menstrual Hygiene Scheme (MHS):** Run by the Ministry of Health, this targets adolescent girls (10–19 years). It uses ASHA workers to distribute subsidized pads in rural areas and hold community meetings to break taboos.
- 3. State govt initiatives:**

- Kerala – Menstrual Cup Revolution: First state to actively promote menstrual cups as a sustainable alternative.
- Maharashtra – Asmita Yojana: Uses Women’s Self-Help Groups (SHGs) to manufacture and distribute pads, creating local livelihoods while solving the supply chain issue.
- Rajasthan – Udaan Scheme: Provides free sanitary napkins to all women and girls in the state, not just those in schools.
- Andhra Pradesh – Swechha: Focuses on providing branded, high-quality napkins to school and college students to ensure comfort and dignity.

4. Initiatives by NGOs:

- Goonj (NJPC): Their “Not Just a Piece of Cloth” campaign transforms old clothes into hygienic cloth pads, treating menstruation as a tool for rural development.
- Pinkishe Foundation: Runs “Pad Banks” where urban donors can sponsor “hygiene kits” for girls in slums and rural areas, combined with “Pink Talks” to educate families.
- Social enterprises like Saathi (biodegradable pads), Aakar Innovations (compostable pads), and Jaipur Cups (menstrual cups) provide eco-friendly and affordable options.

Conclusion: In essence, menstrual health is not just a “women’s issue.” It is a public health imperative, an economic necessity, and a social justice benchmark. Thus, investing in it creates ripple effects – creating more equitable & resilient societies that uphold the dignity & rights of all people who menstruate.

Read More: [The Hindu](#)
UPSC GS-2: Social Justice