

AS ITS CHANGING

Typical Viewpoint July 2026



IMPULSE

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N.B:

- ⊗ A detailed comprehensive discussion has been projected in this study material from the viewpoint of **INTEGRATED UPSC CSE (PrIm+Mains)** preparation.
- ⊗ If any topic has been skipped here from the events of this respective month, it had been already duly discussed in the previous editions. So, please check the previous editions.
- ⊗ We are indebted to the different authenticated published news sources for the compilation of this study material

01.07.2026

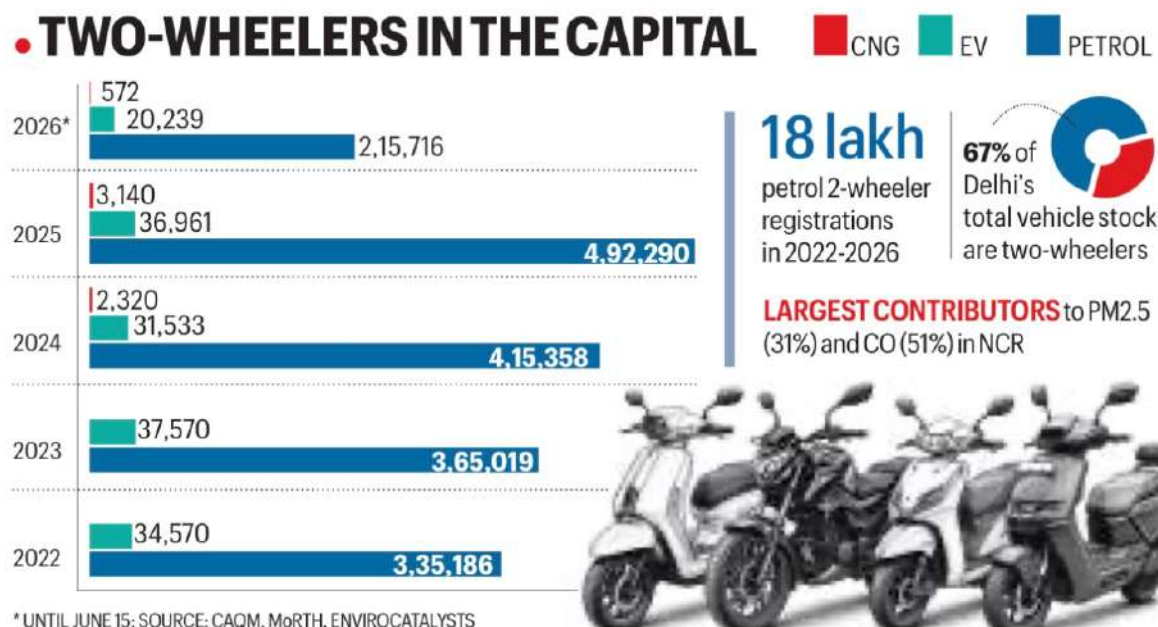
Topic: GS-II: Governance | GS-III: Environment, Energy, Infrastructure & Economy

DELHI GOVT APPROVES EV POLICY 2.0: NO NEW CNG AUTORICKSHAWS FROM JANUARY NEXT YEAR

Delhi mandates all new 2-wheelers be electric from '28 to fight pollution

100% road tax waiver for four-wheelers priced up to Rs 30 lakh; cash incentives for buying electric two- three-wheelers

• TWO-WHEELERS IN THE CAPITAL



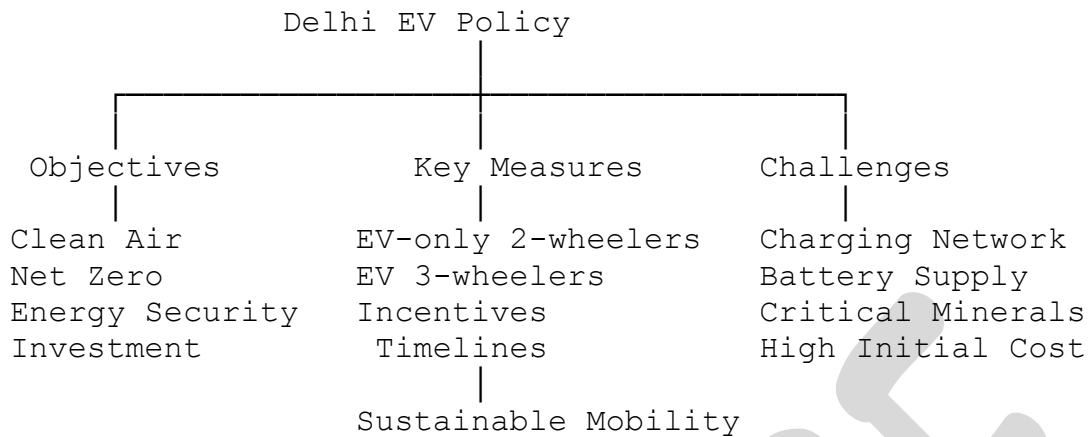
Delhi Electric Vehicle (EV) Policy – Road Ahead is Electric, but Not Easy



Brief

- The **Delhi Government** has unveiled a new **Electric Vehicle (EV) Policy** with mandatory timelines for electrifying major segments of urban transport, aiming to reduce air pollution and accelerate green mobility.

Mind Map



Key Highlights

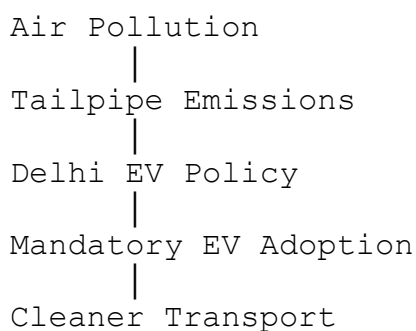
Major Policy Provisions

- **From April 2028:** Only **Electric Two-Wheelers (E2Ws)** can be newly purchased in Delhi.
- **From January 2027:** Mandatory transition of **commercial three-wheelers** to EVs.
- Incentives continue for electric four-wheelers.
- Target: **Greener vehicle fleet by 2030.**

Current Scenario

- EVs constitute **~15%** of registered vehicles in Delhi.
- Two-wheelers account for nearly **2/3 of Delhi's vehicle fleet.**
- Jan-May registrations:
 - **E-bikes:** ↑ **70%**
 - **Private EV cars:** ↑ **95%**

Flowchart



|
Lower PM2.5 & CO₂
|
Improved Public Health
|
Net Zero & Sustainable Cities

Why EV Transition Matters?

Environmental

- ✓ Reduces vehicular emissions.
- ✓ Improves urban air quality.
- ✓ Helps India achieve **Net Zero by 2070**.

Economic

- ✓ Attracts green investments.
- ✓ Promotes domestic EV manufacturing.
- ✓ Reduces oil import dependence.

Social

- ✓ Better public health.
- ✓ Lower noise pollution.
- ✓ Generates green jobs.

Challenges

Infrastructure

- Insufficient public charging stations.
- Need for grid upgradation and fast chargers.

Supply Chain

- Heavy dependence on imported:
 - Lithium
 - Cobalt
 - Nickel
 - Rare earth minerals

Economic

- High upfront EV costs.
- Battery replacement expenses.

Geopolitical Risks

- Concentrated processing of critical minerals in a few countries.
- Supply-chain disruptions due to global conflicts.

Technology

- Battery recycling ecosystem still evolving.
- Limited indigenous battery manufacturing.

Government Initiatives

- PM E-DRIVE Scheme
- National Electric Mobility Mission Plan (NEMMP)
- FAME India Scheme (legacy support)
- PLI Scheme for Advanced Chemistry Cells (ACC)
- National Programme on Advanced Chemistry Cell Batteries
- Battery Waste Management Rules, 2022

Way Forward

- ✓ Expand fast-charging infrastructure.
- ✓ Promote indigenous battery manufacturing.
- ✓ Secure overseas critical mineral partnerships (Australia, Argentina, Chile, Africa).
- ✓ Strengthen battery recycling and circular economy.
- ✓ Encourage renewable-energy-powered charging stations.
- ✓ Improve power distribution infrastructure and smart grids.

Value Addition (UPSC)

Advantages of EVs

- Zero tailpipe emissions
- Higher energy efficiency
- Lower operating cost
- Reduced fossil fuel dependence

Challenges to EV Adoption

- Range anxiety
- Charging infrastructure gaps
- Critical mineral dependence
- Battery disposal and recycling

UPSC Mains Question

Q. The transition to electric mobility is essential for India's climate commitments but requires significant technological, infrastructural and institutional reforms. Discuss in the context of Delhi's Electric Vehicle Policy. (250 words)

Q. Electric mobility can improve urban air quality but cannot succeed without a resilient battery ecosystem. Examine. (150 words)

Keywords to remember: Net Zero 2070 • Critical Minerals • PM E-DRIVE • ACC-PLI • Circular Economy • Urban Air Pollution • Sustainable Mobility

Topic: GS II : Polity, Governance | GS II : Internal Security

ANTI-SOCIAL ACTIVITIES BILL, MAINTENANCE OF PUBLIC ORDER (AMENDMENT) BILL PASSED IN ASSEMBLY

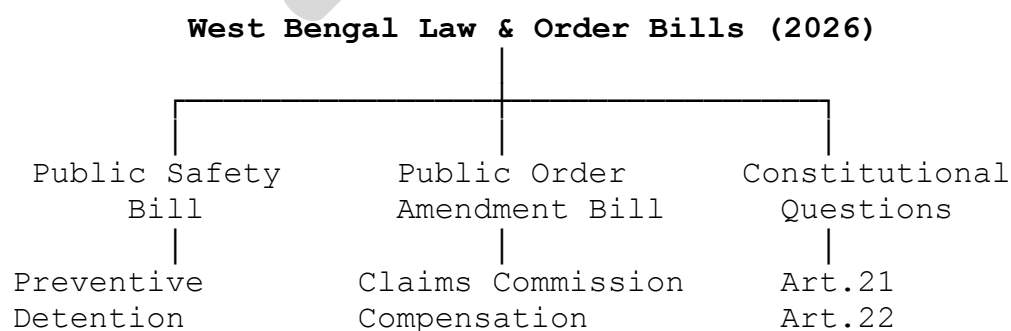
Detention without trial, rioters to pay for vandalism: Two law & order Bills passed

West Bengal Public Safety & Public Order Bills, 2026

Brief

- The **West Bengal Assembly** passed two significant law-and-order legislations aimed at combating organised crime and riot-related violence:
 1. **West Bengal Public Safety and Control of Anti-Social Activities Bill, 2026**
 2. **West Bengal Maintenance of Public Order (Amendment) Bill, 2026**
- The government stated that these laws are intended to strengthen public safety and **will not be used for political vendetta**.

Mind Map



Gang control

Riot damages

Due Process

Property seizure

Organisers liable

Judicial Review

1. West Bengal Public Safety and Control of Anti-Social Activities Bill, 2026

Objective

- ✓ Prevent organised crime and habitual criminal activities.

Major Provisions

◆ Preventive detention

- Up to **12 months** without trial.

◆ Externment (Area Restriction)

Authorities may direct suspected persons to:

- Leave a district/area.
- Restrict entry for up to **1 year**.
- Periodically report movements to police.

◆ Property seizure

- Assets linked with criminal activities can be attached.

Definition of Anti-social Activity

Includes activities causing:

- Public fear
- Insecurity
- Danger to life/property
- Illegal land grabbing
- Business obstruction
- Illegal mining
- Sand mining
- Forest produce crimes

Definition of "Goonda"

A person who:

- ✓ Habitually commits
- ✓ Attempts
- ✓ Abets
- ✓ Finances
- ✓ Facilitates organised criminal activities

OR

Has been charge-sheeted under specified provisions of the **Bharatiya Nyaya Sanhita (BNS), 2023** relating to organised crime.

2. West Bengal Maintenance of Public Order (Amendment) Bill, 2026

Objective

To recover damages caused during:

- Riots
- Violent protests
- Unlawful assemblies
- Mob violence

Key Features

Claims Commission

Special authority to:

- ✓ Assess damages
- ✓ Award compensation
- ✓ Decide liability

Liability extended to

Not only direct offenders but also:

- Organisers
- Financiers
- Instigators
- Logistical supporters

Compensation

Private property owners can also claim damages.

- Limitation period: **3 years**



Flowchart

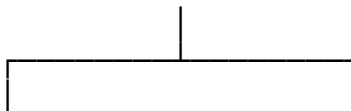
Riot / Violent Protest

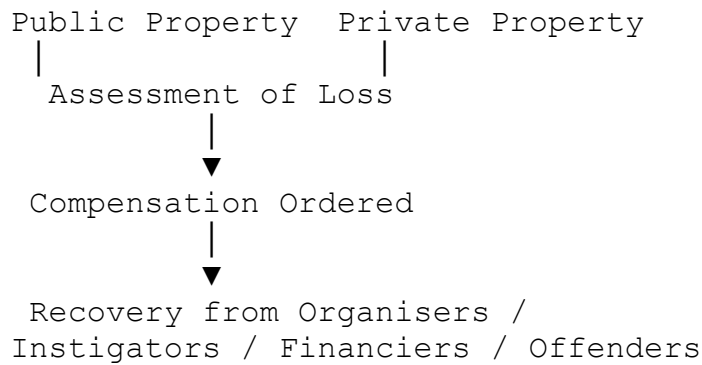


Damage to Property



Claims Commission





Constitutional Dimensions

Supports

- ✓ Public Order (State List - Entry 1)
- ✓ Police (State List - Entry 2)
- ✓ Protection of property
- ✓ Rule of Law

Concerns

- ⚠ Preventive detention without trial
- ⚠ Broad definition of anti-social activities
- ⚠ Possibility of executive overreach
- ⚠ Limited judicial safeguards
- ⚠ Claims Commission decisions final (limited appeal)

Constitutional Provisions

- **Article 21** – Right to Life & Personal Liberty
- **Article 22** – Safeguards against preventive detention
- **Article 14** – Equality before Law
- **Seventh Schedule (State List)** – Public Order & Police

Previous Supreme Court Judgments

- ✂ ***Prem Shankar Shukla (1980)***
Preventive powers must satisfy constitutional safeguards.
- ✂ ***DK Basu vs State of West Bengal (1997)***
Guidelines against arbitrary detention.
- ✂ ***In Re: Destruction of Public & Private Properties (2009)***
SC recommended mechanisms to recover damages from perpetrators of riots.

Preventive Detention

- Exceptional executive power
- Used before conviction
- Subject to constitutional safeguards under **Article 22**

Difference

Preventive Detention

Prevent future offence
No conviction required
Executive action

Punitive Detention

Punish past offence
Court conviction required
Judicial process

Arguments in Favour

- ✓ Tackles organised crime
- ✓ Faster action against gangs
- ✓ Compensation for victims
- ✓ Deterrence against riots
- ✓ Protects public property

Criticisms

- ✗ Scope for misuse
- ✗ Weak judicial oversight
- ✗ Broad definitions may affect civil liberties
- ✗ Preventive detention may conflict with due process
- ✗ Chilling effect on peaceful protests if applied indiscriminately

Way Forward

- Ensure **strict judicial oversight** over preventive detention.
- Precisely define "anti-social activities" to reduce arbitrariness.
- Provide an **independent appellate mechanism** against Claims Commission orders.
- Use digital evidence, transparent investigations and periodic legislative review.
- Balance **public order** with **constitutional freedoms** under Articles 19, 21 and 22.

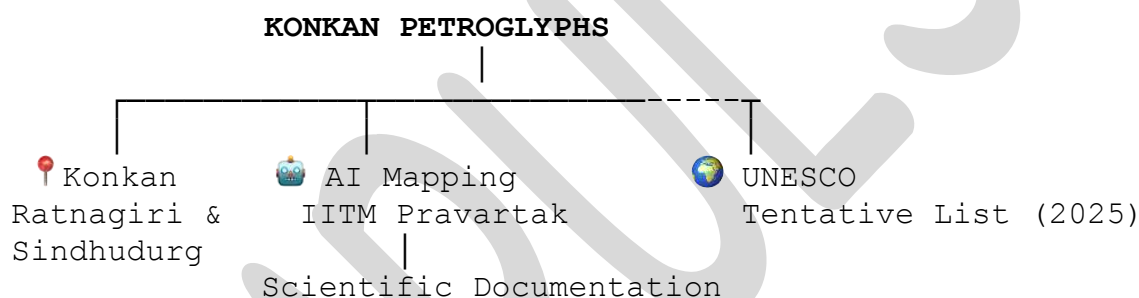
UPSC Mains Question

Q. Preventive detention laws seek to balance public order with individual liberty. Discuss in the context of recent state legislations aimed at tackling organised crime. (250 words)

Q. Recovery of damages from organisers of violent protests is increasingly being adopted by states. Examine its constitutional validity and implications for civil liberties. (150 words)

AI-based Documentation of Konkan Petroglyphs (Maharashtra)

Mind Map



Key Highlights

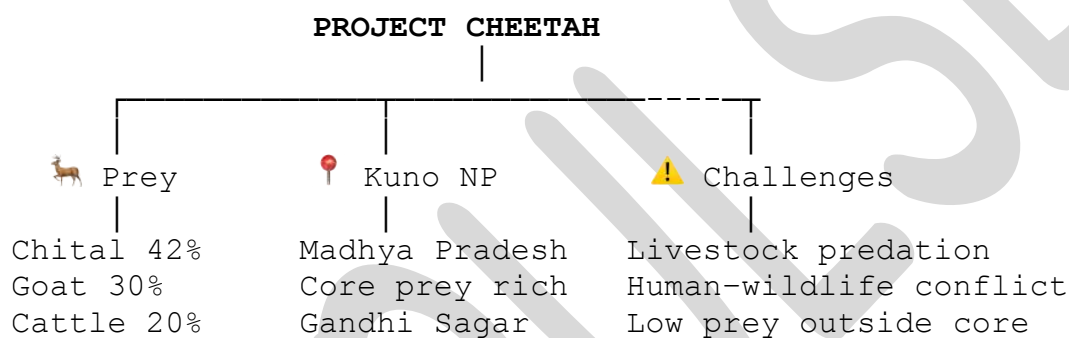
- ₹15 crore project by Maharashtra Government (4 years).
 - IITM Pravartak (IIT Madras) to use Artificial Intelligence, drones & digital mapping for documentation.
 - Found across 150 sq. km in 107 villages of Ratnagiri & Sindhudurg.
 - ~3,000 petroglyphs depicting turtles, elephants, peacocks, rhinoceros and humanoids.
 - No horse or bull figures → suggests pre-agricultural Mesolithic culture.
 - Estimated age: 20,000–10,000 BCE, older than the Harappan Civilization.
 - Added to UNESCO Tentative List (2025).
-

UPSC Prelims Facts

- Petroglyph = Rock carving engraved on stone surfaces.
- Mesolithic Age in India: hunter-gatherers; agriculture not yet established.
- Documentation supports UNESCO World Heritage nomination through scientific evidence.

Project Cheetah – Latest Progress Report (2025)

Mind Map



Key Highlights

- **Project Cheetah:** India currently has **53 cheetahs**.
- **Kuno National Park (Madhya Pradesh)** is the primary reintroduction site; **Gandhi Sagar Sanctuary** hosts additional cheetahs.
- **Diet of free-ranging cheetahs:**
 -  **Chital – 42%**
 -  **Goats – 30%**
 -  **Cattle – 20%**
 - Nilgai, hare, sambar, chinkara, sheep & wild pig – **1–2% each**.
- **Prey density:** ~23 chital/sq km in Kuno core area; lower in territorial forests.
- Wide dispersal recorded (up to **3,198 sq km** explored by one male).

UPSC Prelims Facts

- **Project Cheetah (2022):** World's first **intercontinental translocation** of wild cheetahs (from **Namibia** and **South Africa**).
- **Kuno National Park**
 -  **Sheopur district, Madhya Pradesh**

- **Biome:** Dry deciduous forest
- **River:** Kuno River
- Key challenge: **Human–wildlife conflict** due to livestock predation in buffer/multi-use landscapes.

Topic: **GS-I: Geography | GS-III: Environment, Climate Change & Disaster Management**

Overheated Europe, Underprepared World

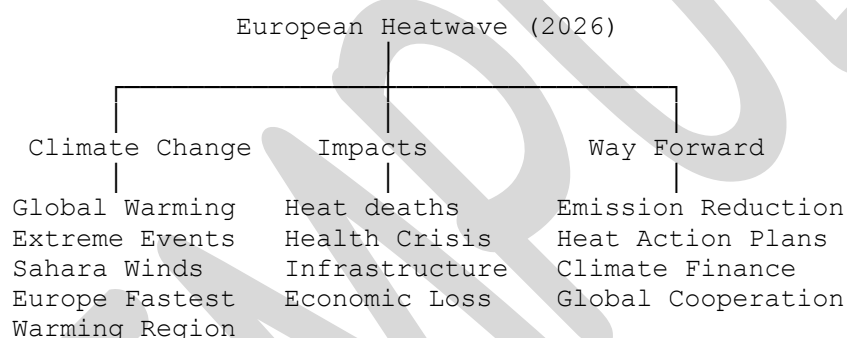


Brief

- Europe is experiencing an **unprecedented heatwave**, with temperatures exceeding **40°C** across several countries.
- The event highlights the accelerating impacts of **climate change**, the urgency of **adaptation**, and the need for stronger **global climate cooperation**.



Mind Map



Key Highlights



Causes

- **Blocked high-pressure system** trapped hot air.
- Warm air transported from the **Sahara Desert**.
- **Anthropogenic climate change** increased the intensity and frequency of heatwaves.
- Europe is the **fastest-warming continent**.



Impacts

- Temperatures crossed **40°C** in many countries.
- Red alerts across France and parts of Europe.
- School closures and transport disruptions.

- Pressure on healthcare systems.
- Increased heat-related deaths and accidents.
- Reduced labour productivity and agricultural stress.

Flowchart

Greenhouse Gas Emissions
 |
 Global Warming
 |
 Higher Average Temperature
 |
 Frequent & Intense Heatwaves
 |
 Health + Economic + Ecological Losses
 |
 Need for Adaptation & Mitigation

Adaptation Measures

- ✓ Heat Action Plans (HAPs)
- ✓ Cooling centres
- ✓ Urban green spaces
- ✓ Heat-resilient buildings
- ✓ Early warning systems
- ✓ Strengthened emergency healthcare

Mitigation Measures

- Rapid reduction in GHG emissions.
- Transition to renewable energy.
- Energy-efficient buildings.
- Sustainable urban planning.
- Carbon neutrality commitments.
- Climate finance and technology transfer to developing countries.

Key Challenges

- Weak implementation of climate pledges.
- Delayed emission reductions.
- Urban Heat Island effect.
- Inadequate climate-resilient infrastructure.
- Insufficient climate finance for developing nations.

Relevance for India

- India also experiences frequent and severe heatwaves.

- Need to expand **Heat Action Plans** across cities.
- Promote climate-resilient infrastructure.
- Strengthen public health preparedness.
- Accelerate renewable energy and sustainable urbanisation.

UPSC Value Addition

Adaptation vs Mitigation

Adaptation

Managing impacts

Cooling centres

Heat Action Plans

Climate-resilient infrastructure

Mitigation

Reducing causes

Renewable energy

Net Zero targets

Carbon emission reduction

Way Forward

- Implement ambitious short-term emission reduction targets.
- Honour commitments under the **Paris Agreement**.
- Increase climate finance and technology transfer.
- Develop climate-resilient cities and public health systems.
- Integrate climate adaptation into urban planning and disaster management.

UPSC Mains Questions

Q. The increasing frequency of extreme heat events demonstrates that climate change is no longer a distant environmental challenge but a public health and developmental crisis. Discuss with suitable examples (250 words).

Q. Differentiate between climate change adaptation and mitigation. Why are both equally important in addressing recurring heatwaves?(250 words)

UPSC Prelims Practice Question

Consider the following statements:

1. Europe is currently recognised as the fastest-warming continent.
2. Heat Action Plans are primarily adaptation measures against climate change.
3. Climate finance is an obligation only for developing countries under the Paris Agreement.

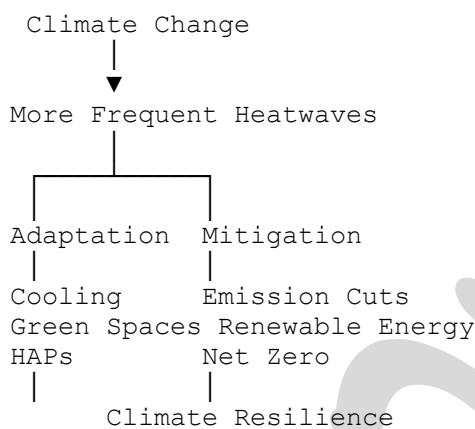
Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

✓ **Answer: A**

Explanation: Statements 1 and 2 are correct. Climate finance commitments are primarily the responsibility of developed countries to support developing countries under the UNFCCC and Paris Agreement framework.

💡 UPSC Quick Revision Diagram



Topic: GS Paper II: Polity & Governance | GS I: Indian Society & Modern History

Akal Takht and Its Influence on Punjab Politics

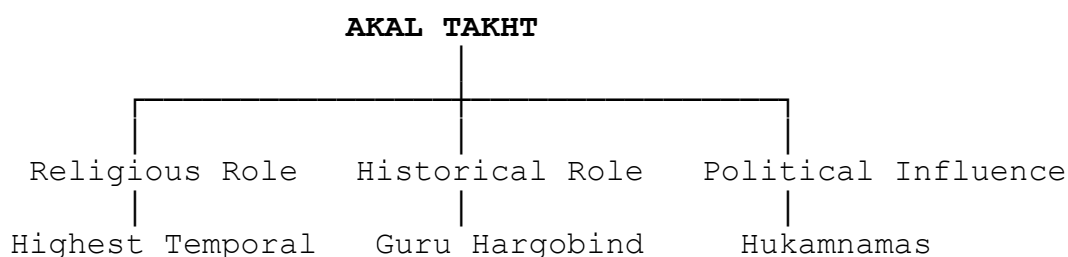


Brief

- The Akal Takht directed the Punjab Government to amend certain provisions of the Jagat Jyot Sri Guru Granth Sahib Satkar (Amendment) Act, 2026, reaffirming its enduring religious and moral authority over Sikh affairs.



Mind Map



Authority	(1606–09)	Moral Sanctions
Maryada	Sarbat Khalsa	Summons to Leaders
Panthic Affairs	Sikh Sovereignty	Punjab Politics

What is the Akal Takht?

- **Meaning:** *"Throne of the Timeless One"*.
- Established by **Guru Hargobind (1606–1609)** opposite the **Golden Temple (Harmandir Sahib), Amritsar**.
- Symbolises **Miri-Piri**:
 - **Miri** → Temporal (worldly) authority.
 - **Piri** → Spiritual authority.
- Highest **temporal seat of Sikhism**.
- Headed by the **Jathedar**, who can issue **Hukamnamas (religious edicts)** and summon any Sikh.

Evolution of the Akal Takht

Guru Hargobind
 |
 Miri-Piri Doctrine
 |
 Sarbat Khalsa Meetings
 |
 Sikh Resistance to Mughals
 |
 Gurdwara Reform Movement (1920)
 |
 Formation of SGPC & Akali Dal
 |
 Modern Religious & Political Influence

Historical Significance

Before Independence

- Centre of Sikh political decision-making.
- Venue for **Sarbat Khalsa** assemblies.
- Guided resistance against Mughal and Afghan invasions.
- Even **Maharaja Ranjit Singh** accepted its disciplinary authority.

After Independence

- Headquarters of:
 - Punjabi Suba Movement.
 - Democracy Bachao Morcha (Emergency, 1975).

- Dharam Yudh Morcha (1982).
- Continues to influence Sikh political discourse.

Powers & Functions

Religious

- Issues **Hukamnamas**.
- Protects **Sikh Maryada (Code of Conduct)**.
- Declares individuals **Tankhaiya** (guilty of religious misconduct).

Moral & Social

- Orders **Sewa (community service)**.
- Public apology and repentance.
- Religious/social boycott.
- Excommunication.
- Revocation of honorary titles.

✂ *These are **moral sanctions**, not legal punishments, but they carry significant political consequences in Punjab.*

Contemporary Issues

Concerns

- Allegations of politicisation through SGPC.
- Overlap between religious authority and democratic governance.
- Balancing freedom of religion with constitutional institutions.

Importance

- Acts as guardian of Sikh identity.
- Preserves religious discipline.
- Serves as a moral check on political leadership.

Way Forward

- Preserve the autonomy and credibility of Sikh religious institutions.
- Ensure religious bodies remain non-partisan.
- Maintain constitutional balance between religious freedom and state authority.
- Promote dialogue between elected governments and religious institutions.



UPSC Value Addition

Important Institutions

Institution

Function

Akal Takht

Highest temporal authority of Sikhs

SGPC

Manages major Sikh Gurdwaras

Shiromani Akali Dal

Political party with historical links to SGPC



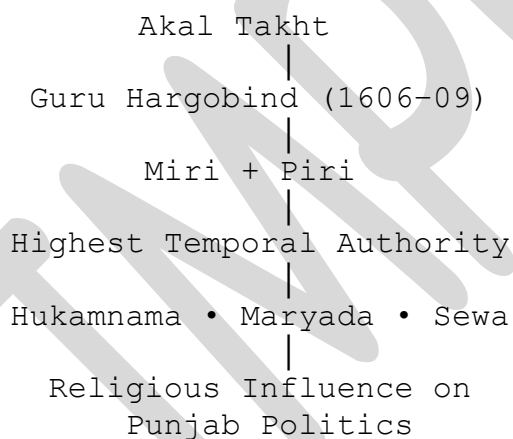
UPSC Mains Questions

Q1. Discuss the historical evolution and contemporary significance of the Akal Takht in shaping Punjab's socio-political landscape. How can religious authority coexist with constitutional governance? (250 words)

Q2. Explain the concept of Miri-Piri and examine its role in the evolution of Sikh political philosophy. (150 words)



Quick Revision Diagram



Keywords for UPSC

☆ Akal Takht • Miri-Piri • Jathedar • Hukamnama • SGPC • Sarbat Khalsa • Tankhaiya • Punjabi Suba Movement • Dharam Yudh Morcha • Religious Institutions & Constitutional Governance

India–Japan Relations **amid Global Disruptions (2026 update)**

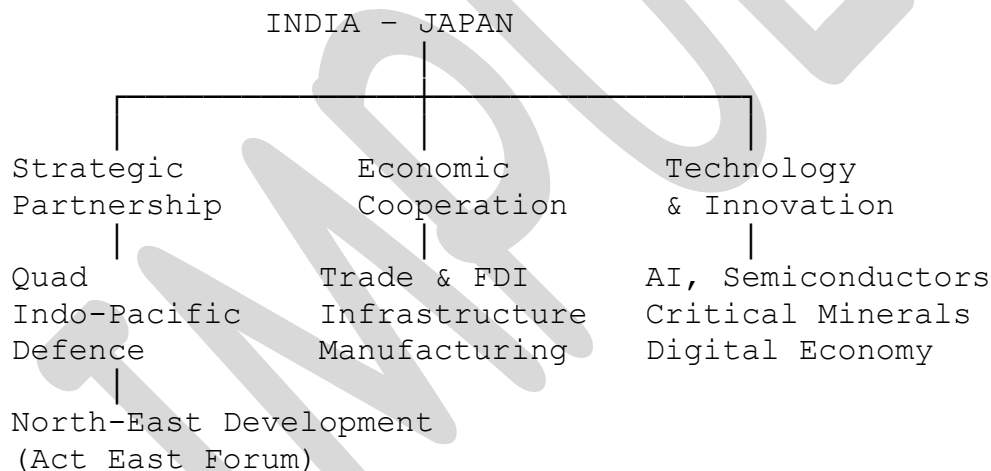
Brief

- Japanese Prime Minister Sanae Takaichi visited India for the **16th India–Japan Annual Summit**, focusing on trade, investment, technology, economic security, and Indo-Pacific cooperation.

MOVE TO DEEPEN MARITIME, DEFENCE COOPERATION IN THE INDO-PACIFIC

Modi flags trust amid turmoil, Takaichi underlines: ‘Build ties as brother, sister’

Mind Map



Evolution of Relations

2000
Global Partnership
|
2006
Strategic & Global Partnership
|
2014
Special Strategic & Global Partnership
|

🌟 Highlights

✅ Economic Cooperation

- Bilateral trade reached **\$27.5 billion (2025–26)**.
- Japanese FDI: **\$3.2 billion (Apr–Dec 2025)**.
- **Nearly 1,400 Japanese companies operate in India.**
- Recent **\$1.6 billion investment in Yes Bank.**

✅ Strategic Cooperation

- Members of the **Quad (India, Japan, USA, Australia)**.
- Promote a **Free, Open and Inclusive Indo-Pacific (FOIP)**.
- Counterbalance China's growing regional influence.

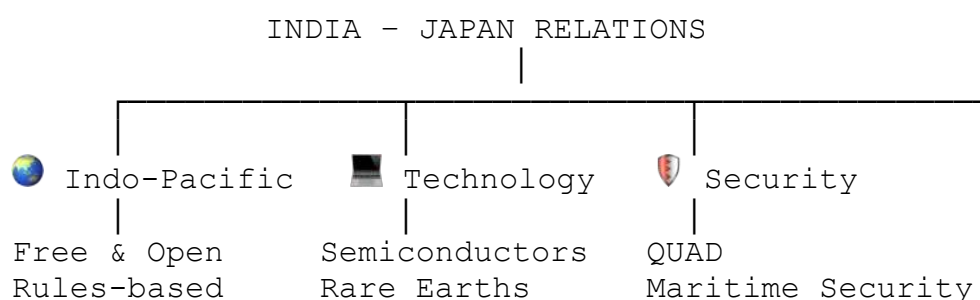
✅ Technology Partnership

- Cooperation in:
 - **Semiconductors**
 - **Critical minerals**
 - **Artificial Intelligence (AI)**
 - **Supply-chain resilience**
 - **Economic security**

✅ North-East Development

- **India–Japan Act East Forum** (unique institutional mechanism).
- Supports:
 - Infrastructure
 - Agriculture
 - Tourism
 - Skill development
 - Connectivity

🧠 Mind Map



Eight Pillars of India–Japan Relations

India-Japan Partnership

- Economy
- Economic Security
- Mobility
- Environment
- Technology & Innovation
- Healthcare
- People-to-People Contacts
- State-Prefecture Cooperation

Significance for India

Strategic

- Counterweight to China's assertiveness.
- Strengthens maritime security in the Indo-Pacific.
- Enhances defence interoperability.

Economic

- Diversifies supply chains.
- Boosts manufacturing under **Make in India**.
- Supports infrastructure development.

Technological

- Semiconductor ecosystem.
- Green technologies.
- Digital transformation and AI collaboration.

Challenges

- Slow progress in CEPA utilisation.
- Global supply-chain disruptions.
- Regional security tensions.
- Regulatory and investment bottlenecks.

Way Forward

- Fast-track semiconductor and critical mineral partnerships.
- Expand manufacturing under "Make in India".
- Strengthen defence logistics and maritime cooperation.
- Deepen collaboration in the North-East under the Act East Forum.
- Increase people-to-people and academic exchanges.

UPSC Value Addition

Key Agreements & Mechanisms

Initiative

Annual Summit (since 2006)
Special Strategic & Global Partnership
Quad
India-Japan Act East Forum
CEPA (2011)

Importance

Highest political dialogue
Comprehensive cooperation
Indo-Pacific security
North-East development
Trade and investment

UPSC Mains Questions

Q1. India-Japan relations have evolved from economic cooperation to a comprehensive strategic partnership. Discuss the significance of this transformation in the context of Indo-Pacific geopolitics and emerging technology partnerships. (250 words)

Q2. Examine the role of India-Japan cooperation in ensuring resilient supply chains, economic security, and sustainable development in the Indo-Pacific region. (250 words)

UPSC Prelims Practice Question

Consider the following statements regarding India-Japan relations:

1. The India-Japan Annual Summit mechanism was established in 2006.
2. Japan is the only country with which India has an Act East Forum for the development of the North-East.
3. India and Japan are members of the Quad grouping.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

 **Answer: D**

Explanation: All three statements are correct. The Annual Summit began in 2006, the India-Japan Act East Forum is unique for North-East development, and both countries are members of the Quad.

Keywords for UPSC

- ☆ Special Strategic & Global Partnership • Quad • Free and Open Indo-Pacific (FOIP) • CEPA • Supply Chain Resilience • Semiconductor Partnership • Critical Minerals • India-Japan Act East Forum • Economic Security • Make in India • North-East Connectivity

Prlm Highlights

- **India and Japan are Special Strategic and Global Partners.**
- Shared concern over China's assertiveness:
 -  **India: LAC/border disputes.**
 -  **Japan: East China Sea (Senkaku Islands) disputes.**
- Cooperation focuses on:
 - Semiconductors
 - Rare earth supply chains
 - Advanced manufacturing
 - Digital and emerging technologies
- Japan contributes **capital, technology and manufacturing expertise**; India offers **market size, skilled workforce and software capability**.
- Both support a **Free, Open, Inclusive and Rules-Based Indo-Pacific**.

Flowchart

China's Assertiveness
↓
India-Japan Strategic Convergence
↓
Technology + Defence + Supply Chains
↓
Resilient Indo-Pacific

UPSC Prelims Facts

- **QUAD Members: India, Japan, USA and Australia.**
- Japan is among India's **largest sources of FDI** and a key partner in infrastructure projects (e.g., **Mumbai-Ahmedabad High-Speed Rail**).
- **Indo-Pacific Oceans Initiative (IPOI)** was launched by **India** in 2019.
- Japan first proposed the concept of a **"Free and Open Indo-Pacific (FOIP)"**.

Topic: GS II | IV

New FCRA (Amendment) Rules, 2026 – Shrinking Space for Civil Society?

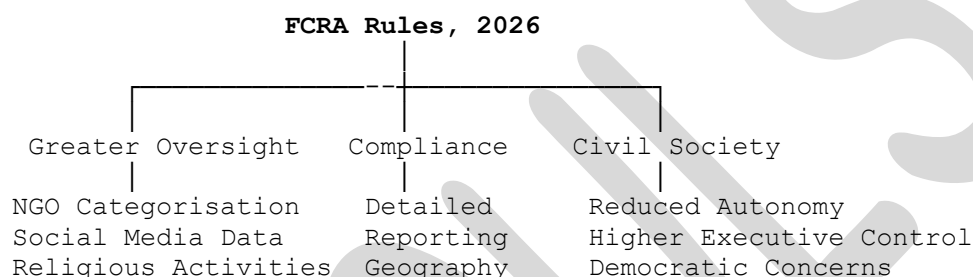


Brief

- The **Foreign Contribution Regulation (Amendment) Rules, 2026** introduce stricter compliance, disclosure, and monitoring requirements for NGOs receiving foreign contributions, sparking concerns over the balance between **transparency and civic freedoms**.



Mind Map



What is FCRA?

- **Enacted: 1976** (during the Emergency).
- **Objective:** Regulate foreign contributions and prevent foreign influence in India's political and public affairs.
- **Major Revision: FCRA Act, 2010.**
- **Major Amendment: 2020.**
- **Latest: FCRA (Amendment) Rules, 2026.**



Evolution of FCRA

1976

Original FCRA

Prevent Foreign Influence

2010

Stricter Registration &
Reporting Requirements

2020

- Ban on transfer of foreign funds
- Admin expenses capped at 20%

2026

Greater Disclosure &
Executive Oversight

🌟 **Key Features of FCRA Rules, 2026**

✅ **Enhanced Compliance**

- NGOs must classify activities into predefined categories.
- Mandatory disclosure of geographical areas of operation.
- More detailed financial and operational reporting.

✅ **Expanded Monitoring**

- Greater scrutiny of organisations engaged in religious activities.
- Disclosure of social media accounts and publications of key office-bearers.
- Increased executive oversight over NGO functioning.

✅ **Government's Objective**

- Prevent misuse of foreign funds.
- Curb unlawful religious conversions.
- Improve transparency and accountability.

⚖️ **Concerns**

Governance Issues

- Expands executive discretion.
- Treats civil society as a regulatory risk.
- Increases compliance burden.

Democratic Concerns

- May reduce operational autonomy of NGOs.
- Chilling effect on advocacy and rights-based organisations.
- Risks shrinking democratic participation.

Impact

- Nearly **20,000 NGOs lost FCRA licences** in the last 12 years (up to March 2026).
- May affect sectors such as:
 - Education
 - Healthcare
 - Environment
 - Legal aid

- Tribal and vulnerable community welfare



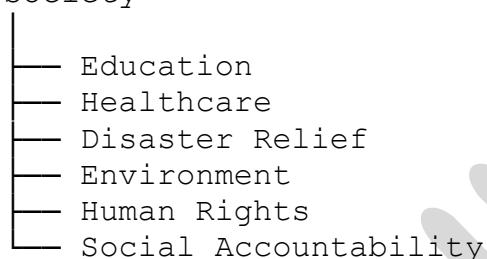
Constitutional Dimensions

- Article 19(1)(c): Freedom to form associations.
- Article 19(1)(a): Freedom of speech and expression.
- Reasonable restrictions under Article 19(4) may apply in the interests of sovereignty, integrity, and public order.



Importance of Civil Society

Civil Society



Way Forward

- Ensure **risk-based rather than blanket regulation**.
- Simplify compliance for genuine NGOs.
- Improve transparency without excessive surveillance.
- Establish independent review and grievance mechanisms.
- Balance **national security** with **constitutional freedoms**.



UPSC Value Addition

Supreme Court Observation

- The Supreme Court has held that **receiving foreign contributions is not a fundamental right**, but regulation must remain **reasonable, non-arbitrary, and proportionate**.



UPSC Mains Questions

Q1. The Foreign Contribution Regulation Act seeks to balance national security with the autonomy of civil society organisations. Critically examine the implications of the FCRA (Amendment) Rules, 2026.(250 words)

Q2. Discuss the role of civil society organisations in strengthening democratic governance. How can transparency in foreign funding be ensured without undermining civic freedoms?(250 words)

✨ Keywords for UPSC

☆ FCRA • Civil Society • NGOs • Foreign Funding • Executive Discretion • Transparency • Accountability • Article 19(1)(c) • Democratic Governance • National Security • Regulatory Compliance • Civic Space

02.07.2026

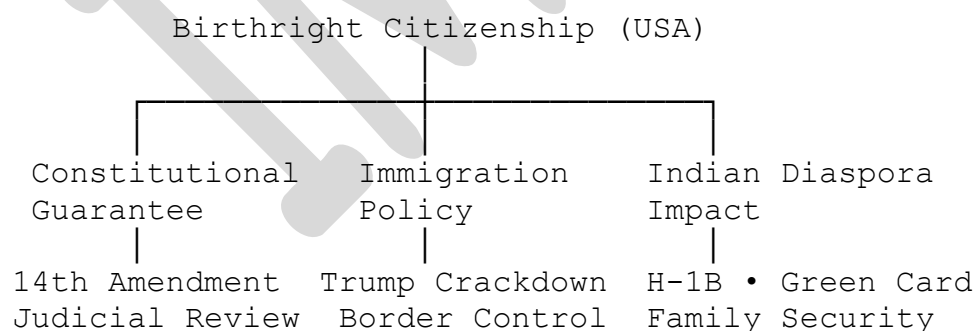
Topic : GS II: International Relations | Indian Diaspora | Governance

US Supreme Court Upholds Birthright Citizenship – Implications for Immigration & Indian Diaspora

📌 **Brief**

- The **US Supreme Court upheld birthright citizenship**, rejecting former President **Donald Trump's executive order** that sought to deny citizenship to children born in the US to parents who were not US citizens or lawful permanent residents.

🧠 **Mind Map**



📌 **Background**

- **Birthright Citizenship:** Citizenship granted to anyone born on US soil.
- Based on the **14th Amendment** of the US Constitution (1868).
- Reinforced by over **125 years of judicial precedent**.

🌟 Key Highlights

✅ Supreme Court Verdict

- Rejected Trump's executive order.
- Affirmed that **children born in the US are citizens**, irrespective of parents' temporary visa status.
- Protected constitutional guarantees under the **14th Amendment**.

✅ Trump's Immigration Agenda

- Proposed ending birthright citizenship through executive action.
- Signalled possible legislative attempts through Congress.
- Continues broader immigration restrictions despite the setback.

🇮🇳 Implications for India

Indian Diaspora

- Around **5.4 million** people of Indian origin reside in the US.
- Indians are:
 - Second-largest immigrant community.
 - Largest recipients of **H-1B visas**.
 - Most affected by employment-based green card backlogs.

Importance

Indian Professionals
|
Temporary Work Visas (H-1B)
|
Long Green Card Wait
|
Children Born in US
|
Birthright Citizenship Protected

⚖️ Significance

For the USA

- Upholds constitutional values and judicial independence.
- Ensures stability for immigrant families.
- Supports labour markets dependent on skilled migrants.

For India

- Provides certainty to Indian professionals.
- Protects educational and employment prospects of second-generation Indians.
- Strengthens people-to-people ties.

Challenges Ahead

- Continued restrictive immigration policies.
- Negative net migration in the US.
- Green card backlog for Indian professionals.
- Political polarisation over immigration.

Way Forward

- Preserve constitutional protections through judicial oversight.
- Reform employment-based immigration.
- Address green card backlogs.
- Promote balanced immigration policies that meet economic needs while ensuring border security.

UPSC Value Addition

14th Amendment (USA)

- Guarantees:
 - Citizenship by birth.
 - Equal protection of laws.
 - Due process of law.

Probable UPSC Mains Questions

Q1. Discuss the significance of the US Supreme Court's decision on birthright citizenship for the Indian diaspora and India-US relations.(250 words)

Q2. How do immigration policies of developed countries influence skilled migration and diaspora relations? Illustrate with the example of the United States.(250 words)

✨ Keywords for UPSC

- ✧ Birthright Citizenship • 14th Amendment • Judicial Review • H-1B Visa • Green Card Backlog • Indian Diaspora • Constitutional Rights • Immigration Policy • Skilled Migration • India-US Relations

🎯 UPSC Prelims Facts

- **Jus Soli** = Citizenship by **place of birth**.
- **Jus Sanguinis** = Citizenship by **descent/bloodline**.
- **USA** follows **broad Jus Soli** (with limited exceptions).
- **India** follows a **modified/restricted Jus Soli** after the 1986 and 2003 amendments.
- The **Citizenship Act, 1955** governs acquisition and termination of Indian citizenship.

💡 UPSC Trap

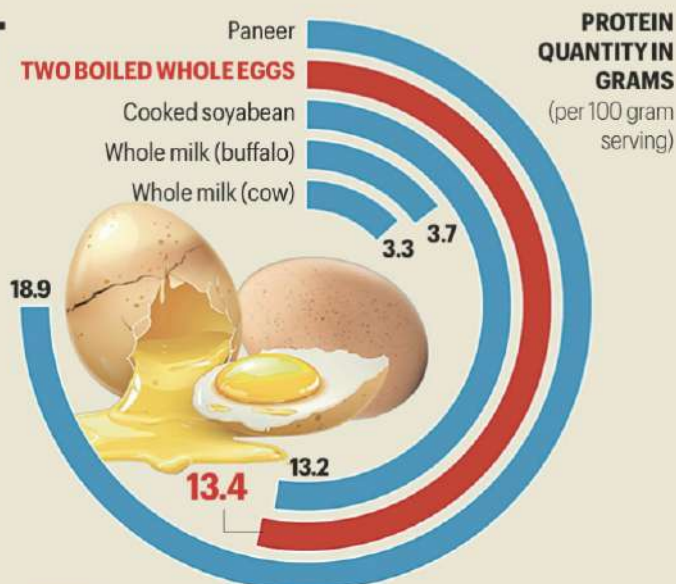
- ✧ **✗** India provides automatic citizenship to everyone born in India.
✔ **Incorrect.** Since the **1986** and **2003** amendments, birth alone is **not sufficient** for citizenship.
-

Why eggs matter for schoolkids

• EGGS vs THE REST

The chart and table show the quantity of nutrients such as protein and carbohydrates in various foods.

- Eggs and cooked soyabeans appear indistinguishable in protein content. But not all proteins are created equal.
- Eggs are highly digestible and 'bio-available' (well-utilised by the body).
- Soyabean is a high-quality plant protein. But it is best as part of a dietary mix rather than a standalone solution.
- Paneer has higher protein. But 100 gms is tough to consume at one go. Egg also contains all nine essential amino acids.



(NUTRIENT VALUES BELOW ARE PER 100 GRAM SERVING)



Nutrient	Whole milk (buffalo)	Whole milk (cow)	Paneer (cottage cheese)	Cooked soyabean	Two boiled whole eggs
Energy (gram)	107.3	72.9	257.9	132.09	147.7
Carbohydrate (g)	8.3	4.9	12.4	3.57	Virtually nil
Fats (g)	6.6	4.5	14.8	6.79	10.54
Calcium (milligram)	121	118	476	68.25	55.1
Riboflavin (B2) (mg)	0.13	0.11	0.1	0.08	0.19

How school lunch came to other states

- In 1984, Kerala became the country's second state to have a school lunch programme.

- Over the next few years, many other states launched their own versions of the scheme, and finally in 1995, the Centre stepped in. It was launched as a centrally sponsored scheme across 2,408 blocks for students up to Class 5, initially providing foodgrains to states.

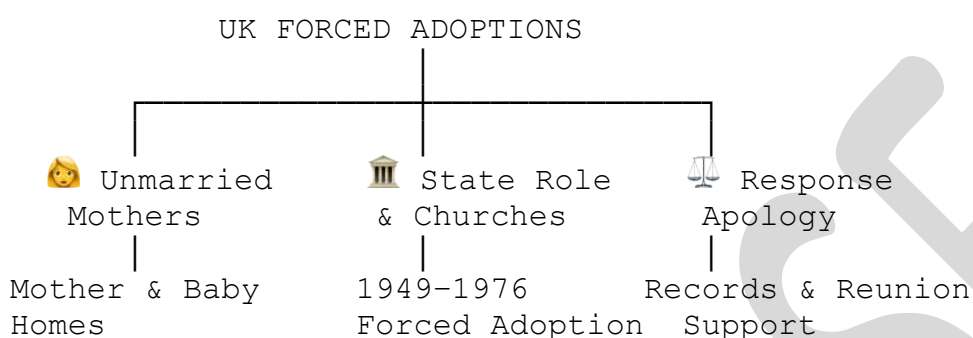
- In 2001, following a landmark Supreme Court order, states were directed to provide cooked mid-day meals rather than dry rations. In 2007, the UPA government expanded the scheme to Class 8.
- In 2021, the scheme was named PM POSHAN.

03.07.2026

Topic: GS I | II | IV

UK Forced Adoptions Apology (2025)

Mind Map



Key Highlights

- **UK Prime Minister Keir Starmer** issued a formal state apology for the forced adoption of children from **unmarried mothers**.
- **Period: 1949–1976.**
 - Around **185,000 children** were separated from their mothers in Britain.
 - The system involved **state institutions** and **Christian churches**, including "**Mother and Baby Homes**", where many women were pressured or coerced into giving up their babies.
 - The **Church of England** also apologized for its role.
 - The UK government announced **£4 million** to:
 - Help people access **adoption records**.
 - Support **family reunification**.
 - Fund **research and documentation** of long-term impacts.

UPSC Prelims Facts

- Similar official apologies have previously been issued by **Ireland and Australia** for comparable historical practices.
- The case highlights issues of **human rights, state accountability, social justice, and transitional justice**.

UPSC Trap

- ✗ The policy targeted **orphans only**.
 - ✓ **Incorrect.** It primarily affected **children born to unmarried mothers**, who were often coerced into adoption because of prevailing social norms.

04.07.2026

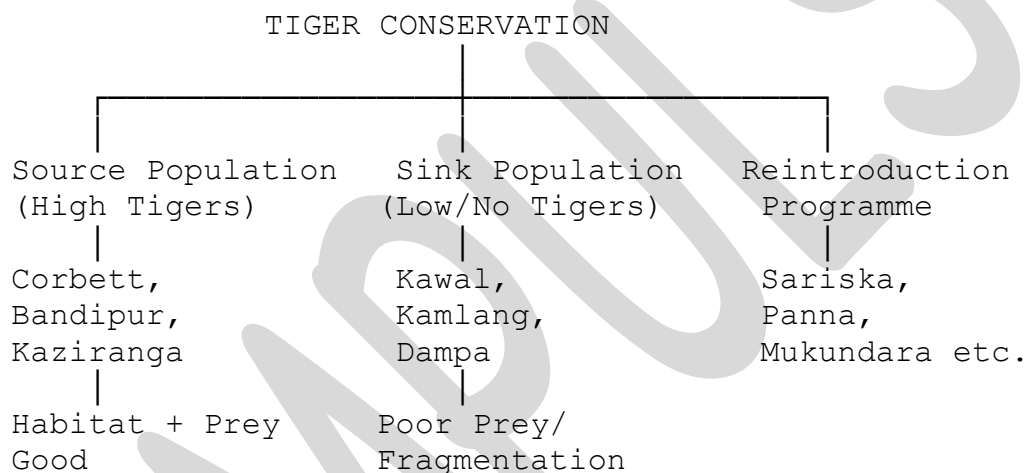
Government's Plan to Revive Struggling Tiger Reserves (2025)

(Based on NTCA, Project Tiger, All India Tiger Estimation, Wildlife Institute of India, MoEFCC)

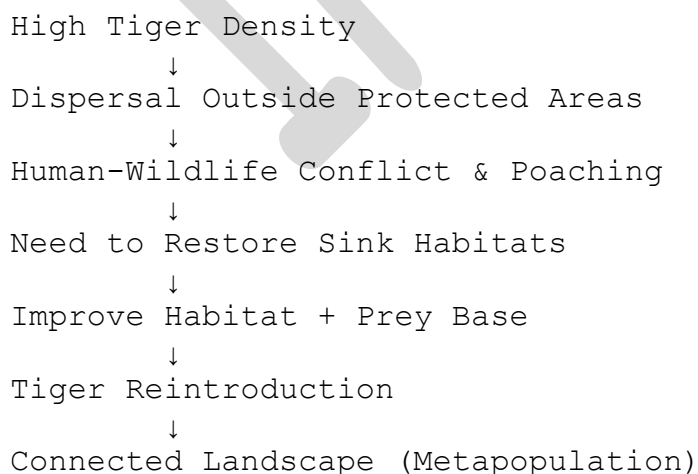
Brief

- **18th anniversary of Sariska Tiger Reintroduction (2008).**
- Centre released:
 - **Roadmap for Tiger Management**
 - **Assessment of 12 Tiger Reintroduction Initiatives**

Mind Map



Flowchart



↓
Long-term Genetic Diversity

★ Key Facts (Prelims)

Tiger Population

- 2006: 1,411
- 2022: 3,682
- Tiger Reserves: 58
- Area under reserves: ~85,000 sq km

Distribution

- 10–12 reserves hold nearly 36% of India's tigers.
- 12 reserves have <3 tigers.
- Zero-tiger reserves:
 - ★ Kawal (Telangana)
 - ★ Kamlang (Arunachal Pradesh)
 - ★ Dampa (Mizoram)

Important Concepts

Source Population

- High tiger density
- Good habitat
- Adequate prey
- Breeding population

Examples: Corbett, Bandipur, Kaziranga

Sink Population

- Low prey
- Poor habitat/connectivity
- Few or no breeding tigers
- Requires restoration

Tiger Reintroduction

Successful

- ★ Sariska (2008) – First reintroduction

- ★ Panna (2009) – Major conservation success

Challenges

- **Satkosia (Odisha):** Local opposition
- **Mukundara Hills (Rajasthan):** Slow implementation



Why Connectivity Matters?

Metapopulation

- Network of connected tiger populations.
- Enables:
 - **Genetic exchange**
 - Natural dispersal
 - Reduced extinction risk
 - Stable long-term population



High-Yield Prelims Facts

- Project Tiger: 1973
- NTCA: Statutory body under Wild Life (Protection) Act, 1972 (amended in 2006).
- Tiger is listed in:
 - Schedule I of the Wild Life (Protection) Act, 1972
 - Appendix I of CITES
 - IUCN Red List: Endangered



UPSC Prelims Trap Points

- More tigers ≠ healthier ecosystem if concentrated in few reserves.
- **Source populations** supply dispersing tigers.
- **Sink populations** require habitat restoration and prey augmentation.
- Habitat connectivity is essential for maintaining **genetic diversity**.



Probable UPSC Prelims Question

Q. Consider the following statements regarding tiger conservation in India:

1. Source populations are characterised by high prey density and breeding tiger populations.
2. Metapopulation management aims to improve genetic exchange between tiger populations.
3. Kawal Tiger Reserve currently has one of the highest tiger densities in India.

Which of the statements given above is/are correct?

- A. 1 and 2 only ✓
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

Answer: A



UPSC Revision Box

- ☆ Source → Surplus Tigers
- Sink → Needs Restoration
- Connectivity → Metapopulation → Genetic Diversity
- Sariska (2008) • Panna (2009) • Project Tiger (1973) • NTCA (2006)

Ban on Irrational Fixed Dose Combination (FDC) Drugs

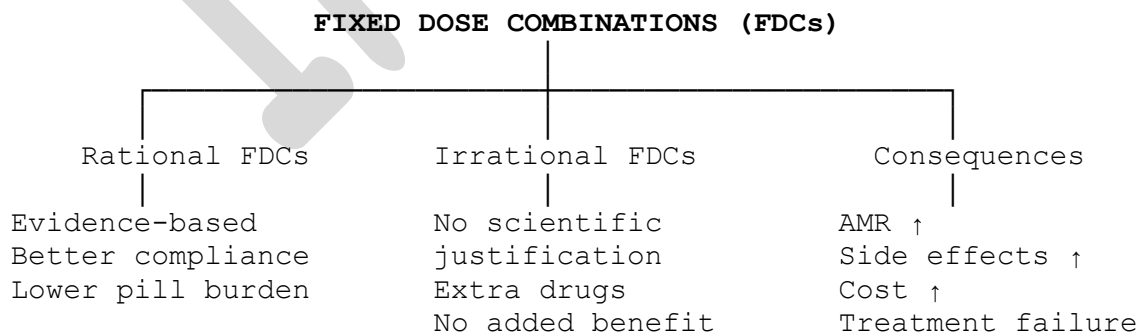
(Based on CDSCO, Drugs & Cosmetics Act, ICMR, WHO, National Action Plan on AMR)

Brief

- Government banned **16 Fixed-Dose Combination (FDC) drugs** due to **lack of scientific evidence** regarding their efficacy and safety.
- The move aims to **promote rational drug use** and combat **Antimicrobial Resistance (AMR)**.



Mind Map



Flowchart

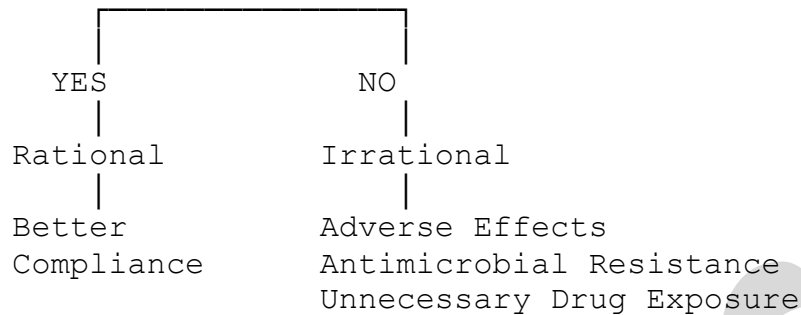
Two or More Drugs



Fixed-Dose Combination (FDC)



Scientific Evidence?



★ **What is an FDC?**

Fixed-Dose Combination (FDC)

A single medicine containing two or more active pharmaceutical ingredients in fixed proportions.

✓ **Advantages (Only if Rational)**

- Better patient compliance
- Reduced pill burden
- Improved therapeutic outcomes
- Simplified treatment

✗ **What is an Irrational FDC?**

An FDC is **irrational** when:

- No scientific evidence supports the combination.
- Individual drugs do not complement each other.
- No additional clinical benefit over separate medicines.
- Increased risk outweighs benefits.

Why are Irrational FDCs Dangerous?

Health Risks

- Increased adverse drug reactions
- Drug interactions
- Allergic reactions

- Difficulty in dose adjustment
- Masks underlying disease

Public Health Risks

- Unnecessary antibiotic exposure
- Promotes **Antimicrobial Resistance (AMR)**
- Increases treatment costs



Antimicrobial Resistance (AMR)

Definition

AMR occurs when **bacteria, viruses, fungi and parasites** no longer respond to **medicines**, making infections harder to treat.

Causes

- Irrational antibiotic use
- Over-prescription
- Self-medication
- Incomplete antibiotic courses
- Irrational FDCs



Examples

1 Amoxicillin + Serratiopeptidase ❌

- No proven improvement in bacterial cure.
- Serratiopeptidase lacks strong clinical evidence.

2 Norfloxacin + Tinidazole (Norflox-TZ) ❌

- Bacterial diarrhoea → Tinidazole unnecessary.
- Amoebic dysentery → Norfloxacin unnecessary.
- Simultaneous infections are uncommon.

3 Amoxicillin + Clavulanic Acid (Augmentin) ✅ (Conditional)

- Clavulanic acid blocks β -lactamase enzymes.
- Useful **only when bacteria produce β -lactamase**.
- Otherwise adds no benefit.

4 Steroid + Antifungal Creams ❌

- Steroids suppress local immunity.
- May worsen fungal infection.
- Can contribute to resistant fungal infections.

Regulation of FDCs

Organization/Country

Approach

WHO	Supports only evidence-based FDCs in Essential Medicines List
USA (FDA)	Requires clinical proof of superiority or convenience
European Union	Full scientific evaluation before approval
India (Post-2016)	Review of ~6,000 FDCs; irrational combinations banned

Indian Regulatory Framework

CDSCO

- Central Drugs Standard Control Organisation
- National drug regulator

Legal Basis

- **Drugs and Cosmetics Act, 1940**
- **Drugs and Cosmetics Rules, 1945**

High-Yield UPSC Facts

- ★ Irrational FDCs increase **AMR**.
- ★ More ingredients $\neq$ better treatment.
- ★ Antibiotics should be **targeted and evidence-based**.
- ★ WHO discourages irrational FDCs.
- ★ Fixed-dose combinations are beneficial **only if scientifically validated**.

Previous UPSC Themes Connected

UPSC has repeatedly asked questions on:

- Antimicrobial Resistance (AMR)
- WHO Essential Medicines List
- Rational drug use
- National Health Policy
- Drug regulation
- Antibiotic misuse

UPSC Revision Box

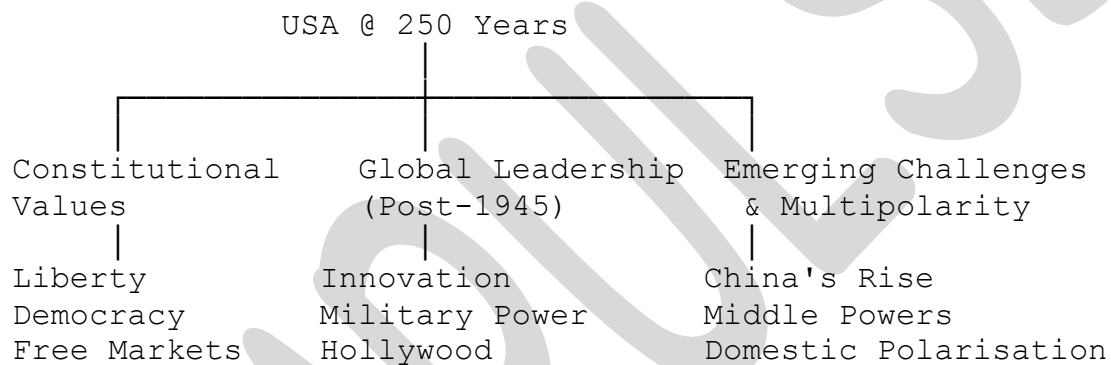
- ☆ **FDC = Two or more active drugs in one formulation**
Rational FDC → Evidence-based + Better compliance
Irrational FDC → No added benefit + Adverse effects + AMR
AMR = Microorganisms become resistant to medicines
Regulator in India → CDSCO under Drugs & Cosmetics Act, 1940

250 Years of American Independence – **US Exceptionalism in a Changing World**

Brief

- **The United States celebrated the 250th anniversary (1776–2026) of its Independence amid debates over American exceptionalism, domestic polarisation, and the emergence of a multipolar world order.**

Mind Map



Evolution of American Power



🌟 Pillars of American Exceptionalism

✅ Constitutional Ideals

- **Declaration of Independence (1776):**
 - *Life, Liberty and the Pursuit of Happiness.*
- Rule of Law.
- Individual freedoms.
- Democratic governance.

✅ Sources of Global Influence

- World's largest innovation ecosystem.
- Leading universities and research.
- Military superiority.
- Dollar as global reserve currency.
- Hollywood, digital platforms and cultural influence.
- Technology giants driving AI and innovation.

⚠️ Emerging Challenges

Domestic

- Political polarisation.
- Immigration debates.
- Institutional distrust.
- Concerns over democratic norms.

External

US Dominance



Rise of China



Emergence of Middle Powers
(India, Brazil, Australia)



Multipolar World Order

- China's economic and technological rise.
- Greater strategic autonomy of middle powers.
- Declining unipolarity.

Relevance for India

Opportunities

- Stronger India–US strategic partnership.
- Cooperation in Quad, technology, AI and semiconductors.
- Supply-chain diversification.

Challenges

- Balancing ties with US, Russia and Global South.
- Navigating US-China rivalry.
- Managing trade and immigration issues.

Way Forward

- The US must reinforce democratic institutions and openness.
- Strengthen alliances while adapting to a multipolar order.
- India should pursue **multi-alignment**, leveraging cooperation with the US without compromising strategic autonomy.

UPSC Value Addition

Key Concepts

Concept

American
Exceptionalism

Multipolarity

Strategic Autonomy

Meaning

Belief that the US has a unique political and moral role in the world

Distribution of power among multiple major states

Independent foreign policy based on national interests

Probable UPSC Mains Questions

Q1. "The era of unipolarity is giving way to a multipolar world." Examine this statement in the context of the changing role of the United States and the rise of emerging powers.(250 words)

Q2. Critically analyse the concept of American exceptionalism in the context of contemporary global political and economic transformations.(250 words)

✦ Keywords for UPSC

✦ American Exceptionalism • Declaration of Independence • Liberal Democracy • Multipolarity • Strategic Autonomy • Unipolar World • Global Governance • Indo-Pacific • Rules-based Order • Middle Powers • Soft Power • Knowledge Economy

When peak romance meets the law's long arm

WHAT KAREN Carpenter sang about in 1972, Angela Nikolau and Ivan Beerkus embodied this week: Being so in love that they were “on top of the world, looking down on creation”. The Russian daredevil duo has gone viral for scaling the Empire State Building in New York City, where he went down on one knee and put a ring on her perfectly manicured fingers. The proposal was photographed and shared with their 2 million followers.

The stunt was the culmination of a decade-long romance that has played out across countries and skyscrapers, from the 1,957-ft Goldin Finance 117 in China to the 2,227-ft Merdeka 118 in Malaysia. It was also, perhaps inadvertently, the encapsulation of what it could feel like to be in love: Euphoric and vertiginous, complete with the conviction that there is no force on Earth that can bring one down. Yet, the high is inevitably followed by the crashing low.

The climb to the top of the Empire State Building, done with neither safety gear nor permission, was illegal. Among the many charges that the NYPD has slapped on the couple are reckless endangerment, criminal mischief, criminal trespass and disorderly conduct. So far, Nikolau and Beerkus have refused to let the prosecutorial instincts of the state dampen their romance, kissing for the cameras after leaving the courthouse where they were arraigned. Like other lovers before them, they may discover that even the most soaring romance can only defy gravity for so long.

Biggest cities offer better salaries, more regular jobs for women, but stark gender disparity in income favours men

Women’s overall contribution to workforce, however, continues to languish — just one of every four women employed in big cities compared to almost 3 of every 4 men

• JOBS AND SALARIES IN BIG CITIES

% employed in regular jobs

	MN-PLUS CITIES	URBAN INDIA
Men	56.4	46.5
Women	65.1	50.9
Overall	58.5	47.6

Average monthly salary

	MN-PLUS CITIES	URBAN INDIA
Men	Rs 30,707	Rs 27,984
Women	Rs 23,707	Rs 21,664
Overall	Rs 28,808	Rs 26,258

How metro cities pay

	MEN	WOMEN
Mumbai	Rs 36,453	Rs 35,788
Delhi	Rs 35,708	Rs 31,644
Bengaluru	Rs 37,430	Rs 28,325
Chennai	Rs 31,655	Rs 22,919
Kolkata	Rs 21,534	Rs 13,784

SOURCE: PERIODIC LABOUR FORCE SURVEY (PLFS) 2025

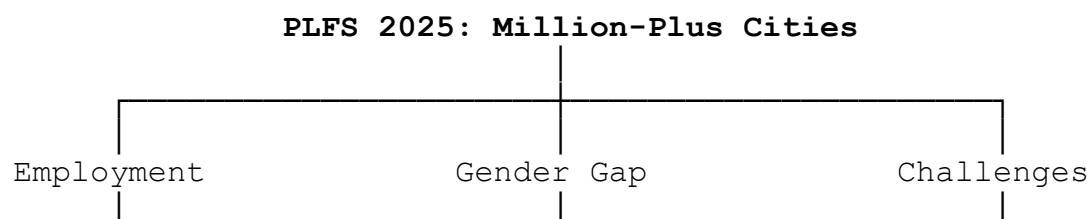
Labour Market Dynamics in Million-Plus Cities (PLFS 2025)

(Based on NSO–Periodic Labour Force Survey (PLFS) 2025)

Brief

- **National Statistics Office (NSO)** released the first-ever **Labour Market Dynamics in Million-Plus Cities** report based on **PLFS 2025**, covering **46 cities** with populations above **1 million (Census 2011)**.

Mind Map



Regular Jobs ↑
Self-employment
Casual Labour ↓
Inclusion

Pay Gap persists
NEET Women ↑
Metro disparities

Low Female WPR
Informal Wage Gap
Labour Force

Flowchart

PLFS 2025 Survey

↓
46 Million-Plus Cities
↓
Higher Regular Employment
↓
Better Female Salaried Jobs
↓
But ↓ Female WPR
↓
Persistent Gender Pay Gap
↓
Need for Inclusive Urban Employment

★ **About PLFS**

Periodic Labour Force Survey (PLFS)

- Conducted by **National Statistics Office (NSO)**
- Ministry of Statistics & Programme Implementation (**MoSPI**)
- Started in **2017**
- Measures:
 - Employment
 - Unemployment
 - Labour Force Participation
 - Worker Population Ratio (WPR)
 - Wage levels

Key Findings

Women's Employment

Regular/Salaried Employment

- **Million-plus cities: 65.1%**
- **Urban India: 50.9%**

 Women in large cities are **more likely to have regular jobs.**



Men

Regular salaried employment:

- Million-plus cities → **56.4%**



Worker Population Ratio (WPR)

Definition

Percentage of employed persons in the total population.

<i>Category</i>	<i>Million-plus Cities</i>
Men	72.6%
Women	25.5%



Female employment participation remains **very low**.



Gender Pay Gap

Average Monthly Salary

<i>Category</i>	<i>Men</i>	<i>Women</i>
Urban India	₹27,984	₹21,664
Million-plus Cities	₹30,707	₹23,707

✂ Women earn only **77.2%** of men's salaries.



Cities with Near/Better Pay Parity

<i>City</i>	<i>Women vs Men</i>
★ Prayagraj	131.2%
★ Srinagar	124%
★ Lucknow	117.1%
★ Patna	111.1%
★ Meerut	105.9%
★ Varanasi	102.4%

Metro Comparison

<i>Metro</i>	<i>Women Salary (% of Men)</i>
Mumbai	98.2%
Delhi	88.6%
Bengaluru	75.7%
Chennai	72.4%
Kolkata	64% (largest gap)

Self-Employment

Highest earning city:

★ **Navi Mumbai**

- Men → ₹62,234/month
- Women → ₹84,913/month

Casual Labour

Average Daily Wage

- Men → ₹643
- Women → ₹434

Highest female wage:

★ **Srinagar – ₹800/day**

NEET Population

✂ **NEET : Not in Employment, Education or Training**

Women (30–59 years):

- Urban India → 65%
- Million-plus cities → 67%

Men:

- Around 4.3–4.4%

Important Definitions

- ☆ **Labour Force** : People working or actively seeking work.
- ☆ **Labour Force Participation Rate (LFPR)**
Percentage of population in the labour force.
- ☆ **Worker Population Ratio (WPR)**
Percentage of employed persons in the population.
- ☆ **Unemployment Rate (UR)**
Percentage of unemployed persons within the labour force.

UPSC Prelims Focus

- PLFS is conducted by **NSO (MoSPI)**.
- Higher regular employment **does not necessarily mean** higher female workforce participation.
- Million-plus cities have:
 - More salaried jobs
 - Less casual employment
 - Persistent gender wage gaps
- WPR and LFPR are different indicators.

UPSC Revision Box

PLFS → NSO (MoSPI)

Million-plus cities → 46 (Census 2011)

Women in regular jobs: 65.1% (vs 50.9% in urban India)

Women WPR: 25.5% (still low)

Gender pay ratio: Women earn ~77.2% of men's salaries

NEET = Not in Employment, Education or Training

06.07.2026

Topic: GS III | Essay

AI IS RESHAPING WARFARE

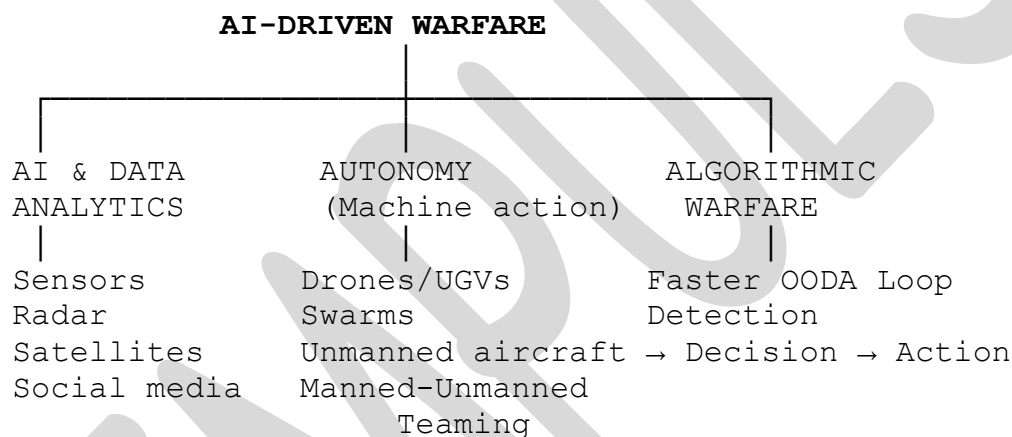
● Core Concept: AI + Autonomy + Algorithms = New Warfare Trinity

AI → analyses huge data

Autonomy → machines act with limited human intervention

Algorithms → convert data into rapid decisions

● **MIND MAP**



✂ **1. How AI is changing warfare**

◆ Traditional warfare

Detect → Human analysis → Command → Strike

◆ AI-enabled warfare

Sensors → AI data fusion → Target identification → Autonomous systems → Rapid action

➡ Result:

Compression of the OODA Loop

OODA = Observe → Orient → Decide → Act

✍ **UPSC Fact:** In modern warfare, the side that can complete the OODA loop faster may gain a decisive operational advantage.

2. Drones: The major military transformation

Uses:

- **ISR** → Intelligence, Surveillance & Reconnaissance
- Target acquisition
- Precision strikes
- Logistics and resupply
- Casualty evacuation
- Drone swarms
- Counter-drone operations

Kill Web

Satellite / Radar / Drone / Cyber / Human Intelligence

↓
AI DATA FUSION
↓
TARGET DETECTION
↓
DECISION SUPPORT

↓
Drone / Missile / Artillery / Fighter

★ **Key Concept:**

Kill Chain vs Kill Web

Kill Chain: Linear process

Detect → Decide → Engage

Kill Web: Networked and flexible system

Multiple sensors + shooters + command nodes → rapid re-routing of attack.

3. Ukraine's DELTA System – Prelims Relevant

DELTA is an AI-enabled battlefield management system used by Ukraine.

Functions:

- Integrates battlefield information from multiple sources

- Provides real-time situational awareness
- Supports operational planning
- Helps identify enemy targets
- Facilitates information sharing between military units

UPSC Link:

AI + Data Fusion + Battlefield Awareness + Network-Centric Warfare

✂ Ukraine's Defence Ministry has described DELTA as an increasingly data-driven combat system with AI-assisted target detection.

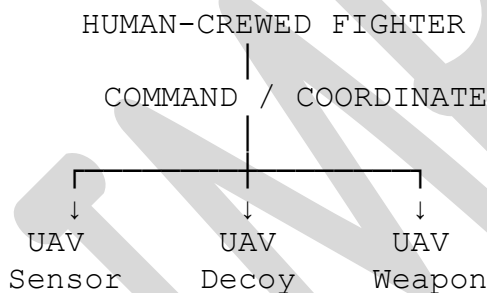
4. Autonomous Combat Aircraft

YFQ-44A Fury

- Developed by **Anduril**
- Part of the US **Collaborative Combat Aircraft (CCA)** concept
- Designed to operate alongside crewed aircraft or independently
- Uses semi-autonomous flight and mission-autonomy technologies

Concept:

Manned-Unmanned Teaming (MUM-T)



Prelims Trap:

- ☞ Autonomous ≠ necessarily completely independent of humans. Many systems function with a human “on the loop”, supervising rather than directly controlling every movement.
- ☞ The **YFQ-44A** has been tested as a **semi-autonomous** aircraft capable of executing mission plans and managing flight functions with limited direct human control.

5. Implications for India

India needs:

AI Capability



Sovereign Defence Data



Autonomous Drones & Swarms



Counter-Drone Systems



AI-enabled ISR



Network-Centric Warfare

Strategic relevance:

- **LAC:** High-altitude surveillance and autonomous systems
- **LoC:** Persistent surveillance and rapid response
- **Indian Ocean:** Maritime domain awareness
- **Cyber domain:** AI-driven attacks and defence
- **Space:** Satellite-based ISR and data fusion

6. Major Challenges

Technological

- Dependence on foreign chips and computing infrastructure
- Insufficient defence datasets
- Cyber vulnerabilities
- AI bias and false identification

Strategic

- Autonomous escalation
- Machine-speed conflict
- Risk of accidental engagement
- AI-enabled misinformation and deepfakes

Ethical

Who is responsible if an autonomous weapon makes a mistake?

Human Control



Accountability



Proportionality

↓
International Humanitarian Law

★ PRELIMS QUICK REVISION

Remember:

AI → Data analysis

Autonomy → Machine decision/action

Algorithmic warfare → Rules/models converting data into rapid operational decisions

ISR → Intelligence, Surveillance, Reconnaissance

OODA → Observe–Orient–Decide–Act

MUM-T → Manned–Unmanned Teaming

Kill Web → Networked sensors + decision nodes + shooters

DELTA → Ukraine's AI-enabled battlefield management system

YFQ-44A Fury → Autonomous/semi-autonomous Collaborative Combat Aircraft concept



UPSC Mains Questions

Q 1: “Artificial Intelligence, autonomous systems and algorithmic warfare are transforming the nature of modern warfare from platform-centric to network-centric conflict.” Discuss the opportunities and challenges this transformation presents for India’s national security. *(150 words, 10 marks)*

Q 2: What is a ‘kill web’ in modern warfare? Explain how the integration of Artificial Intelligence, drones, satellite-based ISR and autonomous systems can enhance India’s defence capabilities. Also discuss the risks associated with excessive reliance on autonomous weapons. *(250 words, 15 marks)*



UPSC Essay Question

“The future battlefield will be won not merely by the nation possessing the most powerful weapons, but by the nation capable of converting information into action the fastest.”
(1200 words, 125 marks)

• From Ukraine to US: AI on the battlefield

UKRAINE'S DELTA battlefield management system has given it an edge in its grinding war against Russia. The system uses artificial intelligence to help with target selection, faster multi-sensor data analysis about enemy activity, and decision-making, among others.

THE UKRAINIAN defence ministry

has said that Delta enables “real-time battlefield awareness, supports operational planning, and facilitates information sharing within units, brigades, formations, and, when needed, with allies”.

ANOTHER EXAMPLE is YFQ-44A Fury, an AI-powered unmanned fighter jet developed by the American

defence tech startup Anduril.

ANDURIL SAYS on its website that integration of autonomy into fighter aircraft is a “step change” in aviation. “We designed YFQ-44A for a specific Air Force mission: to enhance survivability, lethality, and mission effectiveness by teaming with crewed fighter aircraft or operating independently.”

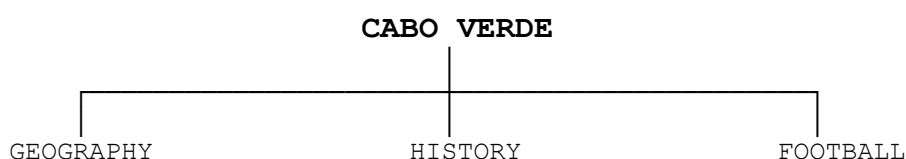
CABO VERDE (CAPE VERDE)

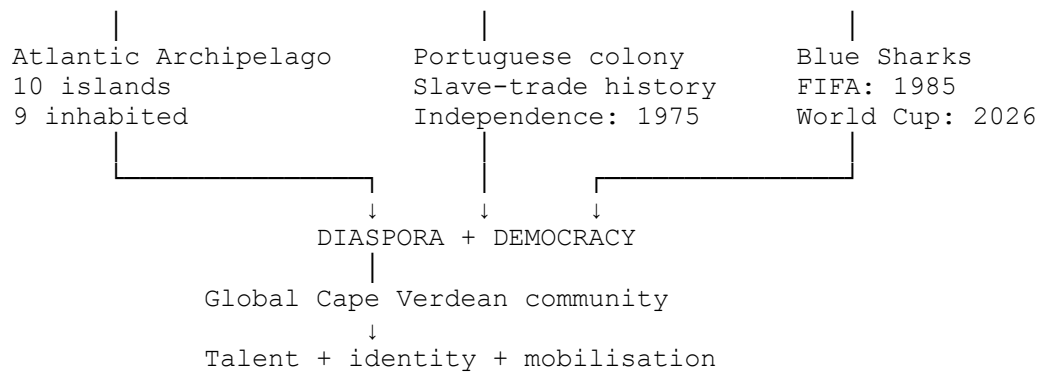
Location & Geography

ATLANTIC OCEAN
|
WEST COAST OF AFRICA
|
 CABO VERDE
|
~450–600 km west of Senegal

- **Official name:** Republic of Cabo Verde
- **Location:** Atlantic Ocean, off the west coast of Africa
- **Nature:** Archipelago
- **Islands:** 10 major islands; 9 inhabited
- **Capital:** Praia
- **Area:** Around 4,000 sq km
- **Population:** Just over 500,000
- **Official language:** Portuguese
- **Widely spoken:** Crioulo/Kriolu, a Portuguese-based Creole language
- **Former colonial power:** Portugal
- **Independence:** 1975

MIND MAP: CABO VERDE





Historical Background

Colonial History

- Islands were **uninhabited before Portuguese discovery and settlement** in the 15th century.
- Portugal brought enslaved Africans to work on plantations.
- Cabo Verde became an important centre of the **transatlantic slave trade**.

Political Development

- Portugal attempted to suppress anti-colonial nationalism.
- **Independence: 5 July 1975**
- **Multi-party democracy:** Established in 1991.
- It is considered one of Africa's relatively stable electoral democracies.

2026 FIFA WORLD CUP: WHY HISTORIC?

The Blue Sharks

- **First-ever FIFA World Cup qualification: 2026**
- Qualified by finishing top of CAF Group D.
- Defeated Eswatini 3–0 to confirm qualification.
- Became the **second-least populous country** to qualify for the World Cup **after Iceland**.
- Also among the smallest nations by area to qualify.

The Diaspora Factor

Why is the diaspora important?

Cabo Verde has a population of **only around half a million**, but a large Cape Verdean-origin population lives abroad.

Small resident population
↓
Historical migration
↓
Large global diaspora
↓
Players born/raised in Europe & elsewhere
↓
Talent pool expands beyond national borders
↓
Stronger national football team

UPSC Concept: Diaspora as Soft Power

The Cabo Verde example shows how diaspora can contribute to:

- Human capital
- Sports development
- Remittances
- International visibility
- Cultural diplomacy
- National identity

Why Relevant for UPSC?

1. Archipelagic Geography

Island states face:

- Limited land resources
- Climate vulnerability
- Water scarcity
- Dependence on external trade and tourism

2. Diaspora & Development

A diaspora can act as a source of:

- Talent
- Remittances
- Investment
- International networks

3. Post-Colonial State Formation

- Cabo Verde reflects the transition:

Portuguese colonial rule → Independence (1975) → Multi-party democracy (1991)

4. Globalisation of Sport

- The success of Cabo Verde shows how national teams increasingly draw upon **diaspora communities and dual-nationality talent**.

PRELIMS QUICK FACTS

<i>Feature</i>	<i>Cabo Verde</i>
Official name	Republic of Cabo Verde
Region	West Africa
Ocean	Atlantic Ocean
Political form	Republic
Capital	Praia
Former colonial power	Portugal
Independence	1975
Islands	10 major islands
Inhabited islands	9
Official language	Portuguese
Local language	Crioulo/Kriolu
FIFA confederation	CAF
World Cup debut	2026
Team nickname	Blue Sharks

UPSC Prelims Practice Question

Consider the following statements regarding Cabo Verde:

1. It is an archipelagic country located in the Atlantic Ocean off the western coast of Africa.
2. Portuguese is its official language.
3. It gained independence from France in 1975.
4. It qualified for the FIFA World Cup for the first time in 2026.

Which of the statements given above are correct?

Answer: 1, 2 and 4 only

 **Statement 3 is incorrect:** Cabo Verde was a Portuguese colony and gained independence from Portugal in 1975.

One-line revision:

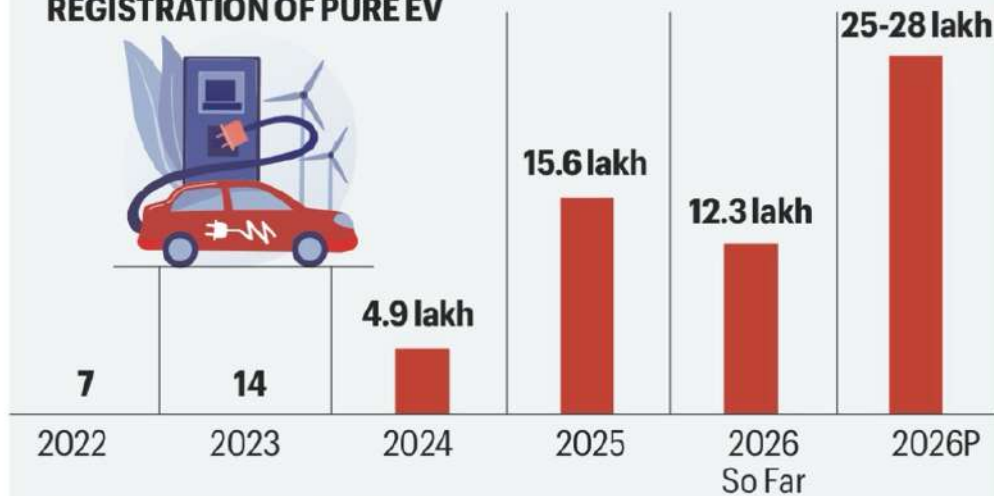
 **Cabo Verde** = Atlantic African archipelago + Portuguese colonial legacy + 1975 independence + large diaspora + historic 2026 World Cup debut.



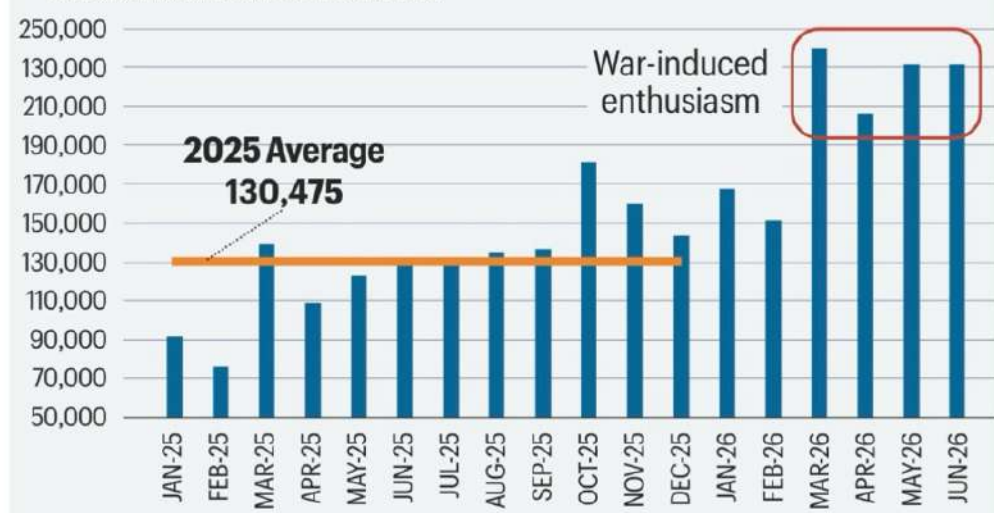
• EV SURGE

The registration of electric vehicles (EVs) soared significantly after the beginning of the West Asia war, which affected the energy supply from the Gulf region. During the March-June stretch of 2026, the average EV registrations shot up to 2.3 lakh, way above the 1.3 lakh registration seen in the same period of 2025.

REGISTRATION OF PURE EV



REGISTRATION OF PURE EV



NOTE: P: SBI PROJECTION

SOURCE: VAHAN; SBI RESEARCH

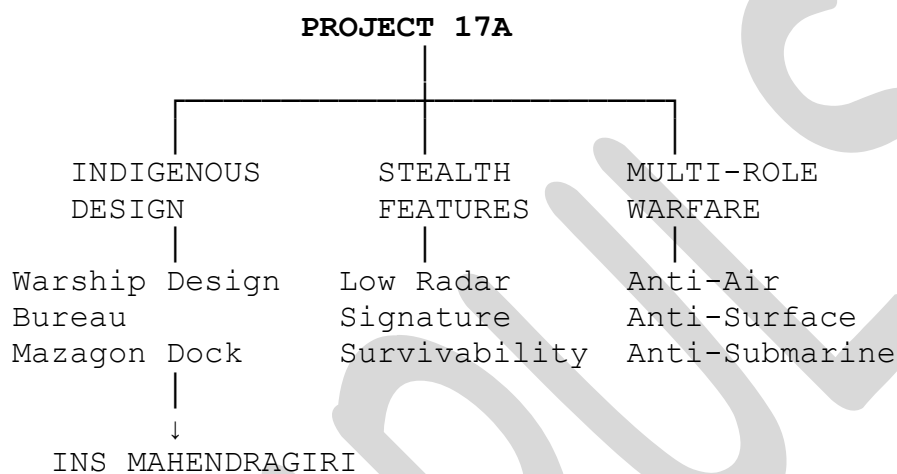
07.07.2026

INS MAHENDRAGIRI & PROJECT 17A

Brief

- **INS Mahendragiri (F38)** is the **sixth Project 17A indigenous stealth frigate** of the Indian Navy. It is scheduled for commissioning at **Visakhapatnam**.

MIND MAP



Key Facts

Design & Construction

- Designed by: Indian Navy's **Warship Design Bureau (WDB)**
- Built by: **Mazagon Dock Shipbuilders Limited (MDL)**, Mumbai
- Indigenous content: **Over 75%**
- Pennant number: **F38**
- Named after: **Mahendragiri mountain range of the Eastern Ghats**

Project 17A

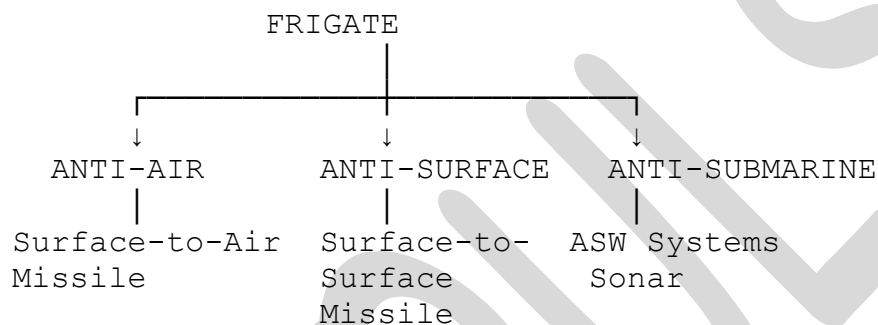
- A class of **indigenous stealth-guided missile frigates**
- Total planned: 7 frigates
- **Mahendragiri**: Sixth frigate of the class

Project 17A Commissioning Sequence

INS Nilgiri → Lead ship
INS Udaygiri → 2nd
INS Himgiri → 3rd
INS Taragiri → 4th
INS Dunagiri → 5th
INS Mahendragiri → 6th
↓
7th & final ship

Capabilities

Three-Dimensional Warfare



Other Features:

- Reduced **Radar Cross-Section (RCS)**
- Enhanced survivability
- Advanced electronic warfare systems
- Integrated Combat Management System
- High degree of automation
- Long endurance and high-speed operations

Propulsion

Combined Diesel or Gas (CODOG)

Diesel Engine → Efficient cruising / endurance
+
Gas Turbine → High-speed operations
↓
CODOG Propulsion

Prelims Trap:

CODOG ≠ CODAG

- CODOG: Diesel **OR** Gas turbine
- CODAG: Diesel **AND** Gas turbine can operate together

Wider Maritime Roles

INS Mahendragiri is not limited to combat operations:

- Maritime security
- Power projection
- Humanitarian Assistance and Disaster Relief (**HADR**)
- Search and Rescue (**SAR**)
- Sustained maritime presence
- Protection of India's maritime interests

Strategic Significance

Atmanirbhar Bharat in Defence

Indigenous Design



Domestic Shipbuilding



MSME Participation



Employment Generation



Defence Industrial Ecosystem



Strategic Autonomy

Why important for India?

- Reduces dependence on foreign warship technology
- Strengthens the Indian Navy's **blue-water capability**
- Supports the **defence industrial base**
- Enhances India's role in the **Indo-Pacific**
- Promotes indigenous defence manufacturing

UPSC PRELIMS QUICK REVISION

Feature	INS Mahendragiri
Type	Stealth frigate
Project	Project 17A
Pennant	F38
Designer	Warship Design Bureau
Builder	Mazagon Dock Shipbuilders Limited
Indigenous content	Over 75%
Named after	Mahendragiri range, Eastern Ghats
Key roles	Anti-air, anti-surface, anti-submarine
Propulsion	Combined diesel or gas system
Total Project 17A ships	7

UPSC Prelims Practice Question

Consider the following statements regarding INS Mahendragiri:

1. It is a Project 17A indigenous stealth frigate.
2. It has been designed by the Indian Navy's Warship Design Bureau.
3. It is capable of undertaking anti-air, anti-surface and anti-submarine operations.
4. It is named after a mountain range in the Western Ghats.

Which of the statements given above are correct?

Answer: 1, 2 and 3 only

 Statement 4 is incorrect: Mahendragiri is named after the Mahendragiri mountain range of the Eastern Ghats.

One-line Revision:

INS Mahendragiri = Project 17A + indigenous stealth frigate + 75%+ indigenous content + CODOG-type propulsion + three-dimensional warfare capability.

Urban Flooding & “Sponge Cities”

● Core Issue

- Mumbai’s recurring urban floods show that **drainage expansion alone cannot address climate-induced extreme rainfall**. Cities must move from merely **draining rainwater away to absorbing, storing and reusing it**.

📌 Why Mumbai Floods?

Intense Rainfall + Urbanisation + High Tide

Heavy Rainfall



Concrete surfaces → Less infiltration



Wetlands/creeks/salt pans lost



Natural drainage channels disrupted



Drainage capacity exceeded



High Tide → Sea water enters outfalls



 URBAN FLOODING

- Mumbai is built on **reclaimed land**, much of it only a few metres above sea level.
- **Creeks, wetlands and salt pans** previously acted as natural sponges.
- Rapid urbanisation has increased **impervious surfaces**.
- The storm-water drainage system largely relies on **gravity-based discharge into the sea**.
- During **high tide + intense rainfall**, seawater can obstruct drainage outfalls.

● The Solution: Blue-Green Infrastructure

From “Drain the Water” → “Absorb, Store and Reuse the Water”

Traditional Approach

Concrete drains
Pump water away
Reclaim wetlands
Only flood barriers
Water as a problem

Climate-Resilient Approach

Permeable surfaces
Store and reuse rainwater
Restore wetlands
Natural + engineered protection
Water as a resource

Global Examples

China – Sponge Cities

Permeable pavements
+
Restored wetlands
+
Artificial lakes
↓
Absorb → Store → Release rainwater gradually

Netherlands – Water Squares

- Store excess rainwater during extreme rainfall.
- Function as **public recreational spaces during dry periods.**
- Promotion of **green roofs** helps retain rainwater and reduce urban heat.

Way Forward for Indian Cities

Urban Flood Resilience =

 Wetland protection

-  Rainwater harvesting
-  Permeable pavements
-  Green roofs and urban forests
-  Restored lakes and natural drainage channels
-  Better weather forecasting and flood warning systems
-  Climate-sensitive urban planning

UPSC Mains Conclusion

Indian cities must shift from an **engineering-only approach** centred on larger drains to an integrated **blue-green infrastructure** model that works with natural hydrology.

Urban planning must ensure that development does not destroy the very ecosystems that protect cities from extreme weather.

Keywords for UPSC

Urban Flooding | Climate Resilience | Sponge City | Blue-Green Infrastructure | Permeable Surfaces | Wetland Restoration | Urban Hydrology | Nature-based Solutions | High Tide | Sustainable Urbanisation

Probable UPSC Mains Question

“Urban flooding in India is increasingly a consequence of both extreme rainfall and flawed urban planning. Discuss the limitations of drainage-centric solutions and examine the role of blue-green infrastructure in building climate-resilient cities.” (250 words, 15 marks)

07.07.2026

• AUTOMOBILES

Ethanol blending in fuel: Why road ahead is bumpy

For the Indian motorist, mileage calculus matters most. But higher ethanol blending has other problems, and significant advantages, too

Fuelling protests

Regular ICE cars running on higher ethanol blends, alongside the drop in mileage, are harder to start on winter mornings because ethanol burns at a higher temperature than petrol.

While a fuel with 10 per cent ethanol (E10) made little difference to a car's performance, anything above that is said to impact operations.

• ETHANOL: PHYSICS AND CHEMISTRY

ETHANOL CAN help reduce carbon dioxide emissions because it contains less carbon than petrol. Ethanol's chemical formula is C_2H_5OH , meaning each molecule contains two carbon atoms. Petrol is made up of hydrocarbons that typically contain 8 to 12 carbon atoms. As the share of ethanol in a fuel blend increases, the amount of carbon dioxide released when the fuel is burned is lower.

HOWEVER, ETHANOL has a lower calorific value than petrol. A litre of ethanol contains substantially less energy than a litre of petrol, resulting in roughly 30% lower mileage.

ETHANOL HAS a very high octane number. Octane number measures a fuel's resistance to premature combustion due to compression. Ethanol's Research Octane Number of



Union Minister Hardeep Puri launches a higher ethanol blend in New Delhi. ANI

around 108 allows it to burn more cleanly inside an internal combustion engine than pure petrol.

ETHANOL AND ethanol-based fuels

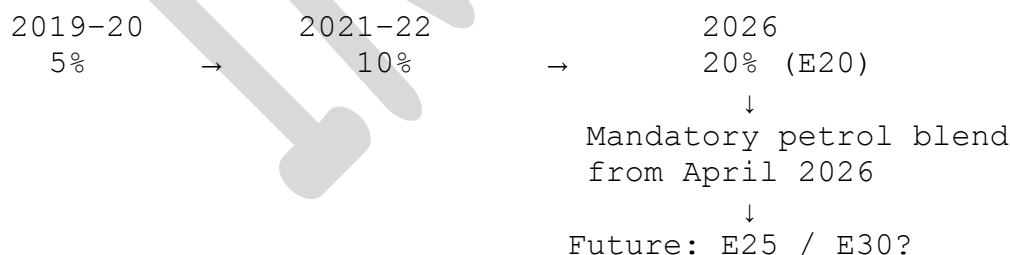
have been used in sports cars because of their superior anti-knock characteristics, better power potential and cooling effect stemming from their high latent heat of vaporisation.

Ethanol Blending in Petrol — “Make Haste Slowly”

● Core Issue

- India has rapidly achieved **20% ethanol blending (E20)**, much ahead of the earlier **2030 target**. Therefore, a cautious pause before moving to **E25/E30** is justified to address technological, economic and environmental concerns.

India's Ethanol Blending Journey



⚙️ Key Concerns with Higher Ethanol Blending

1 Lower Fuel Efficiency

- Ethanol has **30–35% lower calorific value** than petrol.
- This may reduce **vehicle mileage**, particularly in older vehicles.

2 Material Compatibility

- Ethanol is **hygroscopic** → absorbs moisture.
- May cause **corrosion of steel fuel tanks and metal components**.
- Vehicles sold in India **after April 2023** have full E20 material compatibility.
- Older vehicles may experience:
 - Reduced mileage
 - Wear and tear of engine components
 - Possible ethanol-related degradation

3 Consumer Concerns

Higher Ethanol

↓

Lower energy density

↓

Lower mileage

↓

Higher fuel consumption

↓

Consumer dissatisfaction

Hence, **transparent communication** is necessary before introducing E25/E30.

The Feedstock Challenge

✗ Problem: Water-intensive crops

Water-intensive rice

↓

High water consumption

↓

Unsustainable ethanol production

✓ Sustainable Alternatives

-  **Sweet sorghum**
-  **Bajra**
-  **Other millets**
-  **Maize**, where ecologically suitable

 Research should focus on **high-starch varieties/hybrids** with better fermentation efficiency.

Benefits of Ethanol Blending

Ethanol Blending

↓
Lower crude oil imports

↓
Reduced import bill

↓
Greater energy security

↓
Support to farmers

↓
Potential reduction in emissions

India's **high dependence on imported crude oil** makes diversification of transport fuels essential, especially during geopolitical disruptions and global oil supply shocks.

Way Forward: Calibrated Transition

Ethanol Policy Roadmap

E20 → Pause & Assess → E25/E30

During the pause, the government should:

- ✓ Ensure **vehicle compatibility testing**
- ✓ Protect owners of older vehicles
- ✓ Improve consumer information and labelling
- ✓ Consider **fiscal incentives** for higher ethanol blends
- ✓ Promote **second-generation biofuels**
- ✓ Encourage sustainable feedstocks like **millets and sweet sorghum**
- ✓ Continue investment in **electric mobility** and other alternative fuels

UPSC Mains Conclusion

India must balance **energy security** with consumer protection and ecological **sustainability**. Ethanol blending should not be pursued merely through numerical targets; instead, a **technology-neutral, feedstock-sensitive and phased transition** is required. The principle should be: **"Make haste slowly"** — **accelerate energy diversification, but avoid abrupt transitions that impose hidden costs on consumers and the environment.**

UPSC Keywords

E20 | Biofuels | Energy Security | Calorific Value | Hygroscopicity | Material Compatibility | Food vs Fuel | Water Stress | 2G Ethanol | Sustainable Feedstock | Energy Transition | Electric Mobility

Probable UPSC Mains Question

“India’s ethanol blending programme is important for energy security but raises concerns related to vehicle compatibility, mileage and sustainable feedstock. Examine these challenges and suggest a calibrated roadmap for higher ethanol blending.” (250 words)

08.07.2026

Topic: GS III

Women’s Cash Transfers — Safety Net vs Fiscal Trade-off

Core Issue

- Unconditional cash transfers to women have become an important tool of **social protection, women’s empowerment and electoral politics**. While they improve household welfare, excessive expansion can create **fiscal stress and crowd out productive public investment**.

Scale of the Trend

Women Cash Transfers



₹1,000–₹2,500/month



12 States



₹1.68 lakh crore (2025–26)



Higher than MGNREGA allocation
(₹86,000 crore)

Examples

- Ladli Behna Yojana — Madhya Pradesh
- Maiya Samman Yojana — Jharkhand
- Magalir Urimai Thogai — Tamil Nadu

● Benefits of Unconditional Cash Transfers

Cash → Women → Household Welfare

Direct Cash Transfer



Higher disposable income



Consumption + Savings



Medical + Education + Lifestyle spending



Improved Household Welfare

Key Advantages

- ✓ Improves **consumption and savings**
- ✓ Enhances women's **economic agency**
- ✓ Helps meet **health and education expenses**
- ✓ Provides a **safety net against economic shocks**
- ✓ Can improve women's bargaining power within households
- ✓ Promotes financial inclusion when transferred directly to bank accounts

📌 Evidence from Maharashtra and Odisha supports positive welfare outcomes.

⚠️ The Fiscal Trade-off

Risk of Crowding Out

Limited State Resources



Large Cash Transfers + Freebies



Higher Revenue Expenditure



Less Fiscal Space



Reduced Spending on:

Infrastructure | Health | Education | Capital Investment

📌 The RBI has warned that such schemes may "crowd out" productive investment.

State Fiscal Stress

Although the consolidated debt of States has declined from **31% of GSDP in March 2021 to 29.2% in 2026 (Budget Estimates)**, state-level variations remain significant.

<i>State</i>	<i>Debt Burden (% of GSDP)</i>
Punjab	46.4%
West Bengal	38.9%
Bihar	36.8%

Major Risks

- ⚠ Expenditure switching
- ⚠ Higher fiscal deficits
- ⚠ Growing contingent liabilities from guarantees
- ⚠ Debt accumulation
- ⚠ Reduced capital expenditure

The Central Policy Dilemma

Cash Transfers = Social Protection ✓

Uncontrolled Populism = Fiscal Risk ⚠

Welfare Need
+
Women's Empowerment
+
Fiscal Sustainability
↓
RESPONSIBLE CASH TRANSFER POLICY

Way Forward

- Target transfers towards **vulnerable households**.
- Ensure **fiscal sustainability** through medium-term expenditure frameworks.
- Link some transfers to **human capital development**, wherever appropriate.
- Maintain adequate spending on **health, education and capital expenditure**.
- Improve transparency regarding the **true fiscal cost** of guarantees and subsidies.
- Conduct regular **outcome evaluations** rather than focusing only on beneficiary numbers.
- Strengthen women's economic empowerment through **employment, skill development, credit and asset ownership**, alongside cash transfers.

UPSC Mains Conclusion

Women-focused cash transfers can be an effective **social safety net**, particularly when they enhance household welfare and women's economic agency. However, they cannot substitute for employment generation, public health, education and infrastructure. The objective should be to combine **immediate income support with long-term capability enhancement**, while ensuring that welfare expenditure does not undermine the fiscal capacity of the State.

Probable UPSC Mains Question

“Unconditional cash transfers to women can promote welfare and empowerment, but their expansion may create fiscal risks for States. Examine the benefits and trade-offs of such schemes in the context of India's public finances.” (250 words)

Surge in Gold Loans and NBFC Credit Growth

Core Issue

- Gold loans have emerged as the **fastest-growing segment of retail credit in India**, driven by high gold prices, easy access to secured finance and growing formalisation of household borrowing.

Key Data

Gold Loans by NBFCs

↓

₹1.94 lakh crore (May 2025)

↓ 69.9% YoY growth

₹3.29 lakh crore (May 2026)

 NBFC gold loan outstanding rose by **136% in two years.**

Regional Expansion

Growth in gold-backed loans:

- **Uttar Pradesh:** 138%
- **West Bengal:** 112%
- **Rajasthan:** 105%
- **Maharashtra:** 102%

This indicates that gold lending is expanding beyond its traditional concentration in southern India.

Why Are Gold Loans Growing?

Household Gold → Formal Credit

Household Gold Holdings
↓
Pledged as Collateral
↓
Secured Loan
↓
Quick & Accessible Finance
↓
Consumption + Livelihood + Enterprise

Key Drivers

- ✓ High gold prices increase the **collateral value** of jewellery.
- ✓ Secured loans generally carry lower risk for lenders than unsecured credit.
- ✓ Faster processing and easier access than many conventional loans.
- ✓ Helps households convert **dormant assets into productive capital**.
- ✓ Supports **micro-enterprises, livelihood generation and women-led households**.
- ✓ Expands access to the **formal financial system**.

Key Risks

Loan Rollover / Evergreening

Some borrowers partially repay loans to extend the tenure and reset the loan period.

Existing Loan
↓
Partial Repayment
↓
Loan Extension
↓
Repeated Rollover
↓
Hidden Stress / Evergreening Risk

 RBI guidelines seek to restrict repeated extension without **fresh appraisal**.

Repayment Risk

Borrowers must repay bullet gold loans within the prescribed period. Failure can eventually lead to **auction of pledged jewellery**.

Gold Price Risk

A fall in gold prices can reduce the collateral value and create a **loan-to-value (LTV) risk** for lenders.

NBFC Sector: Broader Credit Expansion

Overall NBFC credit, including HFCs:

₹51.32 lakh crore → ₹58.61 lakh crore

 **14.2% year-on-year growth**

Credit Composition

NBFC Credit

—	Retail: 43%
—	Industry: 37.4%
—	Services: 13%

Commercial Real Estate Credit Surge

Commercial real estate credit:

₹85,317 crore → ₹1.196 lakh crore

 **40.2% growth**

Drivers

- Office demand
- Warehousing
- Mixed-use developments

 However, commercial real estate is considered a relatively riskier lending segment, along with unsecured retail credit and microfinance.

Important Banking Linkage

Banks

↓ Credit to NBFCs

NBFCs

↓

Retail + Gold Loans + Real Estate Lending

↓

Higher Credit Availability

☆ Bank credit to NBFCs also grew substantially, improving the ability of NBFCs to lend in sectors where they have a competitive advantage.

UPSC Concept: Why Gold Loans Are “Secured Loans”?

Gold Loan

Collateral-backed

Gold pledged

Lower lender risk

Loan recovery through collateral

Quick access to finance

Unsecured Personal Loan

No collateral

Creditworthiness-based

Higher lender risk

Higher default risk

May involve stricter eligibility

Way Forward

- Strong enforcement of RBI prudential norms.
- Prevent **evergreening** and repeated rollovers.
- Conduct regular **gold valuation** and collateral audits.
- Ensure transparent communication of interest, repayment and auction conditions.
- Monitor rapid growth in **commercial real estate** and unsecured retail credit.
- Maintain adequate NBFC liquidity and capital buffers.



Probable UPSC Prelims Question

Consider the following statements regarding gold loans in India:

1. Gold loans are a form of secured lending because the lender holds gold as collateral.
2. A rise in gold prices can increase the borrowing capacity of households against pledged jewellery, subject to regulatory limits.
3. Repeated extension of loans without fresh appraisal may create risks of loan evergreening.

4. Gold loans are classified as unsecured retail credit.

Which of the statements given above are correct?

Answer: 1, 2 and 3 only

Char Kaman of Hyderabad — Heritage Conservation

Core Issue

- The Telangana government plans to restore **Char Kaman**, the four ornamental gateways surrounding the **Charminar**, highlighting the importance of conserving lesser-known components of India's architectural heritage.

Historical Background

Qutb Shahi Dynasty



Muhammad Quli Qutb Shah



Charminar (1589–1591)



Four ornamental gateways



CHAR KAMAN

- **Charminar** was built by **Muhammad Quli Qutb Shah**, the fifth ruler of the Qutb Shahi dynasty.
- The **Char Kaman** were probably constructed around **1594**.
- They formed the architectural setting around the Charminar and marked important entrances to the historic city of Hyderabad.
- The central area between the four arches was known as **Jilau Khana**, or the **royal vestibule**.

The Four Char Kaman

<i>Kaman</i>	<i>Direction / Significance</i>
Machli Kaman	North; associated with a fish-shaped decoration
Charminar Kaman	South
Kali Kaman	East; the “Black Arch”
Kaman Sher Dil / Sihr Batil	West; associated with “lion-hearted” or “magic breaker”

📌 The names and historical descriptions are associated with accounts of Hyderabad's architectural heritage.

👑 Historical Function

City Entrance
↓
Char Kaman
↓
Jilau Khana
(Royal Vestibule)
↓
Nobles & Officials
↓
Royal Audience

During the Qutb Shahi period:

- The arches witnessed considerable movement of nobles and officials.
- Retinues and attendants remained in the central vestibule.
- Officials then proceeded to meet the ruler.

Thus, the Char Kaman served not merely as decorative structures but also as part of the **urban and ceremonial architecture of the Qutb Shahi capital**.

🔧 Restoration Plan

Focus Areas

- ◆ Structural repairs
- ◆ Conservation of heritage features
- ◆ Restoration of historical character
- ◆ Protection from urbanisation and pollution

Urbanisation + Pollution
↓
Structural & Architectural Damage
↓
Scientific Conservation
↓
Heritage Preservation

🧠 UPSC Significance

Why Heritage Conservation Matters

- Preserves **historical memory and cultural identity**.
- Protects **architectural heritage** from urban expansion.

- Promotes **sustainable cultural tourism**.
- Ensures conservation of **associated heritage structures**, not merely iconic monuments.
- Reflects the importance of **integrated heritage-zone management**.

UPSC Keywords

Qutb Shahi Dynasty | Muhammad Quli Qutb Shah | Charminar | Char Kaman | Jilau Khana | Deccan Architecture | Built Heritage | Heritage Conservation | Urbanisation | Cultural Tourism

Probable UPSC Prelims Question

Consider the following statements:

1. Charminar was built by Muhammad Quli Qutb Shah of the Qutb Shahi dynasty.
2. Char Kaman refers to four ornamental gateways associated with the historic urban setting around Charminar.
3. Jilau Khana was associated with the royal vestibule in the area of the four arches.

Which of the statements given above are correct?

Answer: 1, 2 and 3 only.

Zebra Finch Communication and Interspecies Communication

Core Idea

- Research on **zebra finches** suggests that birds may organise vocal calls according to their **behavioural meaning or function**, and not merely according to how similar the sounds are acoustically.
- This challenges the assumption that animal communication can be understood simply by **recording and classifying sounds**.

What Did the Research Find?

Zebra Finch Calls

↓
11 distinct call types identified
↓
Birds trained to distinguish calls
↓
Birds make classification errors
↓
Errors linked more to similar behavioural meaning than merely similar sound
↓
Possible meaning-based perceptual organisation

Central Finding

- When zebra finches confused two calls, they were more likely to confuse calls with **similar behavioural functions** rather than merely calls with similar acoustic structures.
- This suggests that the birds' perception of calls may be organised around **what the calls do**, not just **what the calls sound like**.

How Do Scientists Study Animal Communication?

Naturalistic Observation

Researchers examine:

- When is the call produced?
- Who produces it?
- Who receives it?
- What happens after the call?

Acoustic Analysis

Scientists compare:

- Frequency
- Duration
- Structure
- Other sound characteristics

Playback Experiments

Recorded Call



Played to Animal



Animal Response Observed



Does response match the original context?



Evidence of Information Content

 Example: Different alarm calls may produce different responses *depending on the predator*.

Behavioural Error Analysis

The study compared:

- Which calls an **acoustic classifier** confuses
- Which calls the **birds themselves** confuse

The difference between the two is scientifically important.

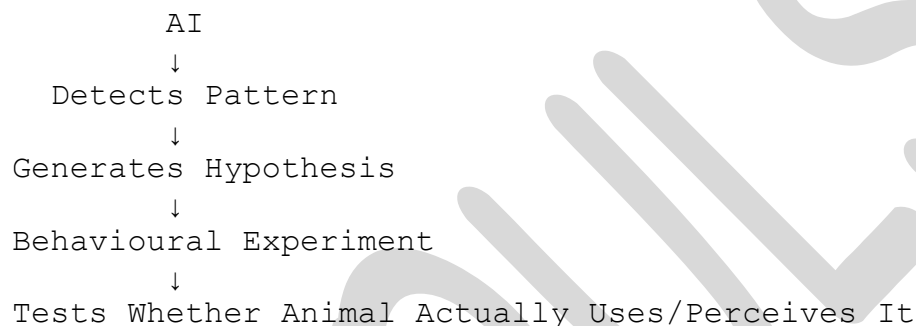
AI and Animal Communication

AI Can

- ✓ Analyse enormous datasets
- ✓ Detect subtle acoustic patterns
- ✓ Identify vocal clusters
- ✓ Distinguish individuals
- ✓ Find statistical regularities

But AI Cannot Automatically Prove

- ✗ That a detected category has meaning for the animal
- ✗ That the animal perceives the category
- ✗ That the signal represents a “word”



Major Risk: Anthropomorphism

Scientists must avoid automatically assuming that animal calls are equivalent to **human words or sentences**.

47 statistically distinct vocal clusters $\neq$ 47 words.

Clusters may instead reflect:

- Individual identity
- Sex
- Emotional arousal
- Context
- Recording conditions

Decoding Signals $\neq$ Conversation

Two-Way Communication

Requires:

Human/Machine Signal



Changes Animal Behaviour



Animal Signal



Changes Human/Machine Behaviour

Conversation Requires More

A genuine conversation-like exchange would ideally involve:

- ✓ **Contingency** — later communication depends on previous communication
- ✓ **Flexibility** — not merely fixed trained responses
- ✓ **Generalisation** — ability to communicate in new situations
- ✓ **Spontaneous information** — animal communicates information unknown to humans
- ✓ **Adaptive response** — animal changes subsequent communication based on human response



Significance



Animal Welfare

Better understanding of:

- Pain
- Stress
- Fear
- Social needs



Conservation

Potential improvement in understanding:

- Social behaviour
- Distress signals
- Environmental threats



Laboratory Research

Could improve:

- Animal care
- Experimental conditions
- Ethical standards

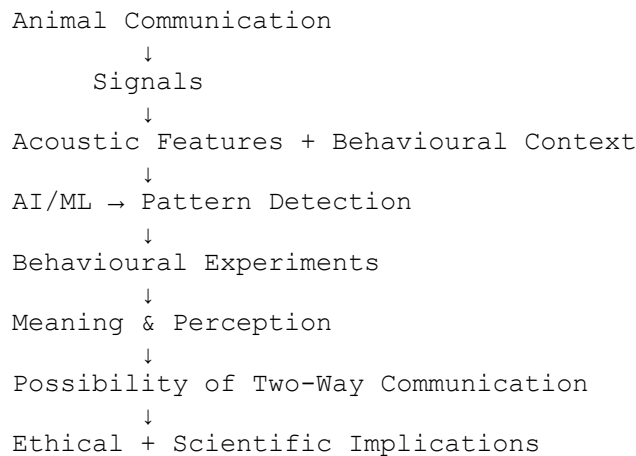


Scientific Understanding

It may force humans to move beyond the assumption that all animal communication must fit **human linguistic categories**.



UPSC Concept Map



UPSC Keywords

Animal Cognition | Zebra Finch | Vocal Communication | Playback Experiment | Machine Learning | Anthropomorphism | Behavioural Function | Signal Decoding | Interspecies Communication | Comparative Cognition



Probable UPSC Prelims Question

Consider the following statements regarding animal communication research:

1. Playback experiments can help determine whether an animal responds appropriately to a recorded signal outside its original context.
2. Machine-learning algorithms can identify statistical patterns in animal vocalisations, but computationally detected clusters do not automatically establish that animals perceive them as meaningful categories.
3. Classification errors made by animals can provide insights into how they perceptually organise communication signals.
4. The identification of distinct acoustic clusters conclusively proves the existence of an equivalent number of “words” in an animal language.

Which of the statements given above are correct?

Answer: 1, 2 and 3 only.

09.07.2026

Topic: GS III

India–Indonesia Relations

◆ **Historical Background**

- Shared **anti-colonial struggle**.
- Both were associated with the **1955 Bandung Conference**, a precursor to the **Non-Aligned Movement (NAM)**.
- Relations weakened during the **Cold War** but have been steadily revived.

Strategic Drivers

Rise of China + Indo-Pacific Competition



Need for Strategic Autonomy



India-Indonesia Partnership

◆ **Major Areas of Cooperation**

1 Defence Cooperation

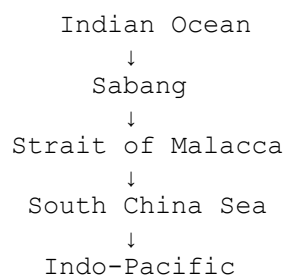
- India's growing defence-export capability.
- **BrahMos** supersonic cruise missiles.
- **Astra** air-to-air missiles.

2 Critical Minerals

- Indonesia has abundant reserves of:
 - **Nickel**
 - **Rare Earth Elements**
- Important for batteries, electronics, renewable energy and defence technologies.

3 Maritime Security

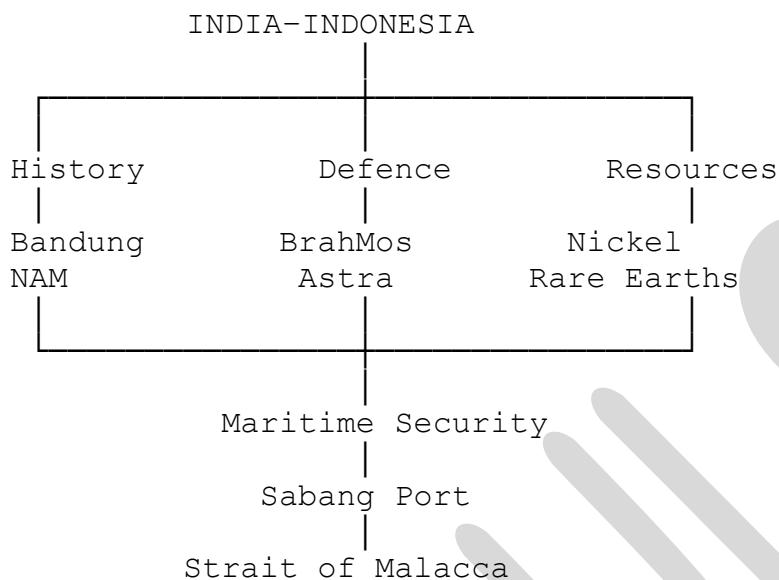
- **Sabang Port** is located near the northwestern entrance of the **Strait of Malacca**.
- Joint development of Sabang Port is strategically significant.



Strait of Malacca: Prelims Significance

- One of the world's busiest maritime chokepoints.
- Critical for global trade and energy transportation.
- China is highly dependent on this route for imported oil.

Mind Map



Challenges

- Bureaucratic delays
- Financing constraints
- Need for greater private-sector participation
- Limited domestic capacity in critical minerals and defence manufacturing

Prelims Keywords

Bandung Conference | NAM | Act East Policy | BrahMos | Astra | Nickel | Rare Earth Elements | Sabang Port | Strait of Malacca | Indo-Pacific

Prelims Fact

Sabang Port's significance arises from its proximity to the western entrance of the Strait of Malacca, making it important for maritime connectivity and strategic security.

UPSC Mains Question

“India-Indonesia relations have evolved from shared anti-colonial solidarity to a strategic partnership centred on defence, critical minerals and maritime security.” Discuss. (150 words)

Astra Missiles: India's Indigenous BVRAAM

◆ **Brief**

- India signed a deal to export **Astra Mk-1** missiles to **Indonesia**.
- It is the **first export of Astra missiles** to another country.
- Indonesia will equip its **Su-30 fighter aircraft** with these missiles.

🎯 **What is a BVRAAM?**

Beyond-Visual-Range Air-to-Air Missile (BVRAAM)

Fighter Aircraft



Air-to-Air Missile

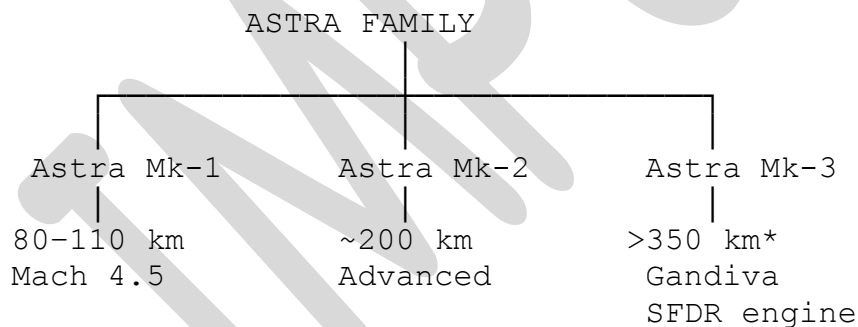


Target beyond visual range

(Generally > 20 nautical miles / 37 km)

- Fired from an **airborne platform**.
- Designed to destroy **airborne targets**.
- Enables engagement without visual contact with the enemy aircraft.

🧠 **Astra Missile Family**



**Expected/under development range.*

◆ **Astra Mk-1**

- Developed by **DRDO**.
- Range: **80–110 km**.
- Maximum altitude: up to **20 km**.
- Speed: approximately **Mach 4.5**.
- Integration:
 - **Su-30MKI**
 - Planned for **Tejas Mk-1A**

- Planned for **Rafale**

◆ Astra Mk-2

- Enhanced range of approximately **200 km**.
- Received **Acceptance of Necessity (AoN)** from the Defence Acquisition Council.
- Still undergoing development/testing stages.

◆ Astra Mk-3 / Gandiva

- Under development by DRDO.
- Expected to use **Solid Fuel Ducted Ramjet (SFDR)** technology.
- Potential range: **over 350 km**.

⚙️ SFDR Technology

Solid Fuel Ducted Ramjet



Continuous thrust during flight



Longer effective range



Improved long-range air combat capability

🌐 Strategic Significance

Indigenous Development



Astra BVRAAM



Self-Reliance in Defence



Reduced Dependence on Imports



Defence Exports



Strategic Partnerships

- Provides an indigenous alternative to imported missiles such as **Meteor** and **R-77**.
- Aims to counter long-range missiles such as China's **PL-15**.
- Strengthens India's **defence industrial base and export capability**.
- Supports **Atmanirbhar Bharat** in defence.



Mind Map



Prelims Keywords

BVRAAM | DRDO | Astra Mk-1 | Astra Mk-2 | Gandiva | SFDR | PL-15 | Su-30MKI | Tejas Mk-1A
 | Rafale | Acceptance of Necessity



UPSC Prelims Question

Consider the following statements regarding the Astra missile:

1. Astra is an indigenous family of beyond-visual-range air-to-air missiles developed by DRDO.
2. Astra Mk-1 is being integrated with the Su-30MKI fighter aircraft.
3. The Astra Mk-3 is associated with Solid Fuel Ducted Ramjet technology.
4. The recent India–Indonesia agreement represents the first export of Astra missiles.

Which of the statements given above are correct?

- A. 1 and 2 only
- B. 1, 2 and 3 only
- C. 2, 3 and 4 only
- D. 1, 2, 3 and 4



Answer: (D)



Satluj / Punjab 95:

Free Speech, Censorship & Historical Accountability

◆ Brief

- **Satluj**, earlier titled **Punjab 95**, is a biopic on Punjab human-rights activist **Jaswant Singh Khalra**.
- It was reportedly removed from an OTT platform after a brief release.
- The film had earlier faced extensive proposed cuts by the **Central Board of Film Certification (CBFC)**.



Background: Jaswant Singh Khalra

Punjab Militancy Era



Alleged Disappearances & Extra-judicial Killings



Jaswant Singh Khalra



Documentation of Unidentified Cremations



Demand for Truth + Accountability



Abduction (1995) → Conviction of Police Officials

- Khalra documented alleged **illegal cremations of unidentified bodies** around Amritsar.
- He sought answers for families of disappeared persons.
- His abduction and killing led to the conviction of several police personnel.



Constitutional Dimensions

Article 19(1)(a)

Provides citizens the **right to freedom of speech and expression**.

Article 19(2)

Permits **reasonable restrictions** on grounds including:

Sovereignty & Integrity



Security of State



Public Order

Decency & Morality
 Contempt of Court
 Defamation
 Incitement to Offence
 Friendly Relations with Foreign States

 **Prelims Point:** Restrictions under Article 19(2) must be **reasonable, constitutionally grounded and not arbitrary.**

Core Democratic Debate

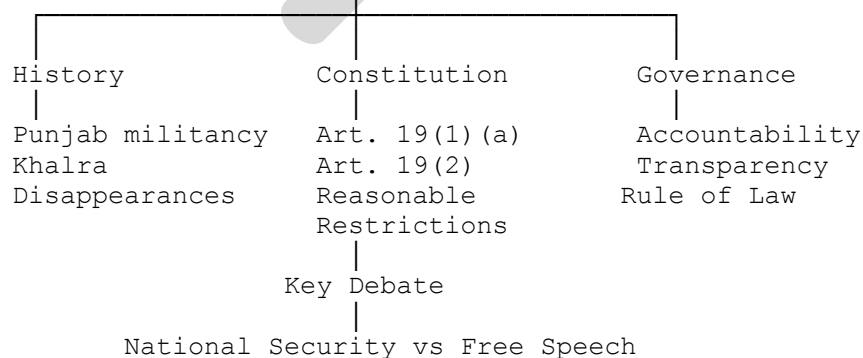
Historical Atrocities
 ↓
 Truth & Documentation
 ↓
 Public Discussion
 ↓
 Accountability
 ↓
 Democratic Strength

Key Concern

- Broad and vague claims of “**national security**” may potentially be used to restrict legitimate artistic expression and public debate.
- However, genuine restrictions may be constitutionally justified when content demonstrably threatens national security or public order.

UPSC Mind Map

SATLUJ / PUNJAB 95



Prelims Keywords

Jaswant Singh Khalra | Punjab Militancy | CBFC | OTT Regulation | Article 19(1)(a) | Article 19(2) | Reasonable Restrictions | National Security | Rule of Law | Accountability

UPSC Mains Question

“Democracies strengthen national security through accountability and truth-seeking rather than suppression of uncomfortable historical narratives.” Discuss in the context of freedom of speech and reasonable restrictions under Article 19. (10marks, 150 words)

“Football is this, not just tactics and strategies. Those things are important, no doubt, but if we hadn't had the heart we had, we would've been out.”

SCALONI, AFTER THE EGYPT GAME

Topic: GS-II

Kashmir Militancy After Burhan Wani:

Changing Nature of Insurgency

Background

- **Burhan Wani** popularised a new model of militancy through **social media visibility**, attracting educated and tech-savvy local youth.
- His killing in **July 2016** triggered prolonged protests and fresh militant recruitment.

Decline in Key Indicators

Militants Killed

2016 → 157
2018 → 266 (Peak)
2020 → 230
2026 → 10

- Security-force and civilian deaths have also declined significantly.
- Police records indicate a sharp reduction in **active local militants**, while foreign militants continue to remain a security concern.

How Militancy Has Changed

1 From Visibility → Anonymity

Burhan Model
Social Media + Public Image
↓
Recruitment & Mobilisation
↓
Post-2019
Reduced Online Footprint
↓
Harder to Track

2 From Urban Areas → Forests

- Earlier operations had a greater presence in towns and villages.
- Militants have increasingly shifted to **dense, high-altitude forests** offering tactical advantage.

3 From Local Command → Foreign Command

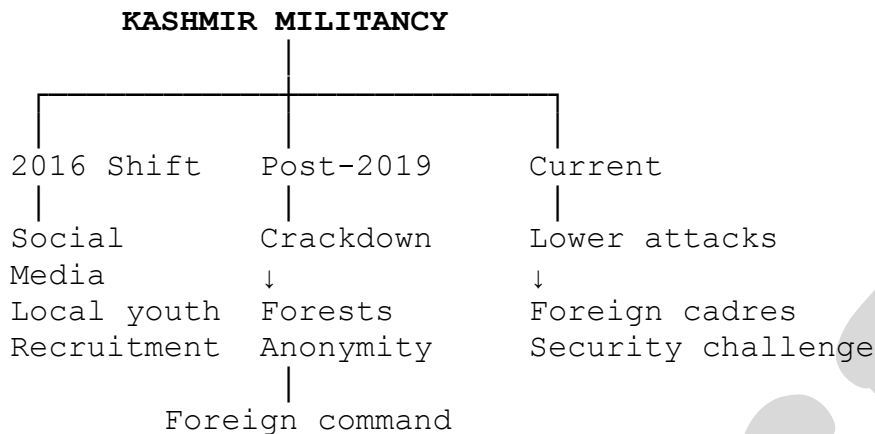
- After the decline of **Hizbul Mujahideen, Lashkar-e-Taiba** became more prominent.
- Greater operational command and control is reportedly associated with Pakistan-based operatives.

4 Intelligence Evolution

- **HUMINT:** Human Intelligence
- **TECHINT:** Technological Intelligence

HUMINT + TECHINT
↓
Better Location Identification
↓
More Precise Counter-Insurgency Operations

Mind Map



Key Security Challenge

A decline in violence does **not necessarily mean complete elimination of militancy**. The insurgency has become **less visible, more opaque, technologically cautious and harder to penetrate**.

Prelims Keywords

Burhan Wani | Insurgency | Militancy | HUMINT | TECHINT | Hizbul Mujahideen | Lashkar-e-Taiba | Counter-insurgency | Social Media Recruitment | Hybrid Security Threat

•Casualties in Numbers

YEAR	MILITANTS KILLED	SECURITY FORCES KILLED	CIVILIANS KILLED
2016	157	88	56
2017	217	83	54
2018	266	94	88
2019	160	78	42
2020	230	57	37
2021	192	45	36
2022	186	30	30
2023	85	32	11
2024	68	26	32
2025	46	17	28
2026	10	1	1

Probable Mains questions

“Kashmir’s militancy has undergone a transformation from a socially visible, locally driven and social-media-enabled insurgency to a more covert, forest-based and externally influenced security challenge.” Discuss the changing nature of militancy in Jammu and Kashmir and examine the role of counter-insurgency measures in addressing it. (10 marks. 150 words)

10.07.2026

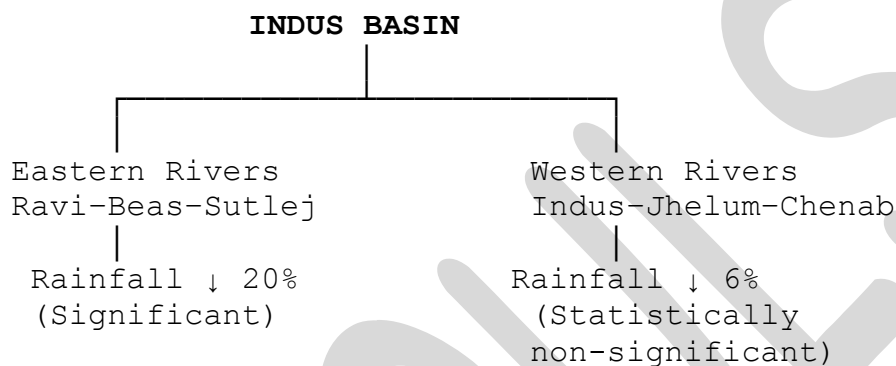
Indus River System:

Climate Change and Indus Waters Treaty

◆ Brief

- A study on the impact of climate change on the **Indus River System (1951–2024)** found significant changes in rainfall and water availability across the basin.

Rainfall Trend

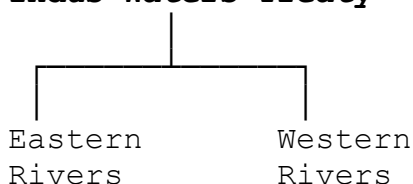


Major Findings

- **Eastern river catchments:** Precipitation declined by approximately **20%** between 1951 and 2024.
- **Western river catchments:** Rainfall remained broadly stable; the observed **6% decline** was **statistically non-significant**.
- **Pong Dam:** Annual inflows declined by nearly **34%** between 1951 and 2020.
- **Mangla and Tarbela reservoirs (Pakistan):** Inflows remained largely stable.
- Significant **groundwater depletion** was observed in the **Sutlej and Ravi sub-basins**.
- The **Chenab and Jhelum basins** showed relatively better groundwater conditions.

Indus Waters Treaty (IWT). 1960

Indus Waters Treaty



India	Pakistan
Ravi	Indus
Beas	Jhelum
Sutlej	Chenab

📌 **Important Prelims Fact:** The treaty allocates the **eastern rivers primarily to India and the western rivers primarily to Pakistan**, while allowing certain permitted uses under the treaty framework.

! **Why is the Study Significant?**

Climate Change
+
Groundwater Depletion
+
Changing Water Demand
↓
Changed Hydrological Conditions
↓
Need for Review of Water Governance

India has argued that **climate change, demographic changes, groundwater depletion, changing water availability and development needs** have altered the conditions existing when the treaty was signed in 1960.

🔑 **Keywords**

Indus Waters Treaty | Ravi | Beas | Sutlej | Indus | Jhelum | Chenab | Hydrology | Groundwater Depletion | Climate Change | Transboundary Water Governance

📝 **Prelims Question**

Consider the following statements:

1. Ravi, Beas and Sutlej are the eastern rivers of the Indus River System.
2. Indus, Jhelum and Chenab are classified as western rivers under the Indus Waters Treaty.
3. The study found a statistically significant 20% decline in rainfall in the catchments of the three western rivers.

Answer: 1 and 2 only.



Cancer Burden in India

◆ **Brief**

- **WHO/IARC** estimates show that **cancer is becoming a major public-health challenge in India**, driven by ageing, population growth, urbanisation and lifestyle changes.

Key Data

2022

1.41 million new cases



916,827 deaths



3.25 million living with
a diagnosis in previous 5 years

2024 → ~1.6 million new cases

2050 → Projected ~2.8 million cases

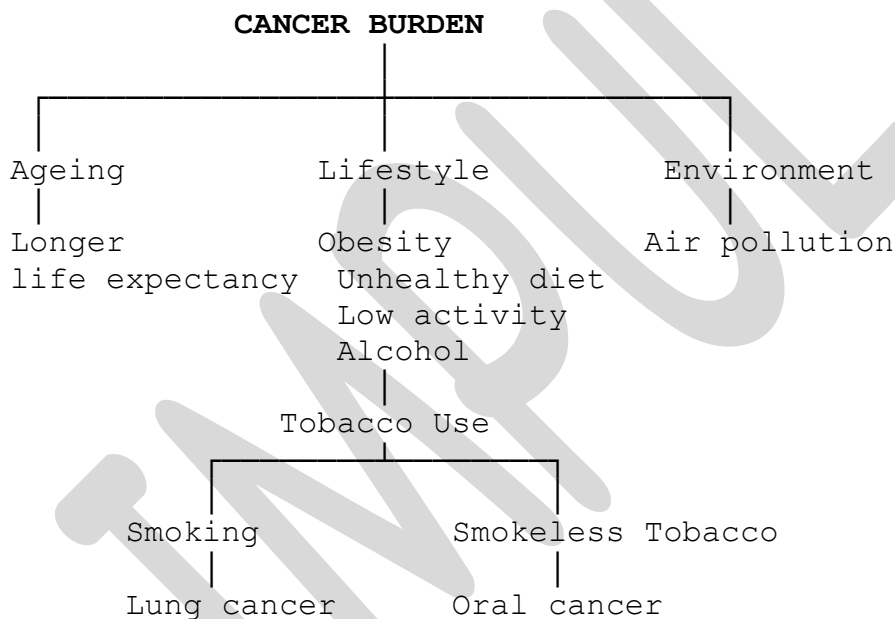


Risk before 75 years:

- Nearly **1 in 10 Indians** may develop cancer.
- Around **7 in 100** may die from cancer.



Mind Map: Drivers of Rising Cancer Burden



Major Cancers of Concern

- **Lung cancer** → strongly associated with smoking.
- **Oral cancer** → gutkha, khaini and betel quid.
- **Cervical cancer**
- **Breast cancer**
- **Colorectal cancer**



India and China together account for **more than half of the global cancer burden**, making Asia a major centre of cancer incidence.

Key Public Health Challenges

Rising Cases



Late Diagnosis



Expensive Treatment



High Mortality

Although better diagnostic facilities have increased detection, experts note that **improved diagnosis alone cannot explain the rise in cancer incidence.**



Way Forward

Prevention + Early Detection + Accessible Treatment

- Tobacco-control measures
- Control of smokeless tobacco
- Healthy diet and physical activity
- Reduction of air-pollution exposure
- Screening and early diagnosis
- Strengthening primary healthcare and cancer-care infrastructure



Prelims Question

Consider the following statements:

1. Increasing life expectancy can contribute to a rise in the number of people vulnerable to cancer.
2. Smokeless tobacco products are associated with a significant burden of oral cancer in India.
3. Improved diagnostic facilities alone fully explain the rise in cancer incidence in India.
4. Lifestyle changes associated with urbanisation can influence cancer risk.

Answer: 1, 2 and 4 only.

INDIA TO ALSO REPATRIATE RELICS OF AN 'AUSTRALIAN FIRST NATIONS' ANCESTOR

11th-12th century antiquities from Tamil Nadu to finally come home from Australia

• All about the three antiquities

METAL TRIDENT WITH IMAGE OF GODDESS BHADRAKALI:

Originating from Sri Kasiviswanathaswamy Temple in Kollumangudi, it was crafted in the South Indian temple ritual metal work tradition for religious worship



STONE IDOL OF SIX-HEADED KARTHIKEYA:

Carved in the Chola-period sculptural tradition, it originates from the Naganathswamy Temple, Manambadi village of Thanjavur district



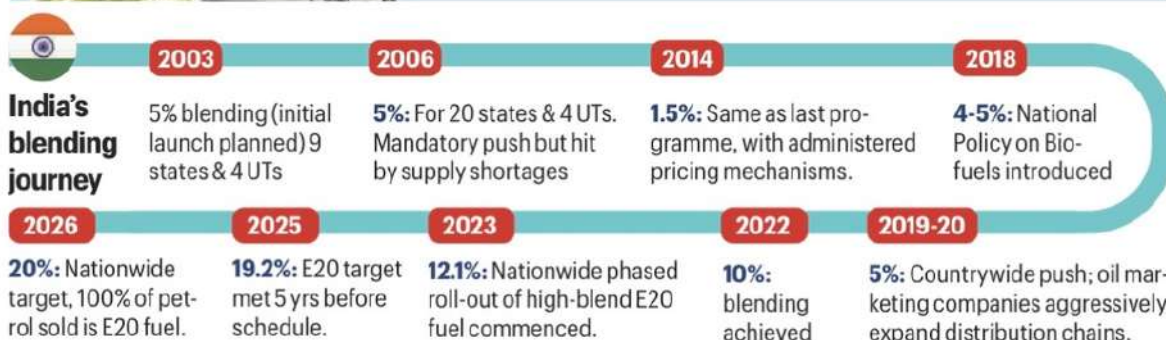
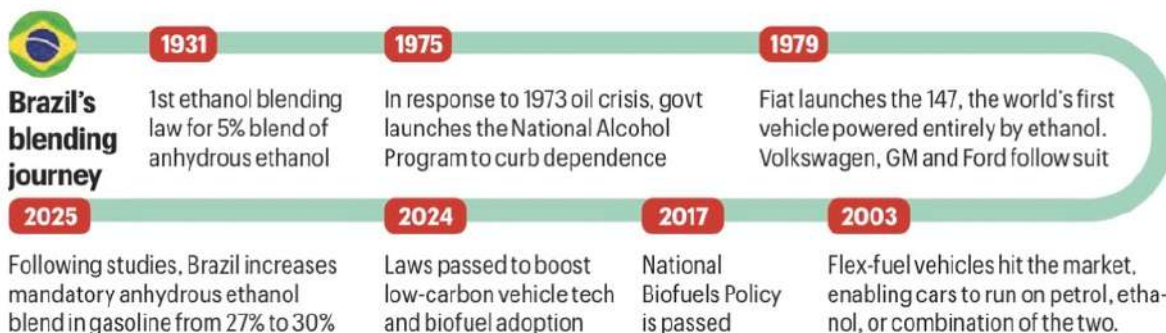
STONE IDOL OF NANDI: Sculpted in the Tamil Shaiva temple tradition, it originates from Sri Kasiviswanathaswamy Temple, Kollumangudi village in Thiruvavur district



Lessons for India from Brazil's ethanol pathway

Brazil's first ethanol blending law goes all the way back to 1931. Its success story was built over decades of policy and offering choices to consumers

• THE DIVERGENT ETHANOL BLENDING ARCS



Brazil's FFV push

Flex-fuel vehicles (FFVs) are engineered to operate on more than one fuel.

FFVs have been driving cleaner mobility in Brazil for around two decades now.

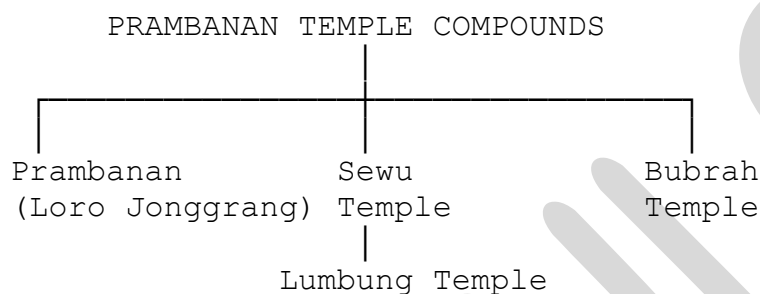
11.07.2026

Prambanan Temple: **Indo-Indonesia Cultural Heritage**

Brief

- India is assisting Indonesia in the restoration of the **Prambanan Temple**, a **UNESCO World Heritage Site** in Yogyakarta, Java.

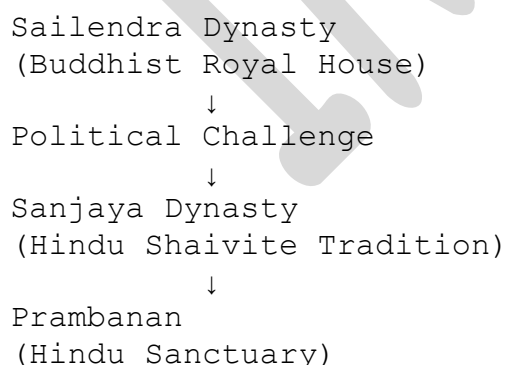
Prambanan Temple Complex



Historical Background

- Located on the island of **Java, Indonesia**.
- Associated with the **Sanjaya dynasty** of the Mataram Kingdom.
- The Sanjaya dynasty is linked with the revival of **Shaivite Hinduism** in Central Java.
- Rakai Pikatan** (c. 842–856 CE) is believed to have commissioned the temple.
- The temple was consecrated in **856 CE** according to inscriptions.

Historical Context



Religious and Cultural Syncretism

- Rakai Pikatan's marriage to **Pramodhawardhani**, a Buddhist princess of the Sailendra dynasty, is often viewed as a symbol of religious harmony.

- Prambanan contains:
 - Hindu architectural elements
 - Buddhist artistic influences
 - A stupa-like element in the superstructure

📌 **Prelims Concept:** Southeast Asian temple architecture reflects the historical spread and localisation of Indian religious and cultural traditions.

🏰 **Decline and Rediscovery**

Political Centre Shifted
to East Java (929–930 CE)
↓
Prambanan Abandoned
↓
Vegetation + Volcanic Debris
↓
Centuries of Neglect
↓
Rediscovery & Documentation

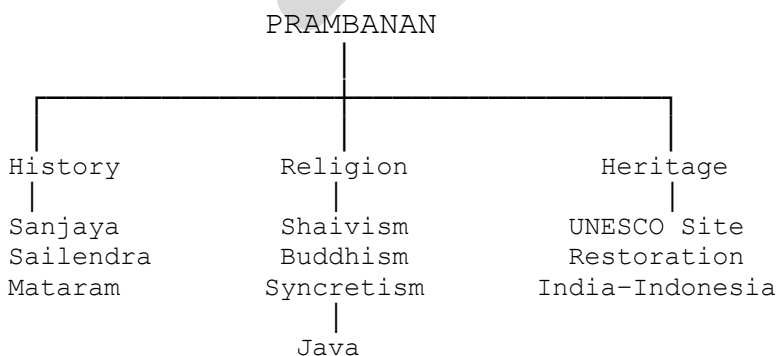
Possible Rediscovery Figures

- **Mpu Tanakung** — 15th-century East Javanese court poet (possible early reference).
- **C.A. Lons** — Dutch East India Company official, documented ruins in 1733.
- **Thomas Stamford Raffles** — documented Java's ancient monuments during British rule (1811–1816).

🔧 **Restoration**

- Restoration occurred in several phases.
- Reconstruction of the main temple began in **1918**.
- It was completed in **1953**, after Indonesia's independence.
- Inauguration was conducted by **Sukarno**, Indonesia's first President.

🧠 **UPSC Mind Map**



UPSC Prelims Question

Consider the following statements:

1. Prambanan Temple is located on the island of Java in Indonesia.
2. The temple is associated with the Sanjaya dynasty and Shaivite Hinduism.
3. The Prambanan Temple Compounds include Prambanan, Sewu, Bura and Lumbung temples.
4. Prambanan was built entirely without any influence from Buddhist traditions.

Which of the statements given above are correct?

Answer: 1, 2 and 3 only.

• PM TO FLAG OFF HYDROGEN TRAIN ON JULY 17

India joins elite group, only Japan, South Korea, the US and Canada have H-trains



Stations
12



Distance
89 km



Travel time
2 hours

Operational speed
75 kmph

Maximum Speed
120 kmph

TRAIN TIMING

Train no 74010
Leave Jind railway station at **7.40 am** and arrive at Sonipat at **9.40 am**

Train no 74009
Leave Sonipat railway station at **10.40 am** and reach Jind at **1.00 pm**

Total seats
682

Coaches
10

- Passenger capacity: **2,600**
- Power: **2400 kW**

Zero CO2 emissions and the only emission is water vapour



Hydrogen train to run on this route

What is it?

Hydrogen trains, often referred to as 'hyd rail' or 'H-trains' provide a viable alternative to diesel locomotives on non-electrified railway routes. The hydrogen fuel cells generate electricity chemically, meaning the only emission is harmless water vapour

“The train will operate as a special inaugural service on July 17. The date for the commencement of its regular passenger service has not yet been decided,”
SENIOR RAILWAY BOARD OFFICIAL

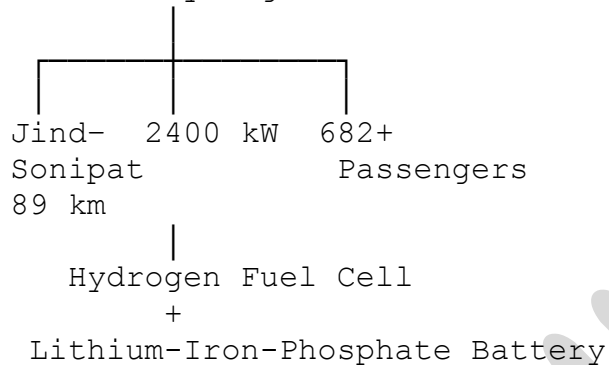
India's First Hydrogen Train

◆ Brief

- India is set to introduce its first **hydrogen-powered train**, marking a major step in clean transport technology.

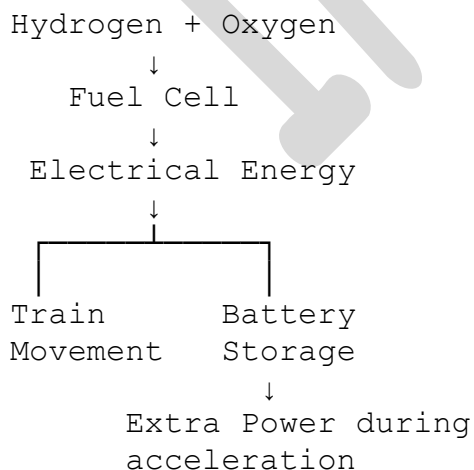
📌 Key Facts

India's Hydrogen Train



- **Route:** Jind-Sonipat, Haryana
- **Trainset:** 8 passenger cars + 2 driving power cars
- **Power:** 2,400 kW (approximately 3,200 hp)
- **Capacity:** At least 682 passengers
- **Maximum operational speed:** 75 km/h
- **Hydrogen consumption:** Approximately 300 kg for two round trips daily
- **Hydrogen storage:** 440 kg onboard at high pressure

⚙️ How Does a Hydrogen Train Work?



Power System

Each power pack:

- 115 kW → Hydrogen fuel cell
- 185 kW → **Lithium iron phosphate battery**
- Total: 300 kW per power pack

4 Power Packs × 300 kW = 1200 kW

↓

2 Power Cars

↓

Total = 2400 kW

 **Fuel Cell:** Provides relatively constant power.

 **Battery:** Stores surplus energy and supplies additional power during acceleration or higher demand.

Environmental Significance

Hydrogen + Oxygen

↓

Electricity

↓

Train Movement

↓

Water as Main By-product

 Hydrogen fuel-cell trains can provide **zero-emission operation** at the **point of use**.

Why Is Hydrogen Technology Challenging?

Storage

- Hydrogen is highly flammable.
- Requires high-pressure storage of approximately **200–500 bar**.

Transport

- Hydrogen is difficult to transport and distribute.
- Production capacity remains limited.

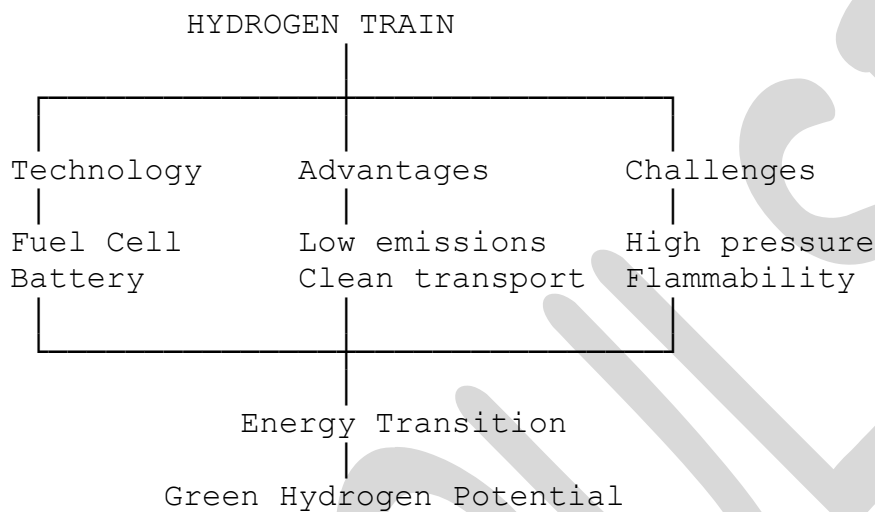
Temperature and Dispensing

- A dedicated **3,000-kg-capacity fuelling facility** has been established at Jind.
- Hydrogen is cooled to around **–15°C during dispensing** to facilitate handling.

Infrastructure

- Requires specialised:
 - Fuel stations
 - Storage systems
 - Safety protocols
 - Maintenance infrastructure

Mind Map



UPSC Prelims Question

Consider the following statements regarding hydrogen-powered trains:

1. Hydrogen fuel cells generate electricity by combining hydrogen with oxygen.
2. Hydrogen trains require high-pressure storage because hydrogen has a low density under normal conditions.
3. The battery in a hydrogen train can supplement the fuel cell during periods of high power demand.
4. Hydrogen-powered trains necessarily produce zero greenhouse gas emissions throughout their entire life cycle, irrespective of how hydrogen is produced.

Which of the statements given above are correct?

- A. 1 and 2 only
- B. 1, 2 and 3 only
- C. 2, 3 and 4 only
- D. 1, 2, 3 and 4

 **Answer: (B) 1, 2 and 3 only**

Explanation: The emissions profile depends on how hydrogen is produced. Hydrogen produced using fossil fuels may have significant associated emissions, even though the fuel cell itself produces electricity without direct carbon emissions.

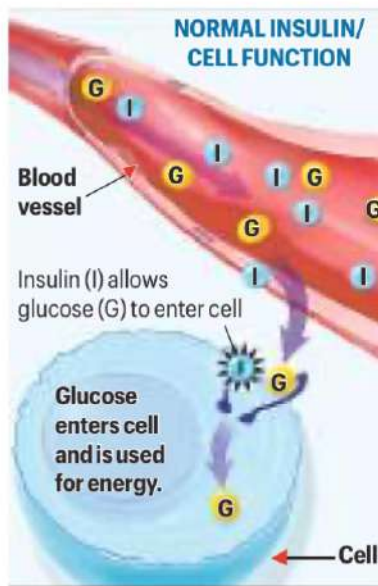
Why weekly diabetes shot could reshape treatment

India has one of the world's largest diabetes populations. Novo Nordisk's new injection offers a cost effective and convenient option for diabetics

• HOW DIABETES TYPES 1 AND 2 AFFECT THE BODY

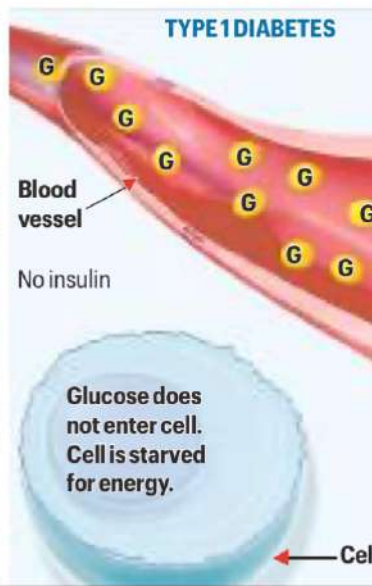
TYPE 1 DIABETES

A condition where the pancreas completely stops producing insulin, the hormone responsible for controlling the level of glucose in blood.



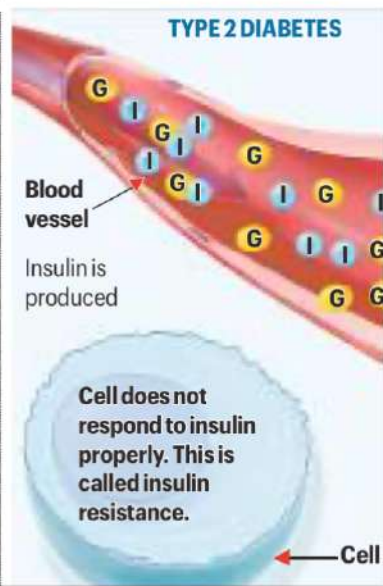
TYPE 2 DIABETES

Body's insulin production either goes down or the cells become resistant to the insulin. It accounts for more than 90% of all diabetes cases in the country.



101 million
INDIANS ARE LIVING WITH DIABETES

136 million
INDIANS HAVE PRE-DIABETES



Weight-loss drugs

Icodec, which lowers blood glucose levels, becomes more effective when combined with GLP-1 drugs.

This is because abdominal obesity, which GLP-1 tackles, reduces insulin sensitivity. Meaning, more insulin is needed to process same amount of sugar.

13.07.2026

Topic: GS II

Indo-Pacific Strategy:

From Diplomatic Intent to Implementation

◆ Brief

- Prime Minister Narendra Modi's visit to **Indonesia, Australia and New Zealand** highlights India's effort to strengthen its independent role in the **Indo-Pacific** amid uncertainty over the future direction of US engagement in Asia.

Evolution of India's Eastward Engagement

Look East Policy



Act East Policy



Indo-Pacific Strategy



Trade + Defence + Connectivity
+ Technology + Maritime Security



ASEAN Trade Gap

India-ASEAN Trade

2000 → ~\$7 billion

2025 → ~\$125 billion

China-ASEAN Trade

2000 → ~\$40 billion

2025 → ~\$1 trillion

📌 **Prelims Insight:** India's engagement with ASEAN has grown substantially, but remains significantly below China's economic integration with the region.

🇮🇩 **Indonesia: Maritime & Defence Cooperation**

- **Sabang Port:** Strategic for:
 - Maritime logistics
 - Maritime Domain Awareness (MDA)
 - Naval cooperation
- **BrahMos missile exports:** Reflect India's growing defence-export potential in Southeast Asia.

Sabang Port

↓

Strait of Malacca Region

↓

Maritime Connectivity + Strategic Security

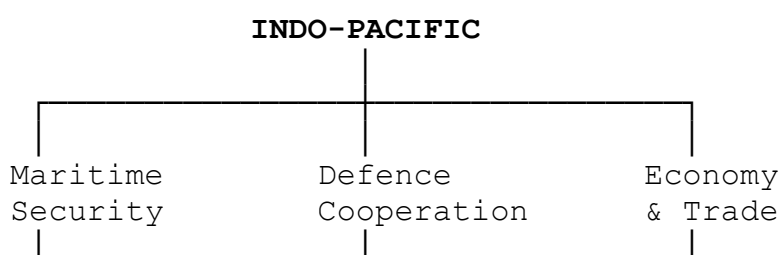
🇦🇺 **Australia: Resources + Strategic Partnership**

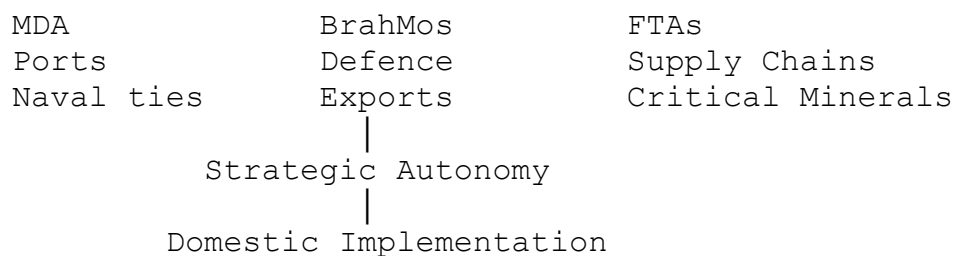
- Talks on a **Comprehensive Free Trade Agreement (FTA)**.
- Administrative arrangements for **Australian uranium exports** to India.
- Cooperation in:
 - Critical minerals
 - Energy resources
 - Nuclear energy
 - Maritime security in the eastern Indian Ocean

🇳🇿 **New Zealand: South Pacific Engagement**

- Renewed diplomatic engagement after a period of limited attention.
- FTA and maritime cooperation can expand India's presence in the **South Pacific**.
- Important amid increasing strategic presence of China in the region.

🧠 **Mind Map: India's Indo-Pacific Strategy**





! **Core Challenge: Implementation Deficit**

Diplomatic Agreement
↓
Domestic Capacity
↓
Funding + Infrastructure
↓
Institutional Coordination
↓
Actual Implementation

📌 Agreements related to **Sabang Port** and **Australian uranium** had been under discussion for years, highlighting the gap between **diplomatic announcements and execution**.

🔑 **Keywords**

Indo-Pacific | Look East | Act East | ASEAN | Sabang Port | Maritime Domain Awareness | BrahMos | Critical Minerals | Uranium | FTA | Supply Chain Resilience | Strategic Autonomy

📌 **UPSC Prelims Question**

Consider the following statements:

1. India's Act East Policy is an extension of its broader engagement with Southeast and East Asia.
2. Sabang Port is strategically important for India's maritime engagement with Indonesia.
3. Australia is relevant to India's energy security and critical-mineral requirements.
4. India's Indo-Pacific strategy is limited exclusively to maritime security and defence cooperation.

Which of the statements given above are correct?

- A. 1 and 2 only
- B. 1, 2 and 3 only
- C. 2, 3 and 4 only
- D. 1, 2, 3 and 4

✓ Answer: (B) 1, 2 and 3 only

UPSC Mains Question

“India’s Indo-Pacific strategy has expanded from the ‘Look East’ and ‘Act East’ policies to a comprehensive framework encompassing maritime security, defence cooperation, trade, critical minerals, technology and resilient supply chains. However, its effectiveness depends more on implementation than diplomatic intent.” Discuss. (250 words)



GCCs, Services and the Need for Manufacturing

◆ Core Idea

- **India** has emerged as the “**world’s office**” through services and **Global Capability Centres (GCCs)**, but it must also develop as the “**world’s factory**” to generate large-scale employment.

Global Capability Centres (GCCs)

- India hosts **2,100+** GCCs of more than **500 Forbes Global 2,000 companies**.
- Employ approximately **23 lakh professionals**.
- Generate nearly **\$100 billion annual revenue**.
- India hosts around **half of the world's GCCs**.

Evolution of GCCs

Back-Office Services



IT + Finance + Customer Support



Technology Platforms



Core Engineering R&D



AI + Clinical Research + Drug Discovery

India's Comparative Advantage

Services vs Merchandise Trade (2025–26)

Services Exports → \$421.3 billion

Goods Exports → \$446.1 billion

Goods Imports → \$783.4 billion

Services Imports → \$204.7 billion

“Goods” → both imports and exports are higher in volume and value → than “services”

Trade Balance

Merchandise Trade

Deficit → \$337.3 billion

Services Account

Surplus → \$216.6 billion

 **Prelims Concept:** India's comparative advantage is currently strongly visible in IT-enabled services, business services and knowledge-intensive sectors.

Geographic Concentration

Major GCC/IT Hubs

Bengaluru | Delhi-NCR | Hyderabad | Chennai | Mumbai | Pune

Government's Aim

Expand GCCs to **Tier-2 and Tier-3 cities**, such as:

- Varanasi
- Visakhapatnam
- Mysuru
- Tiruchirappalli

Metro Cities

Infrastructure + Talent Density



GCC Concentration

Tier-2/3 Cities

Lower Costs + Untapped Talent



Need Better Infrastructure

Why India Needs Manufacturing

Manufacturing



Mass Employment



Less-Skilled Workforce



Inclusive Growth

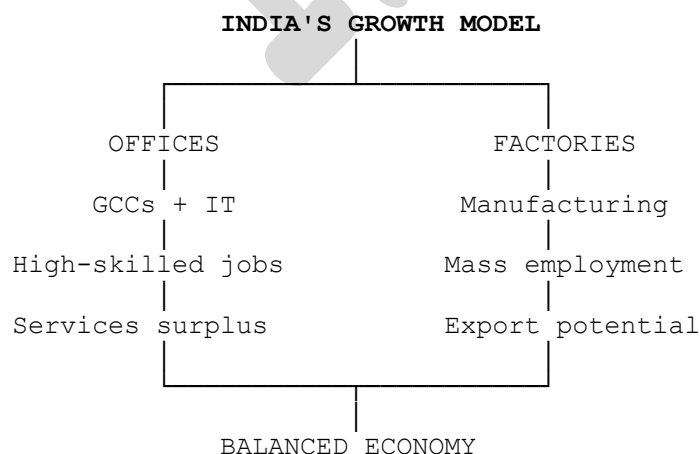
Manufacturing sectors such as:

- Textiles
- Leather
- Agro-processing
- Gems and jewellery

can absorb a much larger share of India's **less-skilled workforce** than knowledge-intensive GCCs.



Mind Map



Keywords

GCC | FDI | Services Exports | Merchandise Trade Deficit | Services Surplus | Comparative Advantage | Manufacturing | Tier-2/Tier-3 Cities | Employment Elasticity



UPSC Prelims Question

Consider the following statements:

1. Global Capability Centres in India have evolved beyond traditional back-office functions.
2. India's services trade has generally contributed to offsetting its merchandise trade deficit.
3. Manufacturing is generally more suitable than GCCs for absorbing large numbers of less-skilled workers.
4. GCCs are evenly distributed across India and are not concentrated in major metropolitan centres.

Which of the statements given above are correct?

- A. 1 and 2 only
- B. 1, 2 and 3 only
- C. 2, 3 and 4 only
- D. 1, 2, 3 and 4

 **Answer: (B) 1, 2 and 3 only**

16.07.2026

Gujarat Data Centre Policy (2026–29)

Brief

- The **Gujarat Government** announced the **Viksit Gujarat Data Center Policy (2026–29)** to attract large-scale investment and establish a major **green, AI-ready data-centre ecosystem**.



Key Targets

Viksit Gujarat Data Centre Policy



₹6 lakh cr	7.5 GW	2026-29
Investment	Capacity	Policy Period

- Target investment: ₹6 lakh crore
- Target capacity: 7.5 GW
- Intended to support **hyperscale and AI-ready data centres.**

Green Energy Focus

Data Centre

↓
High Electricity Demand

↓
Renewable Energy Integration

↓
Lower Carbon Footprint

 **Mandatory condition:** At least **51% of electricity consumed for core operations** must come from **green and renewable sources.**

Major Incentives

Fiscal & Infrastructure Support

- Exemption from **stamp duty and registration fees** for land purchase/lease.
- **100% reimbursement of electricity duty for 20 years.**
- Power subsidy of **₹1 per unit** for 20 years from the start of commercial operations.
- Reimbursement of eligible expenses on:
 - Plant and machinery
 - Building infrastructure
 - Services

Water Security

- Financial assistance for **desalination plants**, given the high water requirements of data centres.

Dholera: Emerging Data Centre Hub

Dholera

↓
~100 km southwest of Ahmedabad

↓

Capital subsidy of 2.5%
on eligible fixed capital investment

📌 Eligible investment excludes the cost of **land, land development and chips.**

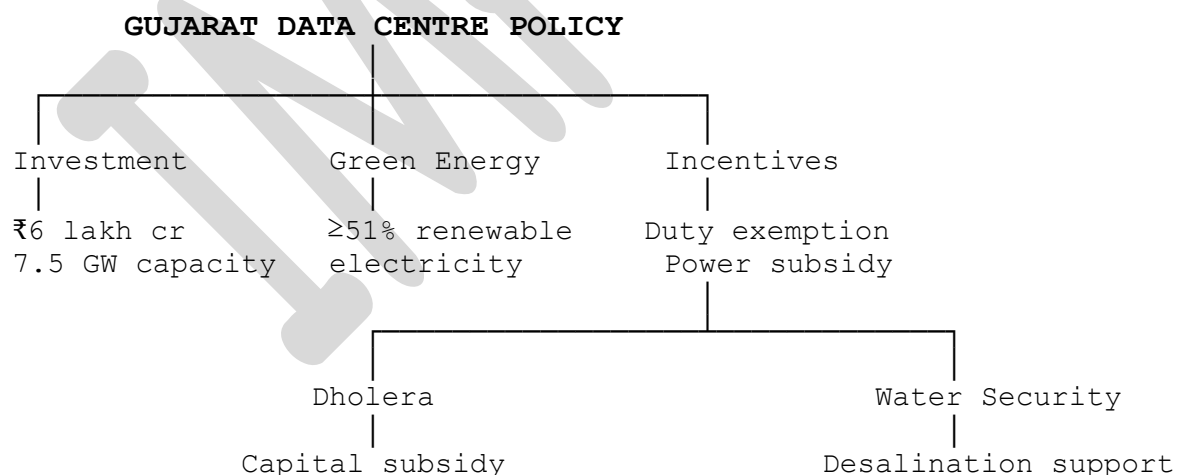
🧠 **Data Centres: Why Important?**

AI + Cloud Computing
↓
Data Centres
↓
High Power + Water Demand
↓
Need for
Renewable Energy + Efficient Cooling

💡 **Major Challenges**

- Very high electricity consumption
- Large water requirement for cooling
- Need for reliable power supply
- E-waste and environmental concerns
- Requirement of high-speed digital infrastructure

🗺️ **Mind Map**



🔑 **Keywords**

Data Centre | Hyperscale | AI-ready Infrastructure | Green Energy | Renewable Energy | Dholera | FSI | Desalination | Electricity Duty | Cloud Computing



UPSC Prelims Question

Consider the following statements regarding Gujarat's Data Centre Policy:

1. The policy aims to attract ₹6 lakh crore in investment and create 7.5 GW of data-centre capacity.
2. It requires at least 51% of electricity used for core operations to come from green and renewable sources.
3. The policy provides incentives for desalination plants because of the high water requirements of data centres.
4. Dholera is located approximately 100 km southwest of Ahmedabad.

Which of the statements given above are correct?

- A. 1 and 2 only
- B. 1, 2 and 3 only
- C. 2, 3 and 4 only
- D. 1, 2, 3 and 4

✓ Answer: (D) 1, 2, 3 and 4

Topic: GS II

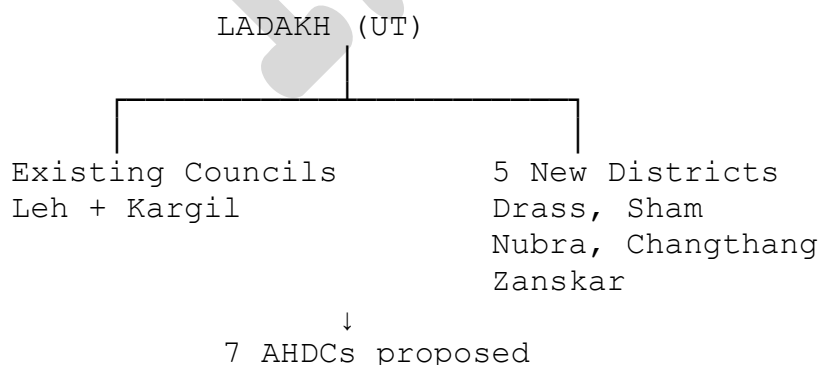
Ladakh's 7 Hill Councils & Decentralisation Debate

◆ Brief

- The Ladakh administration has announced **Autonomous Hill Development Councils (AHDCs) in all seven districts**, reigniting debate over **decentralisation, representation and constitutional safeguards**.



Administrative Structure



Ladakh:

- Area: nearly **60,000 sq km**

- Population: around **3 lakh**
- Large area + difficult terrain → strong case for **administrative decentralisation**.

Core Political Debate

Administrative Decentralisation
+
Political Representation
↓
Balance of Power?

Administration's Argument

- Seven districts logically require seven councils.
- Improves grassroots governance.
- Geographic isolation requires decentralised administration.
- Discussions reportedly include a proposed **UT-level representative body under a customised Article 371 framework**.

Civil Society's Concern

The **Apex Body, Leh (ABL)** and **Kargil Democratic Alliance (KDA)** argue that:

- Seven councils could **fragment political authority**.
- They may weaken a future territorial representative body.
- Multiple institutions may create overlapping accountability:
 - Hill Councils
 - Panchayati Raj Institutions
 - UT Administration
 - Proposed Article 371 body

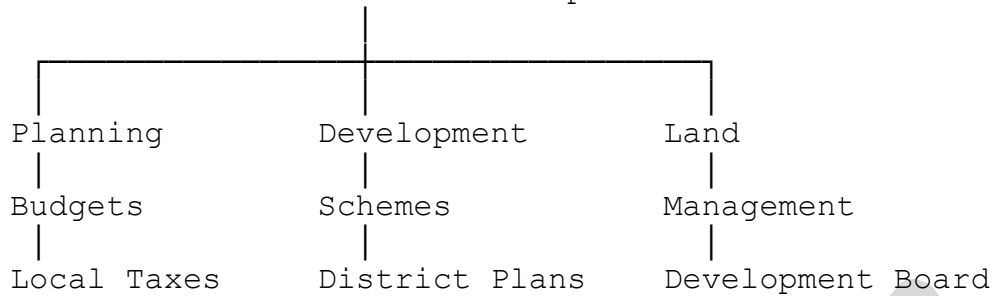
Constitutional Comparison

<i>Feature</i>	<i>Sixth Schedule ADCs</i>	<i>Ladakh AHDCs</i>
Constitutional status	Yes	No
Legislative powers	Yes, subject to constitutional framework	No independent legislative powers
Customary judicial powers	Available in certain areas	No
Nature	Constitutional autonomy	Statutory autonomy

 **Sixth Schedule** → applies to specified tribal areas of **Assam, Meghalaya, Tripura and Mizoram**.

Powers of Existing AHDCs

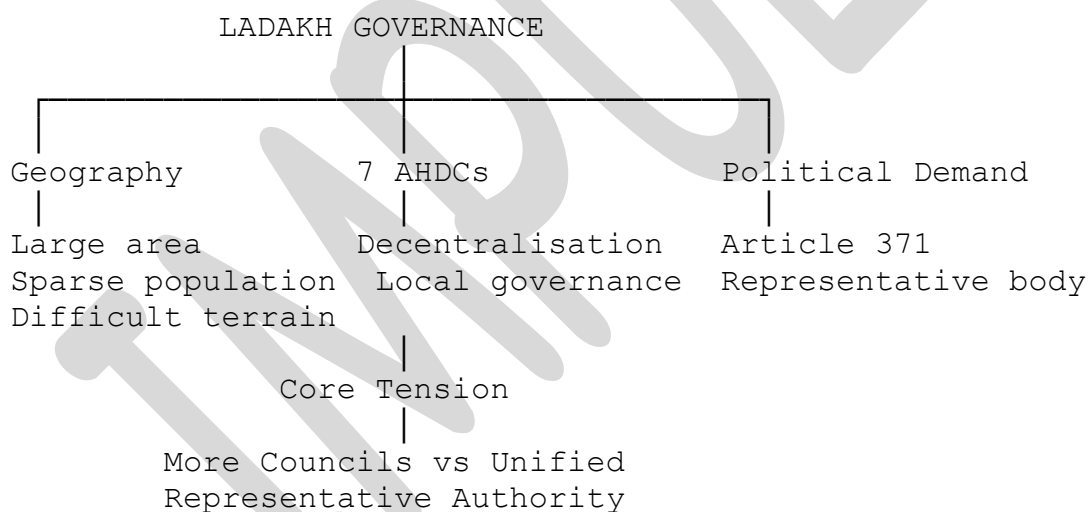
Ladakh Autonomous Hill Development Councils



Practical Concerns

- Alleged shift of decision-making towards the Lieutenant Governor's Secretariat and UT administration.
- Reduced budgets and limited influence of elected councils.
- Existing councils are alleged by some leaders to have become less effective.

Mind Map



Keywords

Union Territory | Autonomous Hill Development Council | Sixth Schedule | Article 371 | Panchayati Raj | Lieutenant Governor | Statutory Autonomy | Constitutional Autonomy | Decentralisation



UPSC Prelims Question

Consider the following statements regarding Ladakh's Autonomous Hill Development Councils:

1. The Ladakh Autonomous Hill Development Councils are constitutional bodies under the Sixth Schedule.
2. The councils have responsibilities related to district planning and development.
3. Unlike Sixth Schedule Autonomous District Councils, Ladakh's hill councils do not possess independent legislative powers of the same constitutional nature.
4. Ladakh's proposed expansion of hill councils has generated debate over the distribution of authority among different representative institutions.

Which of the statements given above are correct?

- A. 1 and 2 only
- B. 2, 3 and 4 only
- C. 1, 3 and 4 only
- D. 1, 2, 3 and 4



Answer: (B) 2, 3 and 4 only

Prelims Trap:

Ladakh's AHDCs are **statutory bodies, not Sixth Schedule** constitutional autonomous councils.

Mains probable question

Q. "Administrative decentralisation does not always translate into effective democratic representation." In the context of the proposed expansion of Autonomous Hill Development Councils (AHDCs) in Ladakh, critically examine the challenges of balancing grassroots governance with political representation. (15 Marks, 250 Words)

Demand of the Question

- Explain the need for decentralisation in Ladakh.
- Discuss the rationale behind establishing seven AHDCs.
- Analyse concerns regarding fragmentation of political authority and demands under Article 371.
- Suggest measures to ensure effective governance while preserving democratic accountability.

Q. Discuss the role of Autonomous Hill Development Councils in promoting local self-governance in Ladakh. How do they differ from the Autonomous District Councils under the Sixth Schedule? Examine the issues arising from the proposal to establish AHDCs in all seven districts of Ladakh. (10 Marks, 150 Words)



17.07.2026

Topic: GS II

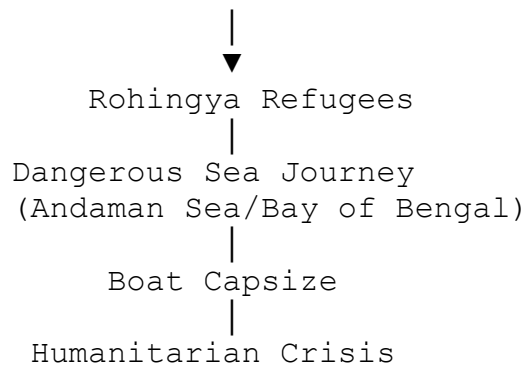
Over 500 Feared Dead as Rohingya Refugee Boats Go Missing

Brief

- Two boats carrying **over 500 Rohingya refugees** from **Myanmar's Rakhine State** and refugee camps in **Bangladesh** reportedly capsized in the **Andaman Sea**, raising concerns over one of the world's deadliest refugee routes.

Diagram

Myanmar (Rakhine State)
+
Bangladesh Refugee Camps



Key Points (Prelims)

- **Community:** Rohingya (Muslim ethnic minority).
- **Origin:** Primarily **Rakhine State, Myanmar**.
- **Major Exodus: 2017**, after Myanmar military operations.
- **Current Drivers:**
 - Civil war after **2021 military coup**.
 - Persecution and statelessness.
 - Poor conditions in Bangladesh refugee camps.
- **Destination Countries:**
 - **Malaysia**
 - **Indonesia**
 - **Thailand**
- **Sea Route:** Andaman Sea & Bay of Bengal (among the world's deadliest refugee routes).

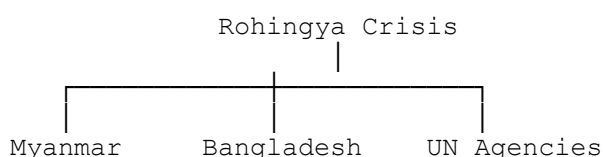
Why are Rohingyas fleeing?

- Ethnic persecution and denial of citizenship.
- Armed conflict between Myanmar military and the **Arakan Army**.
- Lack of livelihood opportunities.
- Human trafficking and unsafe migration.

International Response

- **UNHCR** and **IOM** expressed grave concern.
- Seeking confirmation of casualties and urging protection of refugees.
- Calls for safe migration pathways and humanitarian assistance.

Mind Map



Persecution Refugee Camps UNHCR & IOM
 |
 Statelessness Poor Conditions
 |
 Dangerous Sea Migration
 |
 Humanitarian Crisis

Prelims Facts

- **Ethnic group:** Rohingya Muslims
- **Region:** Rakhine State (Myanmar)
- **Major water bodies:** Andaman Sea & Bay of Bengal
- **Key UN agencies:** UNHCR, IOM
- **Major exodus:** 2017
- **Myanmar military coup:** 2021

Probable Mains Question

Q. The Rohingya refugee crisis reflects the intersection of ethnic conflict, statelessness and regional humanitarian challenges. Examine the causes of the Rohingya crisis and discuss the role of neighbouring countries and international organisations in addressing it. (10 Marks, 150 Words)

18.07.2026

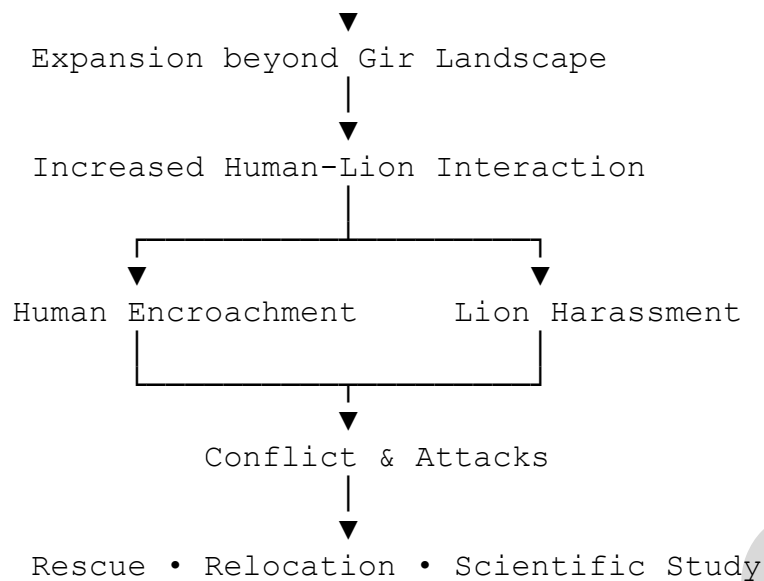
Gujarat Lion Attacks & Human-Wildlife Conflict

Brief

- Following a surge in **Asiatic lion attacks** in Gujarat, the Forest Department has:
 - Captured **31 lions**.
 - Declared **7 lions as "man-eaters"** (to remain in captivity).
 - Requested the **Wildlife Institute of India (WII)** to study possible behavioural changes.

Diagram

Rising Lion Population
 |



🔑 **Key Facts (Prelims)**

- **Only natural habitat of the Asiatic Lion (*Panthera leo persica*) is Gujarat.**
- Major habitats:
 - Gir National Park
 - Gir Wildlife Sanctuary
 - Girnar Wildlife Sanctuary
 - Barda Wildlife Sanctuary
- **Lion population (2025): 891**
 - Core Gir: 394
 - Satellite populations: 497
- **Wildlife Institute of India (WII):** Dehradun; autonomous institute under the Ministry of Environment, Forest and Climate Change.

⚠️ **Causes of Rising Conflict**

- Expansion of lion territory beyond Gir.
- Human settlements and agriculture near lion habitats.
- Harassment of lions (flashlights, photography, "lion shows").
- Habitat fragmentation.
- Increasing human presence in forest fringes.

🛡️ **Government Response**

- Capture and relocation of conflict-prone lions.
- Scientific behavioural study by WII.
- Permanent captivity for confirmed "man-eaters".
- Monitoring and patrolling to prevent illegal lion shows.
- Improved management of the **Greater Gir Landscape**.

Conservation Challenges

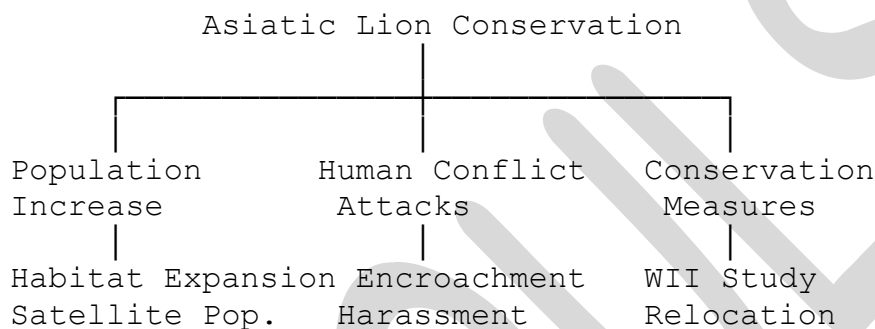
Positives

- Increasing Asiatic lion population.
- Successful conservation outside core Gir.

Concerns

- Human-wildlife conflict.
- Habitat pressure.
- Need for landscape-level conservation.
- Debate over declaring lions as "man-eaters" after a single incident.

Mind Map



UPSC Prelims Facts

- **Scientific name:** *Panthera leo persica*
- **IUCN Status:** Endangered
- **CITES:** Appendix I
- **Wildlife (Protection) Act, 1972:** Schedule I (highest protection)
- **Only wild population:** Gujarat, India

UPSC Prelims Question

Q. Consider the following statements regarding the Asiatic Lion:

1. The only wild population of the Asiatic lion is found in Gujarat.
2. The Wildlife Institute of India is an autonomous institute under the Ministry of Environment, Forest and Climate Change.
3. The Asiatic lion is listed as Endangered on the IUCN Red List.
4. Gir National Park is the only protected area in Gujarat where Asiatic lions are found.

Which of the statements given above are correct?

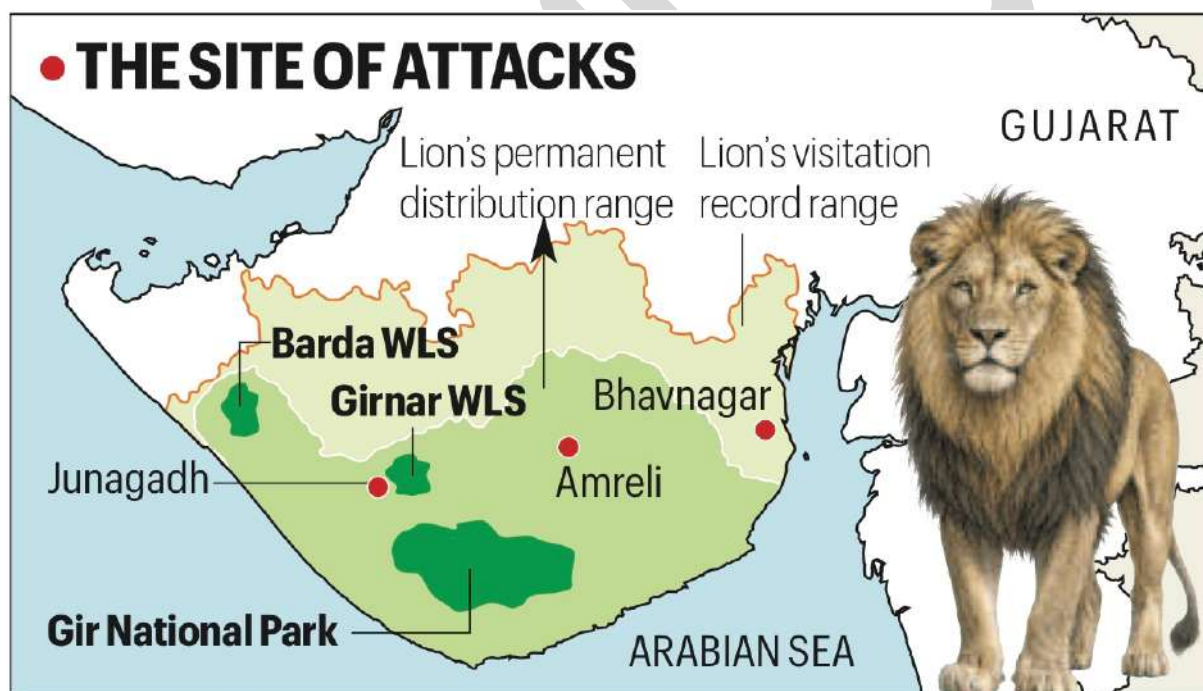
- A. 1, 2 and 3 only
- B. 1 and 4 only
- C. 2, 3 and 4 only
- D. 1, 2, 3 and 4

✓ Answer: (A) 1, 2 and 3 only

Explanation: Statement 4 is incorrect because Asiatic lions are also found in Gir Wildlife Sanctuary, Girnar Wildlife Sanctuary, Barda Wildlife Sanctuary, and other satellite habitats within the Greater Gir landscape.

🖋️ Probable Mains Question

Q. The success of Asiatic lion conservation has also intensified human-wildlife conflicts in Gujarat. Discuss the reasons for the increasing incidence of lion attacks and suggest measures for balancing wildlife conservation with the safety and livelihoods of local communities. (15 Marks, 250 Words)



Access to Life-Saving Medicines & Judicial Delay



Brief

- The **Supreme Court** took **suo motu cognisance** of delays in cases involving access to life-saving medicines after a Kerala High Court case concerning the high cost of the *breast cancer drug* **Ribociclib** remained pending despite **57 hearings**.



Diagram

High Cost of Patented Drug



Limited Patient Access



Litigation under Article 21



Judicial Delay



Risk to Right to Life



SC Suo Motu Intervention



Key Highlights (Prelims)

- **Drug involved:** Ribociclib (breast cancer medicine).
- **Issue:** High price due to patent protection.
- **Original petitioner:** Died during pendency of the case.
- **Kerala High Court:** Converted the matter into a **suo motu PIL** on pricing and accessibility of life-saving medicines.
- **Supreme Court:** Directed early disposal and observed that HC directions may have **pan-India implications**.



Constitutional & Legal Dimensions

Article 21

- Guarantees **Right to Life and Personal Liberty**.
- Judicial interpretation includes:
 - *Right to Health*.

- *Timely access to essential healthcare.*
- **Access to life-saving medicines.**

Patents Act, 1970

- The petition sought a **Government Use Licence** to enable affordable domestic manufacture of Ribociclib.

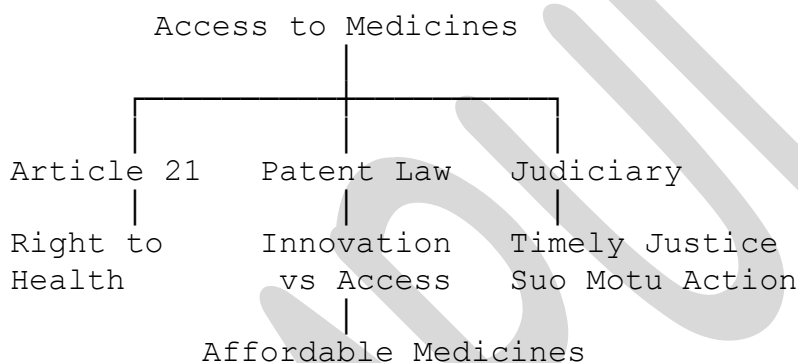


Issues Highlighted

- High prices of patented medicines.
- Judicial delays affecting health rights.
- Balance between:
 - **Patent protection (innovation)**
 - **Public health (affordable access)**
- Need for speedy adjudication in health-related cases.



Mind Map



Prelims Facts

- **Article 21** → Right to Life includes the **Right to Health** (judicial interpretation).
- **Suo motu** → Court initiates proceedings on its own.
- **Government Use Licence** → Permits government-authorised use of a patented invention for public purposes under the **Patents Act, 1970**.
- **Ribociclib** → Used for **HR-positive, HER2-negative breast cancer**.



UPSC Prelims Question

Q. Consider the following statements:

1. The Supreme Court recently took suo motu cognisance of delays in cases concerning access to life-saving medicines.
2. Article 21 has been judicially interpreted to include the Right to Health.

3. The Patents Act, 1970 provides mechanisms such as government use of patents in public interest.
4. Ribociclib is primarily used in the treatment of tuberculosis.

Which of the statements given above are correct?

- A. 1, 2 and 3 only
- B. 1 and 4 only
- C. 2 and 3 only
- D. 1, 2, 3 and 4

✅ Answer: (A) 1, 2 and 3 only

📌 Probable Mains Question

Q. Access to affordable life-saving medicines is an essential component of the Right to Health under Article 21. Discuss the challenges posed by high prices of patented medicines and judicial delays in ensuring equitable healthcare in India. Suggest measures to balance intellectual property rights with public health imperatives. (15 Marks, 250 Words)

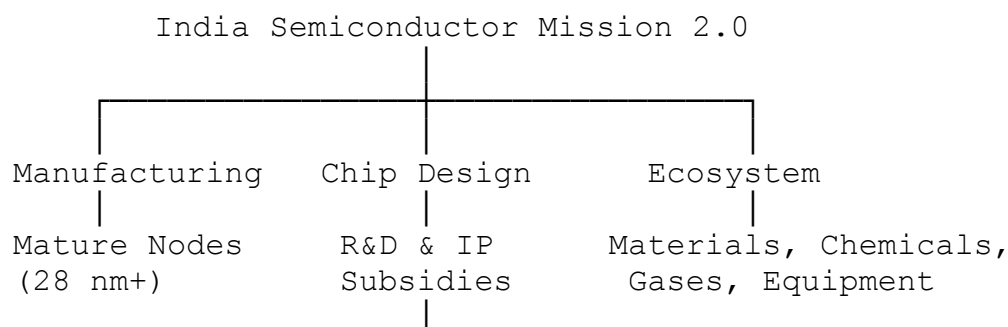
GS - III

India Semiconductor Mission (ISM) 2.0 – Beyond Manufacturing

📌 Brief

- The Union Cabinet approved the **second phase of the India Semiconductor Mission (ISM 2.0)** with an outlay of **₹1,27,500 crore**, shifting focus from **chip fabrication** to building a comprehensive **semiconductor innovation ecosystem**.

📌 Diagram



Key Highlights (Prelims)

- **Mission:** India Semiconductor Mission (ISM) – Phase II.
- **Total Outlay:** ₹1,27,500 crore.
- **Focus Areas:**
 - Chip design.
 - Intellectual Property (IP).
 - Semiconductor equipment.
 - Specialty chemicals and industrial gases.
 - Advanced research and innovation.
- **Design Incentive:** Subsidy up to 75% for chip design activities.

Why Focus on Mature Node Chips (28 nm+)?

- Constitute nearly **70% of global semiconductor demand.**
- Widely used in:
 - Automobiles
 - Consumer electronics
 - Smartphones
 - Medical devices
 - Industrial equipment
 - Power grids

Strategic Importance

Economic

- Reduce import dependence.
- Strengthen electronics manufacturing.
- Boost exports and high-value employment.

Strategic

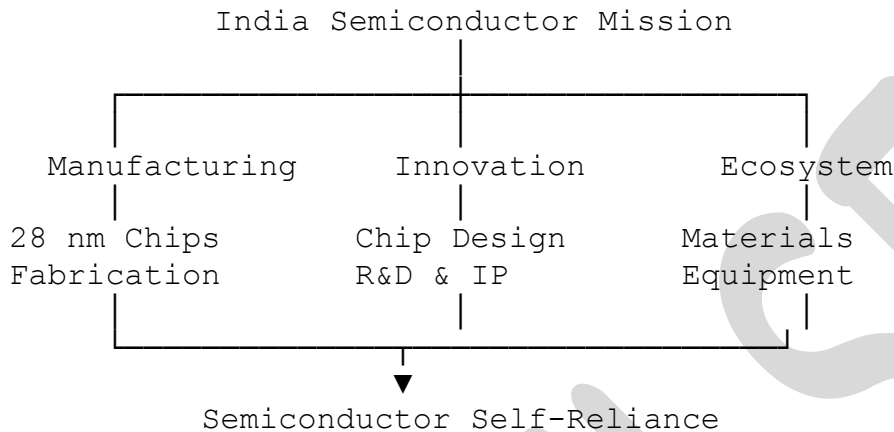
- Semiconductor self-reliance.
- Supply-chain resilience.
- Reduce vulnerability amid global geopolitical tensions.
- Support Digital India, AI and defence technologies.

Challenges

- High capital intensity.
- Uninterrupted power supply.
- Ultra-pure water and specialty chemicals.

- Skilled workforce.
- Technology transfer.
- Predictable regulatory environment.
- Strong academia–industry collaboration.

Mind Map



Prelims Facts

- **India Semiconductor Mission (ISM):** Launched in **2021** under the Ministry of Electronics & Information Technology (MeitY).
- **Phase II:** Greater emphasis on design, innovation and ecosystem development.
- **Mature-node chips: 28 nm and above.**
- **Advanced chips: 7 nm, 5 nm, 3 nm, 2 nm** (long-term strategic goal).



UPSC Prelims Question

Q. Consider the following statements regarding the India Semiconductor Mission (ISM):

1. ISM Phase II places greater emphasis on chip design and semiconductor ecosystem development than on fabrication alone.
2. Mature-node chips (28 nm and above) account for a significant share of global semiconductor demand.
3. Semiconductor fabrication requires uninterrupted power supply and specialised industrial inputs.
4. India has already achieved commercial production of 2 nm semiconductor chips.

Which of the statements given above are correct?

- A. 1, 2 and 3 only
- B. 1 and 4 only
- C. 2, 3 and 4 only

D. 1, 2, 3 and 4

✓ Answer: (A) 1, 2 and 3 only

Explanation: Statement 4 is incorrect. India has **aspirational goals** to develop advanced nodes such as 7 nm and 2 nm, but it has not yet achieved commercial production of 2 nm chips.

Probable Mains Question

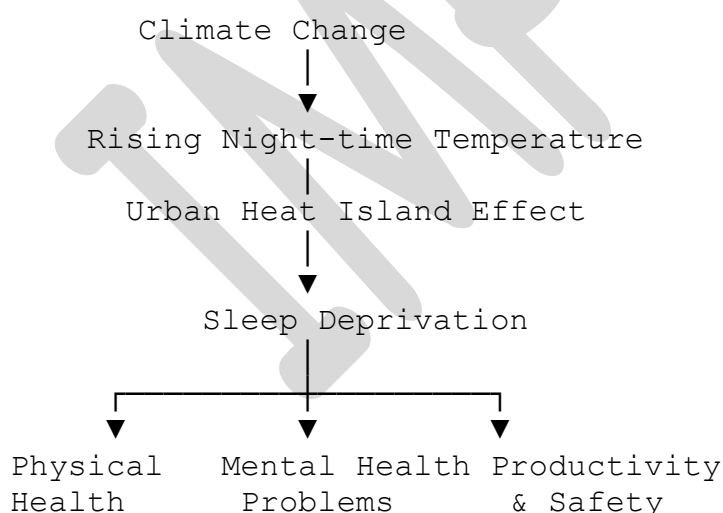
Q. India's semiconductor strategy has evolved from attracting fabrication units to building a complete semiconductor ecosystem. Discuss the significance of the India Semiconductor Mission (ISM) 2.0 in strengthening technological self-reliance and integrating India into global semiconductor value chains. Also examine the key challenges in achieving this objective. (15 Marks, 250 Words)

Sleep Loss & Rising Night-time Heat: **An Emerging Public Health Challenge**

Brief

- A recent study found that **rising night-time temperatures**, exacerbated by **climate change**, are causing significant sleep loss globally. Indian cities such as **Chennai, Mumbai, and Delhi** are among the worst affected.

Diagram



Key Highlights (Prelims)

- Average global sleep loss (2020–2025): **56 hours/year**.
- Around **10%** of sleep loss is directly attributable to **climate change**.
- Sleep loss in major Indian cities:

- **Chennai:** 93 hours/year
- **Mumbai:** 84 hours/year
- **Delhi:** 67 hours/year

Causes of Sleep Deprivation

Climate-related

- Rising night-time temperatures.
- Urban Heat Island (UHI) effect.
- Longer and more humid summers.

Lifestyle-related

- Excessive screen time.
- Social media addiction.
- Shift work.
- Irregular eating habits.
- Urban stress.

Health Impacts

- Hypertension.
- Diabetes.
- Cardiovascular diseases.
- Obesity.
- Reduced immunity.
- Cognitive impairment.
- Mental health disorders.
- Reduced workplace productivity.
- Higher risk of road and workplace accidents.

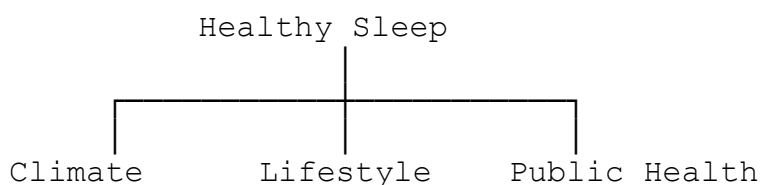


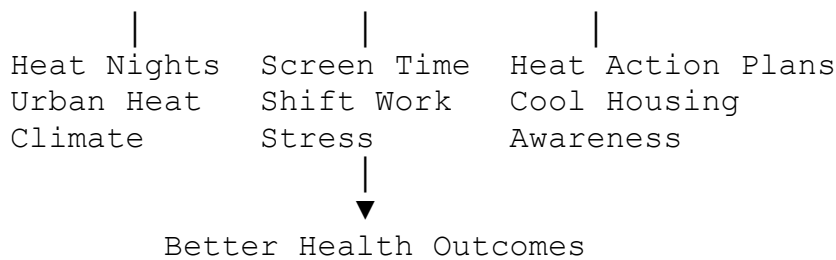
Policy Measures

- Include **warm nights** in Heat Action Plans.
- Promote climate-resilient urban planning.
- Expand green spaces and cool roofs.
- Improve housing ventilation and affordable cooling.
- Public awareness on sleep hygiene.
- Integrate sleep health into NCD prevention programmes.



Mind Map





Prelims Facts

- **Urban Heat Island (UHI):** Urban areas remain warmer than surrounding rural regions due to concrete surfaces, reduced vegetation and waste heat.
- **Heat Action Plan (HAP):** A framework to reduce heat-related mortality and morbidity through preparedness, early warning and coordinated response.
- Sleep is increasingly recognised as a key determinant of **non-communicable disease (NCD)** prevention.



UPSC Prelims Question

Q. Consider the following statements:

1. Rising night-time temperatures due to climate change can adversely affect sleep quality.
2. The Urban Heat Island effect contributes to warmer nights in cities.
3. Chronic sleep deprivation is associated with a higher risk of non-communicable diseases.
4. India's Heat Action Plans are currently designed exclusively to address daytime heat exposure.

Which of the statements given above are correct?

- A. 1, 2 and 3 only
- B. 1 and 4 only
- C. 2, 3 and 4 only
- D. 1, 2, 3 and 4



Answer: (A) 1, 2 and 3 only

Explanation: Statement 4 is incorrect. While many Heat Action Plans have traditionally focused on daytime heat, there is increasing recognition of the need to address **dangerously warm nights** as well.



UPSC Mains Question

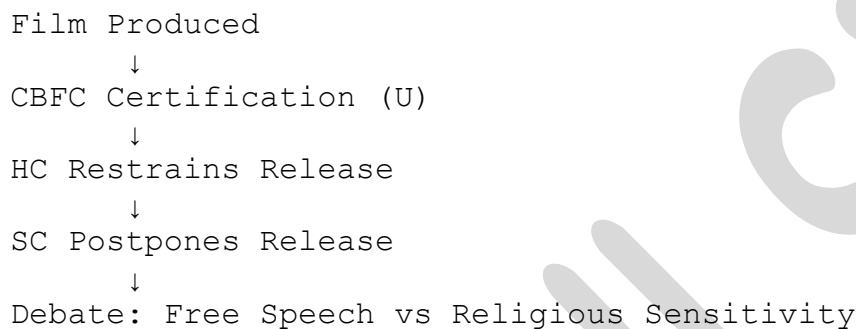
Q. Climate change is emerging as a major public health challenge through pathways beyond extreme weather events. Examine how rising night-time temperatures and rapid urbanisation are affecting sleep health in India. Suggest measures to integrate sleep health into climate adaptation and public health policies. **(15 Marks, 250 Words)**

Can Courts Stop the Release of a Film Cleared by **CBFC?**

Brief

- The Supreme Court deferred the release of the animated film **Mahaprabhu Jagannath**, despite its **CBFC certification**, after the Orissa High Court raised concerns over its release during the Rath Yatra.

Flow Diagram



Key Constitutional & Legal Provisions

- **Article 19(1)(a):** Freedom of Speech & Expression.
- **Article 19(2):** Reasonable restrictions (public order, morality, etc.).
- **Cinematograph Act, 1952:**
 - CBFC certifies films.
 - Government may suspend/revoke certification in specified circumstances.

Important Supreme Court Judgments

1. *Union of India v. K.M. Shankarappa* (2000)

- CBFC is an expert statutory body.
- Executive cannot override CBFC's certification.
- **Law & order is the State's responsibility**, not a reason to ban certified films.

2. *S. Rangarajan v. P. Jagjivan Ram* (1989)

- Freedom of expression cannot be curtailed due to threats of protests or violence.
- State must protect free speech instead of yielding to a "hostile audience."

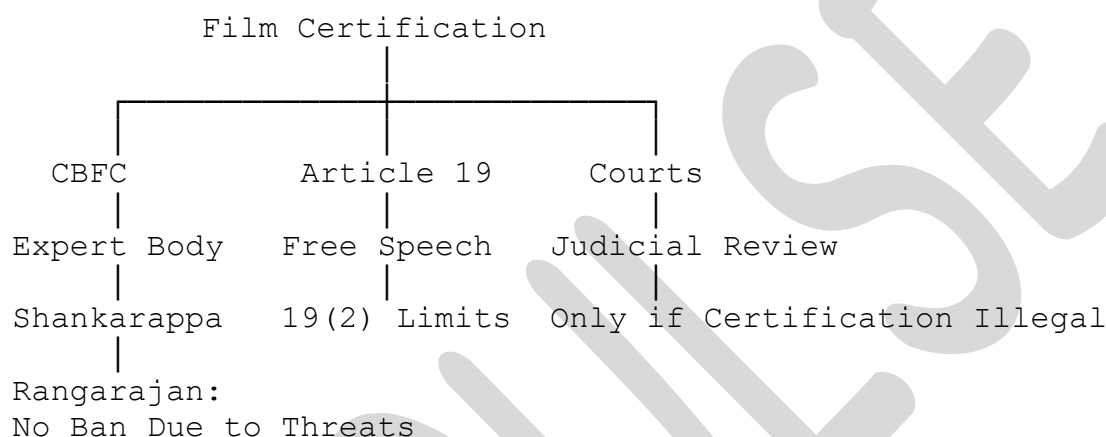
Can Courts Interfere?

✓ Yes, only in limited situations:

- Illegal or arbitrary CBFC certification.
- Violation of statutory provisions.
- Procedural irregularities or lack of due process.

✗ Courts generally **do not substitute** CBFC's expert opinion merely on anticipated public unrest.

Mind Map



UPSC Prelims Question

Q. With reference to film certification in India, consider the following statements:

1. The CBFC is a statutory body under the Cinematograph Act.
2. Once a film is certified by the CBFC, courts can never interfere with its release.
3. The Supreme Court has held that apprehension of law and order alone is not sufficient to suppress freedom of expression.

Which of the statements given above is/are correct?

- A. 1 and 3 only
- B. 2 and 3 only
- C. 1 only
- D. 1, 2 and 3

Answer: (A)

Probable Mains Question

"Freedom of expression in cinema must be balanced with public order, but law and order concerns cannot become a tool for prior restraint." Discuss in the light of CBFC certification and judicial precedents. (150 words)

The case for updating the Indus Waters Treaty

River systems are dynamic entities. Their management, therefore, cannot be static. The 1960 IWT is inadequate to address contemporary challenges

Review, rework

The agreements governing more than 100 transboundary river systems globally have risen over the years to 800-plus.

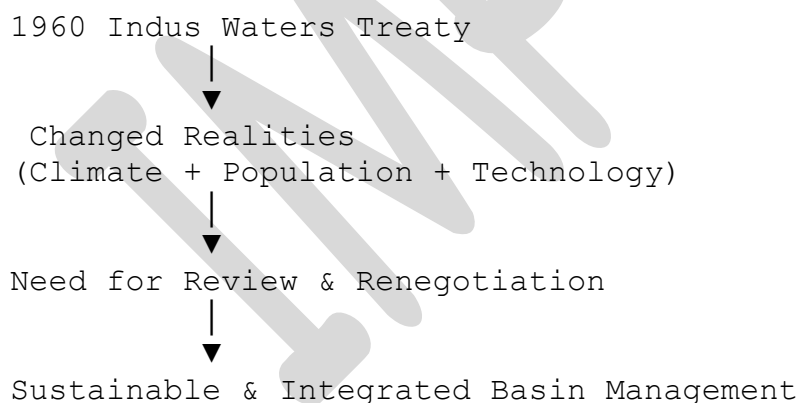
This is evidence that many of these treaties are constantly being reviewed and updated to reflect new ground realities.

The Case for Updating the Indus Waters Treaty (IWT)

Brief

- India has sought **modification/renegotiation** of the **Indus Waters Treaty (1960)**, citing climate change, changing water demands, and contemporary challenges.

Flow Diagram



Key Facts (Prelims)

Indus River Basin

- **Treaty Signed:** 1960 (India–Pakistan; World Bank brokered)
- **Eastern Rivers → India**
 - Ravi
 - Beas

- Sutlej
- **Western Rivers → Pakistan**
 - Indus
 - Jhelum
 - Chenab

Basin Distribution

- Pakistan – **47%**
- India – **39%**
- China – **8%**
- Afghanistan – **6%**

Why Update the Treaty?

1. Climate Change

- **20% decline** in rainfall in eastern river basins (1951–2024).
- Uneven changes in water availability.

2. Population & Water Demand

- Increased irrigation, urbanisation and energy needs.

3. Missing Modern Provisions

- **✗** Groundwater management
- **✗** Water quality standards
- **✗** Environmental flows
- **✗** Climate resilience

4. Static Institutional Mechanism

- Permanent Indus Commission mainly ensures treaty compliance.
- Lacks integrated basin management unlike the **Mekong River Commission**.

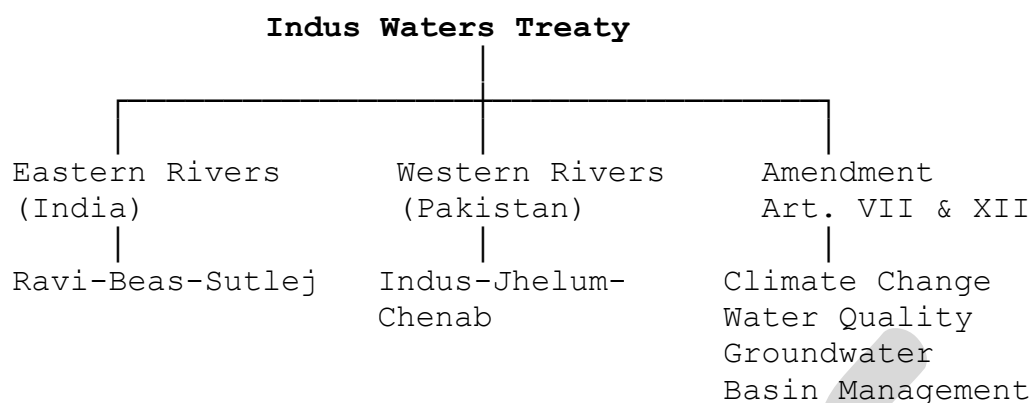
Treaty Provisions for Amendment

- **Article VII** → Cooperation for new engineering/drainage works.
- **Article XII** → Treaty can be modified through a new bilateral agreement.

Global Perspective

- Over **800 international freshwater agreements** have evolved through amendments, protocols and review mechanisms.
- Periodic review is a global best practice.

Mind Map



UPSC Prelims Question

Q. With reference to the Indus Waters Treaty, consider the following statements:

1. India has exclusive rights over the Ravi, Beas and Sutlej rivers.
2. Article XII of the treaty allows modification through a bilateral agreement.
3. The treaty contains provisions relating to groundwater management and environmental flows.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

Answer: (A)

Probable Mains Question

The Indus Waters Treaty, hailed as one of the world's most enduring water-sharing agreements, requires adaptation to contemporary challenges. Discuss the need for its review in the context of climate change, integrated water resource management, and regional cooperation. *(150 words)*

19.07.2026

GS - III

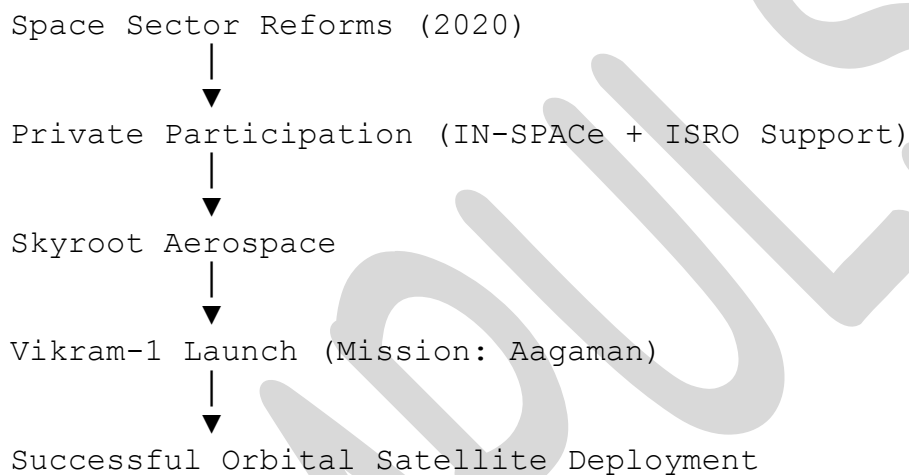
Vikram-1:

India's First Private Orbital Rocket Mission

Brief

- **Vikram-1**, developed by **Skyroot Aerospace**, became **India's first privately built orbital launch vehicle** to successfully place satellites into Low Earth Orbit (LEO). India is now the **third country**, after the **US and China**, with private-sector orbital launch capability.

Flow Diagram



Key Features (Prelims)

Vikram-1

- **Developer:** Skyroot Aerospace (Hyderabad)
- **Mission Name:** Aagaman
- **Orbit:** Low Earth Orbit (~450 km)
- **Payload Capacity:** Up to **350 kg**
- **Launch Site:** Satish Dhawan Space Centre
- **Purpose:** Launch small satellites

Technology

- Multi-stage launch vehicle
- Indigenous propulsion system
- **3D-printed engines**
- High-thrust solid fuel motors

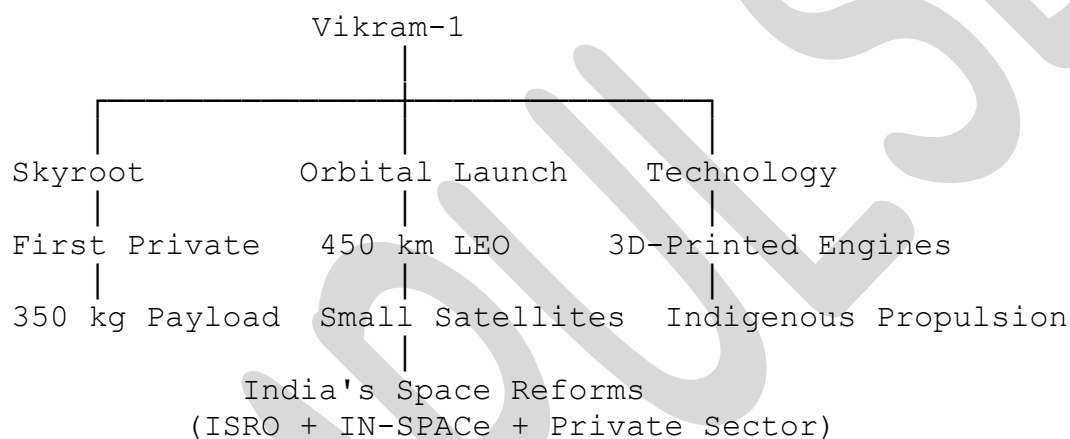
Naming

- **Vikram** → Dr. **Vikram Sarabhai**
- **Kalam Engines** → Dr. **A. P. J. Abdul Kalam**
- **Raman Engine** → Dr. **C. V. Raman**

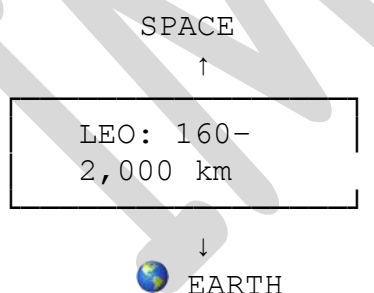
Significance

-  First **private orbital launch** in India.
-  Boosts **commercial space ecosystem**.
-  Strengthens **Atmanirbhar Bharat** in the space sector.
-  Expands India's role in the **global small-satellite launch market**.
-  Demonstrates successful **public-private partnership** (ISRO + IN-SPACe + private industry).

Mind Map



What is LEO?



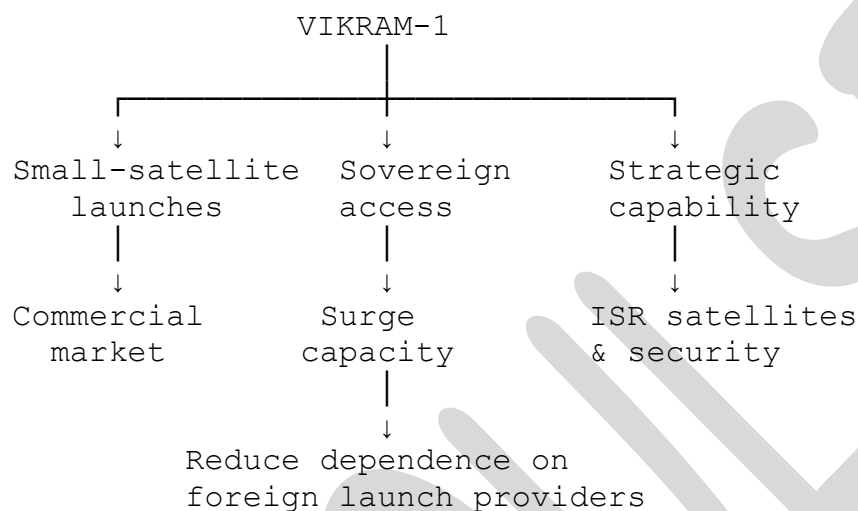
-  Orbital period: ~90-120 min
-  Low latency → Communication
-  Earth observation & imaging

Why is LEO strategically important?

- **Orbital shells:** Satellites sharing similar altitude + inclination.

- There is **no sovereign ownership of orbits** under the **1967 Outer Space Treaty**.
- Competition is essentially for **access to advantageous orbital positions and radio-frequency resources**.
- **ITU** coordinates radio frequencies and prevents harmful interference.
- Mega-constellations such as China's **Guowang** and **Qianfan** illustrate the growing competition.

Significance of Vikram-1



- Provides **assured access to space** for small satellites.
- Creates **sovereign surge capacity** for rapid deployment/replenishment of **ISR (Intelligence, Surveillance & Reconnaissance)** satellites.
- Strengthens India's **space economy and national security**.
- Supports India's broader **Indo-Pacific strategic autonomy**.

Challenges

- Low launch frequency and limited scale.
- High capital requirements.
- Need for greater **private-sector procurement**.
- Lack of operational reusable launch vehicles.
- India remains behind major powers in **LEO mega-constellations**.

Policy Timeline

2020 → Space sector opened to private players
 ↓
 2023 → Indian Space Policy
 ↓
 Private launch ecosystem
 ↓

Vikram-1 → Orbital capability

↓

Future → Reusable + frequent launches

UPSC Prelims Question

Q. With reference to Vikram-1, consider the following statements:

1. It is India's first privately developed orbital launch vehicle.
2. It was developed by Skyroot Aerospace.
3. It is designed to place medium satellites into Low Earth Orbit.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

Answer: (A)

Q. Consider the following statements regarding Low Earth Orbit (LEO):

1. LEO generally extends from about 160 km to 2,000 km above Earth's surface.
2. The Outer Space Treaty permits private entities to claim ownership over specific orbital shells.
3. The ITU plays a role in coordinating radio-frequency usage and preventing harmful interference.

Which of the statements given above is/are correct?

- A. 1 and 3 only
- B. 1 and 2 only
- C. 2 and 3 only
- D. 1, 2 and 3

Answer: (A)

Probable Mains Question (10 Marks)

Q. India's space sector reforms have transformed the role of private enterprises in space exploration. Discuss the significance of the successful Vikram-1 mission for India's commercial space ecosystem and technological self-reliance. (150 words)

Q. "The race for Low Earth Orbit is increasingly becoming a contest over commercial, technological and strategic capabilities." Discuss the significance of India's private launch ecosystem in this context. (150 words)

20.07.2026

GS - III

India's Uranium Security & 100 GWe Nuclear Target by 2047

Brief

- India has secured a **long-term uranium supply agreement with Australia**, following similar arrangements with **Canada and Kazakhstan**. This comes as India targets **100 GWe of nuclear power capacity by 2047** to strengthen energy security and support its low-carbon transition.

Key Facts

- Current nuclear capacity: **~8.7 GWe**
- Domestic** uranium currently supports only about **2.4 GWe** of capacity; the rest depends on imports.
- India imported **18,842.6 tonnes of uranium** during **2008–09 to 2024–25**.
- Estimated imported natural uranium requirement for safeguarded PHWRs during **2025–33: ~9,000 tonnes**.
- Estimated additional annual requirement by 2047: **8,029 tonnes natural uranium + 1,045 tonnes enriched uranium**.
- Domestic uranium oxide resources: **~4.3 lakh tonnes across 47 deposits**.

Why Are Domestic Reserves Insufficient?

Important distinction:

Uranium resources ≠ immediately usable nuclear fuel.

Uranium must pass through several stages:

Uranium Ore

↓

Mining → Milling → Conversion

↓

Enrichment* → Fuel Fabrication

↓

Nuclear Reactor → Electricity

(*where required)

India has deposits across

- Andhra Pradesh,
- Telangana,

- Jharkhand,
- Meghalaya,
- Rajasthan,
- Karnataka,
- Chhattisgarh,
- Uttar Pradesh,
- Uttarakhand,
- Himachal Pradesh and
- Maharashtra.

UCIL (Uranium Corporation of India Ltd.) undertakes mining and processing, with major mines at

- Jaduguda and Turamdih (Jharkhand) and
- Tummalapalle (Andhra Pradesh).

The challenge is therefore not merely geological availability but **limited mining, processing, enrichment and fuel-fabrication capacity** relative to future demand.

International Uranium Partnerships

2008 NSG Waiver

The **Nuclear Suppliers Group (NSG)** granted India a special waiver, enabling civil nuclear commerce despite India being **outside the NPT**.

Australia	
Canada	
Kazakhstan	→ Supplier diversification
Russia	→ Fuel security
Uzbekistan	→ Strategic autonomy

Diversification reduces vulnerability to geopolitical disruptions and supports uninterrupted reactor operation.

Significance for India

Nuclear Power →

- Low-carbon electricity
- Reliable baseload power
- Reduced fossil-fuel dependence
- Energy security
- Strategic autonomy

- Support for **Net-Zero 2070**

⚠ **Challenges**

Import dependence | mining constraints | processing capacity | high capital cost | long gestation | nuclear safety | radioactive waste management

🔑 **Way Forward**

Expand domestic uranium mining + diversify suppliers + strategic fuel reserves + strengthen fuel-cycle infrastructure + indigenous reactor technology + pursue thorium potential.

🎯 **Probable UPSC Mains Question**

Q: “India’s 100 GWe nuclear power target by 2047 requires a secure and diversified nuclear fuel supply chain.” Discuss the significance of domestic uranium resources and international partnerships in achieving this objective. (250 words)

📌 **Prelims Quick Revision**

NSG waiver - 2008 | India - Non-NPT signatory | UCIL - Uranium mining/processing | PHWR - Natural uranium | IAEA safeguards - Civilian facilities | Yellowcake - Uranium concentrate, not final reactor fuel

National Maritime Heritage Complex (NMHC), Lothal

- **Location:** Lothal, Gujarat, ~80 km from Ahmedabad; associated with the **Indus Valley Civilisation (Harappan Civilisation)**.
- **NMHC:** ₹4,000-crore maritime heritage complex; first phase estimated at **₹775 crore**.
- **Lothal:** Flourished about **4,500 years ago**; archaeological excavations reveal an **ancient artificial dock** connected to an old course of the Sabarmati.
- **Museum:** Planned as a major maritime museum with **14 interconnected galleries** and a recreated **80 m × 80 m Lothal settlement**.
- **Themes:** Harappan maritime trade → Indian Ocean commerce → South Indian naval traditions → colonial encounters → modern Indian shipping.
- **Features:** Maritime artefacts, immersive digital exhibits, underwater-themed galleries, lighthouse museum, waterfront promenades and public spaces.
- **Historical significance:** Lothal connected the Indian subcontinent with **Mesopotamia, Egypt and West Asia** through maritime trade.

- **Future:** Eco-resorts, cultural pavilions and themed attractions through PPP; MoUs with over a dozen countries.

Prelims Link

Lothal → Harappan civilisation → Maritime trade → Ancient dock → Gujarat

Dyslipidemia in India

Brief

- The ICMR-INDIAB national study found that **87.3% of Indian adults have at least one abnormal lipid level**, highlighting dyslipidemia as a major emerging **non-communicable disease (NCD)** challenge.

Key Findings

- **87.3%** adults → at least one lipid abnormality.
- **66.8%** → low **HDL** (“good cholesterol”) — most common abnormality.
- **49.4%** → high **LDL** (“bad cholesterol”).
- **29.5%** → high triglycerides.
- **22.1%** → high total cholesterol.
- Around **355 million Indians** may have abnormal lipid levels despite **normal blood sugar, BP and absence of obesity**.
- Burden is **higher among women and urban populations**, though rural India is rapidly catching up.
- Dyslipidemia **peaks at 30–39 years**, indicating an early onset of cardiovascular risk.

Why is the burden rising?

Genetic predisposition + Lifestyle transition

Carbohydrate-rich diet

↓

↑ Triglycerides → ↓ HDL

↓

Dyslipidemia

↓

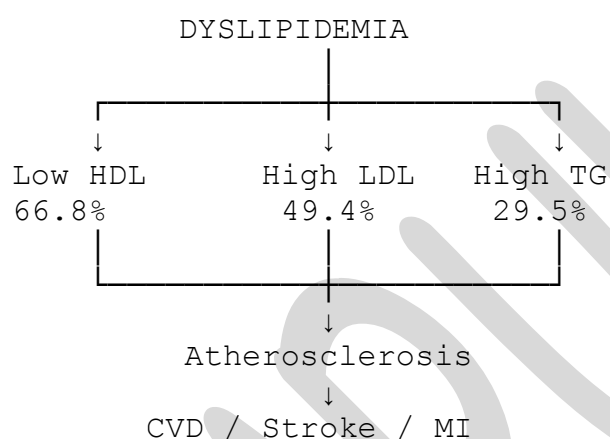
Atherosclerosis → Heart attack / Stroke

Other factors: sedentary lifestyle, processed foods, obesity, diabetes, hypertension and tobacco use.

Prelims Pointers

- **HDL** → generally protective; helps transport cholesterol away from tissues.
- **LDL** → associated with cholesterol deposition in arteries.
- **Triglycerides** → major form of circulating/storage fat.
- Dyslipidemia is a major **modifiable cardiovascular risk factor**.
- **ICMR-INDIAB** is a nationwide study assessing diabetes and metabolic risk factors across India.

Mind Map



Way Forward

Early screening + healthy diet + physical activity + tobacco control + preventive healthcare should be integrated into India's NCD strategy. Screening should not be restricted to older, obese or diabetic populations.

Probable UPSC Mains Question

“Dyslipidemia is increasingly emerging as an early-onset public health challenge in India. Examine its causes, implications and suggest measures to reduce the burden of cardiovascular diseases.” (150 words)

• India's dyslipidemia profile



Nearly
9 IN 10

Indian adults have at least one lipid abnormality

87.3% of Indian adults have at least an abnormal cholesterol level

TYPES OF DYSLIPIDEMIA ABNORMALITIES



66.8%

Low HDL (good cholesterol)

49.4%

High LDL (bad cholesterol)

High triglycerides **29.5%**

High total cholesterol **22.1%**

SEDENTARY LIFESTYLE, UNHEALTHY DIET INCREASES RISK

UNEXPECTED FACE OF RISK

Around 355 million Indians have abnormal lipid levels despite normal blood sugar, normal blood pressure and no obesity.

WOMEN SHOW A HIGHER BURDEN

Women have a higher prevalence of dyslipidemia than men. Urban areas are more affected, though rural India isn't far behind.

LINKED TO MODERN LIFESTYLES

Sedentary lifestyle, unhealthy diet, obesity, diabetes and hypertension significantly increase the risk of abnormal cholesterol levels.

HEART RISK BEGINS EARLY

Dyslipidemia peaks between the ages of 30 and 39 years



SOURCE: ICMR-INDIAB NATIONAL STUDY

21.07.2026

Spain won because it had a winning idea

BY SUNDAY night, Spain had beaten the two teams best equipped to stop them: France's Mbappé-led attack in the semi-final, and then, in the final, Messi's Argentina. And still, Spain did not merely hold the men's World Cup. Its women's team sits at the top of the FIFA rankings, reigning champions, with a European title and a Nations League crown in the cabinet.

Look around the world's biggest leagues, and the pattern repeats. Nearly 20 per cent of coaches in Europe's Big Five leagues are Spanish, 11 of them working abroad, more than double any other nation's tally. At this World Cup, three teams besides Spain were led by Spanish managers. Even the losing coach, Lionel Scaloni, earned his UEFA Pro Licence under Spanish instruction, taught by a man who would become his opponent: On Sunday night, teacher and student stood in opposite dugouts, separated by a scoreline. Arteta's Arsenal finished above Guardiola's Manchester City this season. Xabi Alonso now runs Chelsea.

None of it is new. Johan Cruyff planted the seed at Barcelona in the late 1980s: Teach a player not where to stand, but why. Spain won the 2010 World Cup playing exactly that way, long before their young stars Lamine Yamal or Pau Cubarsi were old enough to watch it. A teenager entering the system today arrives already fluent in the idea. Sunday proved the inheritance still works on the men's side. It has long worked on the women's: Barcelona have won four Champions League titles in six years. Messi had just 29 touches when Rodri was substituted in the 99th minute, and finished with 54 across 120 minutes, most of them harmless. Rodri himself, rebuilt from a serious knee injury, won the Golden Ball. Cubarsi, 19, won the best young player award; Yamal started every match; Pedri ran the midfield; Unai Simon won the Golden Glove. Spain did not export a formation on Sunday. It exported the only thing that travels cleanly: A way of teaching someone to think. The trophies, it turns out, follow.



Spanish players celebrate with the trophy after outclassing Argentina 1-0 in the FIFA World Cup 2026 final. La Roja were crowned champions for the second time. AP

Right to Protest in India

Brief

- Recent police restrictions on a protest in Delhi have revived the debate over **balancing the constitutional right to peaceful assembly with public order and citizens' right to movement.**

Constitutional & Legal Framework

Article 19(1)(a) → Freedom of speech & expression

Article 19(1)(b) → Right to assemble peacefully and without arms

Subject to reasonable restrictions

Articles 19(2) & 19(3) → Restrictions in interests of:

- Sovereignty & integrity of India
- Security of State
- Public order
- Decency/morality
- Friendly relations with foreign States

Section 163, BNSS (replaces CrPC Section 144)

- Executive Magistrate can issue written directions for **immediate prevention/speedy remedy** against obstruction, danger to life, public tranquillity, riot or affray.
- Ordinarily operates for **up to 2 months**, subject to lawful extension.

Supreme Court Jurisprudence

Emergency power

- ❑ The Supreme Court upheld the validity of the erstwhile Section 144 of the CrPC as an emergency power.
- ❑ But the court stressed that it could not become a permanent mechanism to prohibit protests.

Case

Himat Lal K. Shah v.
Commissioner of Police (1973)

Mazdoor Kisan Shakti
Sangathan v. Union of India
(2018)

Amit Sahni v. Commissioner of
Police (2020)

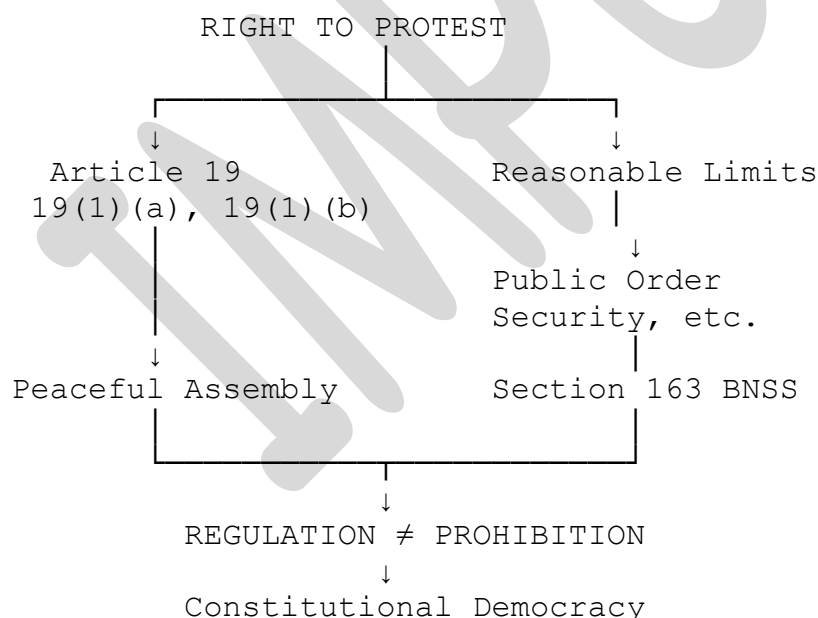
Key Principle

State can **regulate**, but cannot arbitrarily exclude peaceful assemblies

Emergency powers cannot become a **permanent ban** on protests; regulation must balance competing rights

Protests cannot indefinitely block **public roads**; demonstrations should occur at identified sites

Mind Map



Key Concern

The challenge is preventing **emergency powers from becoming routine administrative tools**. Restrictions must satisfy **necessity, proportionality and non-**

arbitrariness, while protecting both protesters' rights and the public's right to peaceful movement.

🎯 Probable UPSC Mains Question

“The right to protest is an essential component of democratic governance, but it is not an absolute right. Examine how Indian constitutional jurisprudence seeks to balance peaceful assembly with public order.” (150 words)

22.07.2026

GS- II

Seafarers & Protection of Maritime Order

Brief

- The killing of Indian seafarers in the **Russia-Ukraine conflict** and attacks around the **Strait of Hormuz** highlight growing risks to civilian maritime commerce and the need to uphold **International Humanitarian Law (IHL)**.

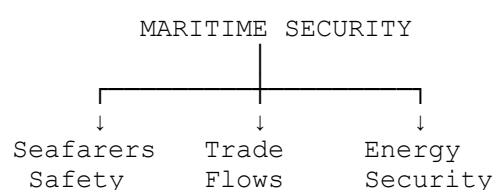
🔑 Key Issues

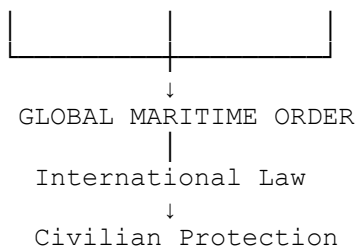
- ❑ **Merchant Shipping = Civilian Commerce**
Merchant vessels are protected under international humanitarian norms **unless they are being used for military purposes**.

Recent Concerns

- *MV Golden Leo* was reportedly struck while departing a Ukrainian port, killing **10 seafarers, including Indians**.
- Indian seafarers have also been among casualties around the **Strait of Hormuz**.
- **>10% of global seafarers are Indian**, making maritime security a major Indian interest.
- India's Directorate General of Shipping advised against deploying Indian seafarers on voyages through the Strait of Hormuz amid heightened risks.

📍 Strategic Importance





International Humanitarian Law

The fundamental principle of **distinction** requires parties to distinguish between:

- **Combatants / military objectives**
- **Civilians / civilian objects**

Hence, civilian merchant vessels engaged in legitimate commerce cannot be deliberately attacked merely because they operate in a conflict zone.

Implications for India

- **Human security:** Protection of Indian seafarers.
- **Economic security:** India depends heavily on maritime trade.
- **Energy security:** Hormuz is crucial for global oil and gas flows.
- **Diplomatic role:** India must raise violations through bilateral and multilateral channels.
- **Maritime diplomacy:** Strengthen cooperation on freedom and safety of navigation.

Way Forward

Risk-based deployment + maritime surveillance + international coordination + stronger diplomatic engagement + adherence to IHL are essential.

Probable UPSC Mains Question

“Attacks on civilian merchant vessels during armed conflicts threaten both humanitarian principles and global economic stability. Discuss the implications for India and suggest measures to strengthen maritime security.” (150 words)

Chabahar Port –

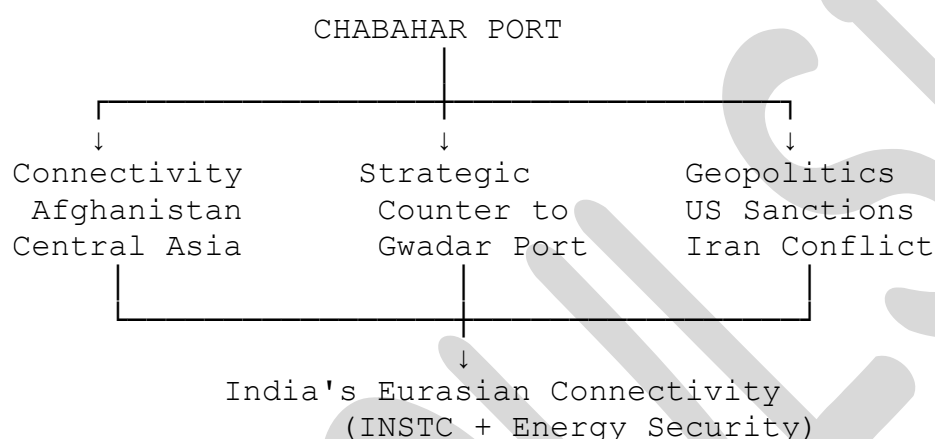
Strategic Asset Under Geopolitical Pressure

Brief

- India's **Chabahar Port Project** faces uncertainty due to **US sanctions on Iran** and recent **US military strikes**, raising concerns over India's connectivity strategy with **Afghanistan, Central Asia and Eurasia**.



Mind Map



Key Facts (Prelims)

- Location:** Sistan-Baluchistan Province, **Iran** (Gulf of Oman).
- Operated by **India Ports Global Ltd (IPGL)** under a **10-year renewable agreement (2024)**.
- Main terminals:
 - Shahid Beheshti** (operated by India)
 - Shahid Kalantari**
- Gwadar Port (Pakistan)** is only **~140 km away**, developed by China under the **China-Pakistan Economic Corridor (CPEC)**.



Strategic Importance for India



Connectivity

- Provides **direct access to Afghanistan and Central Asia**, bypassing Pakistan.
- Integral to the **International North-South Transport Corridor (INSTC)** linking **India–Iran–Russia–Europe**.
- Reduces transport cost and time for Eurasian trade.



Geostrategic

- Counterbalances **China's influence** through Gwadar Port.
- Enhances India's role in the **Indian Ocean Region (IOR)** and Eurasian connectivity.
- Supports energy security and regional diplomacy.



Challenges

- **US sanctions on Iran** have repeatedly disrupted investments and operations.
- Expiry of **US sanctions waiver** has reduced India's operational flexibility.
- Regional instability due to the **Iran–US conflict** increases investment risks.
- No allocation for Chabahar in **Union Budget 2026–27**, creating uncertainty.
- Strengthening of the **China–Pakistan strategic axis** could reduce India's regional influence.



Way Forward

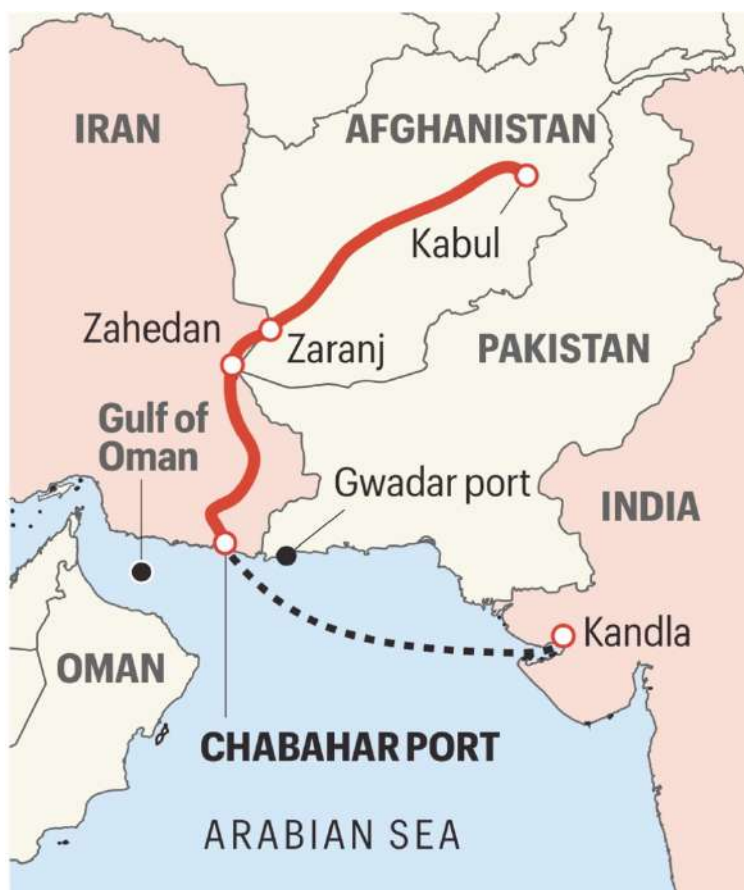
- Pursue **strategic autonomy** while balancing relations with the US and Iran.
- Strengthen **INSTC** and multimodal connectivity.
- Enhance cooperation with **Central Asian countries**, Russia and regional partners.
- Diversify connectivity initiatives while ensuring sustained engagement with Iran.



UPSC Value Addition

Diagram

India
|
Arabian Sea
|
Chabahar (Iran)
|
Zahedan
|
Afghanistan
|
Central Asia
|
Russia → Europe
(INSTC)



🎯 Probable UPSC Questions

Prelims

Q. Which of the following statements regarding Chabahar Port is/are correct?

1. It provides India access to Afghanistan bypassing Pakistan.
2. It is located on the Strait of Hormuz.
3. It forms an important component of the International North-South Transport Corridor (INSTC).

Answer: 1 and 3 only (Statement 2 is incorrect; Chabahar is on the **Gulf of Oman**, outside the Strait of Hormuz.)

Mains

"Chabahar Port is more than an infrastructure project; it is a strategic instrument of India's connectivity and geopolitical outreach. Discuss its significance and analyse the challenges posed by evolving regional geopolitics." (250 words)

23.07.2026

GS – II / III

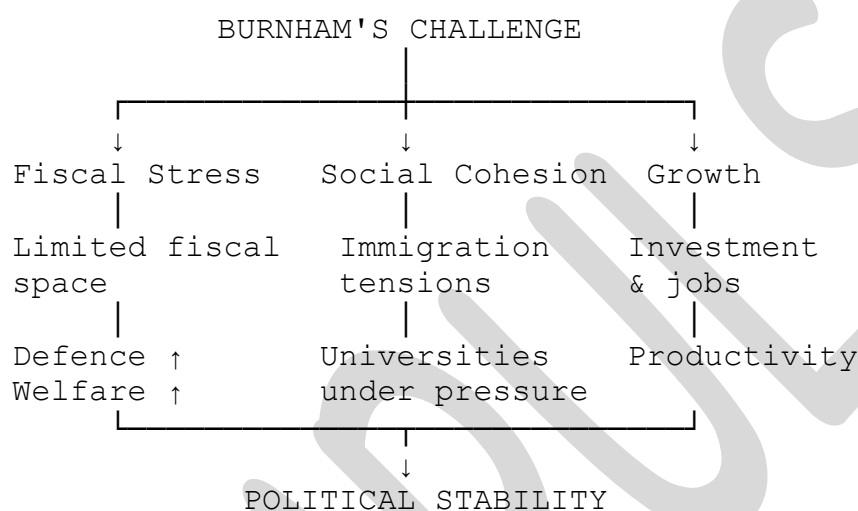
UK's Fiscal & Social Challenges

under Andy Burnham

Brief

- Andy Burnham's assumption of office as **UK Prime Minister** highlights the difficult balance between **fiscal prudence, welfare measures, defence spending and social cohesion**.

Key Challenges



1. Fiscal Tightrope

- UK faces a **constrained fiscal position** and pressure from bond markets.
- Burnham has committed to **Labour's fiscal rules**.
- At the same time, the government has promised:
 - **Bus-fare cap**
 - VAT relief on energy bills
 - Higher **defence expenditure**
- Core dilemma: **How to finance welfare and defence without worsening public debt or market confidence?**

2. Social Cohesion & Immigration

- Tough immigration policies remain politically important amid the rise of **ethno-nationalist politics**.
- Excessively restrictive immigration policies can have unintended economic consequences, particularly for sectors dependent on international talent.

🎓 3. University Funding Crisis

Visa restrictions → ↓ International students → ↓ University revenues → Faculty/job cuts

The crisis threatens one of Britain's globally competitive sectors and raises questions about sustainable higher-education financing.

🌱 4. Growth vs Fiscal Prudence

The central policy challenge is:

Fiscal discipline ↔ Welfare spending ↔ Defence ↔ Economic growth

A credible growth strategy requires productivity enhancement, investment, skills development and stable public finances.

🎯 Probable UPSC Mains Question

“Fiscal consolidation and welfare commitments often pull governments in opposite directions. Discuss this dilemma in the context of contemporary challenges confronting the United Kingdom.” (150 words)

How daily cholesterol pill holds hope for those at risk

Statins, the first-choice drugs for lowering 'bad' cholesterol, are not always enough. A new pill may help improve convenience and adherence

Prevention principle

The biggest beneficiaries of this pill would be patients at high or very high cardiovascular risk, such as those who have already had a heart attack.

In these patients, the focus is on secondary prevention — preventing another cardiac event.

• Cholesterol: Understanding the basics

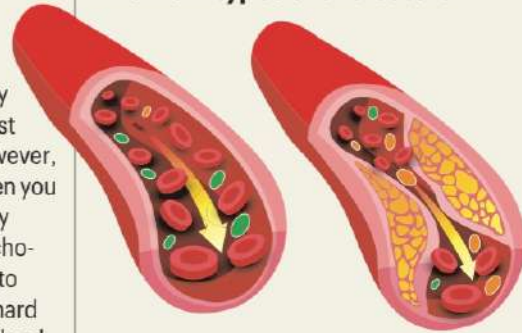
What is cholesterol?

- Cholesterol is a fatty substance that the body needs to build cells and hormones.
- It is naturally produced by the body and plays an important role in immunity, recovery and overall functioning.
- Cholesterol levels can fluctuate with stress, infections, surgeries and even seasonal changes.

When does it become a problem?

- Cholesterol itself isn't inherently bad — your body needs it to build cells, digest food, make hormones. However, it becomes dangerous when you have too much Low-Density Lipoprotein (LDL) or 'bad' cholesterol. Excess LDL sticks to your artery walls, forming hard plaques that narrow your blood vessels and restrict blood flow.

Two main types of cholesterol



● ● **High-Density Lipoprotein (HDL)**, also known as 'good' cholesterol, helps clear LDL from the bloodstream.

● ● **Low-Density Lipoprotein (LDL)**, often called 'bad cholesterol', deposits fat in arteries.

What is ApoB?

ApoB (apolipoprotein B) is the primary structural protein found on the surface of 'bad' cholesterol particles (such as LDL, VLDL and IDL) that carry fats through the bloodstream.

GS - II / IV

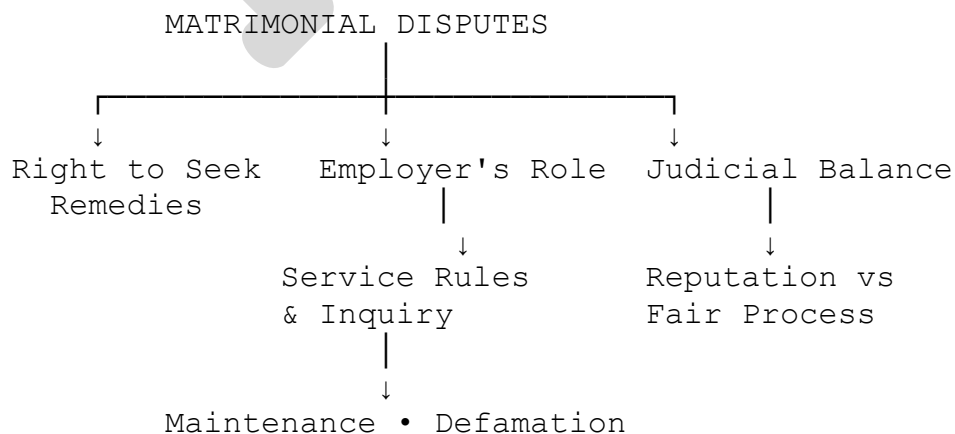
Employer Complaints in Matrimonial Disputes – Legal Limits

Brief

- The **Supreme Court** observed that complaints made by spouses to the employer of the other spouse during matrimonial disputes may adversely affect employment and the ability to pay **maintenance**, while cautioning against misuse.



Mind Map



Constitutional & Legal Framework

- **Article 21** → Right to life includes **reputation and livelihood**.
- **Article 19(1)(a)** → Freedom of speech, subject to reasonable restrictions (Article 19(2)).
- **Section 144, Bharatiya Nagarik Suraksha Sanhita (BNSS)** → Courts may direct deduction of maintenance from salary for non-compliance with maintenance orders.
- **Section 356, Bharatiya Nyaya Sanhita (BNS)** → Criminal defamation for harm to reputation.

Judicial Observations

- Complaints to an employer should **not become a pressure tactic** in matrimonial litigation.
- False or unsubstantiated allegations affecting employment may amount to **mental cruelty**.

Important Cases

- **Delhi High Court (1972)**: False complaint to the husband's employer can constitute **mental cruelty**.
- **Madras High Court (2026)**: Unsubstantiated allegations before employers/superiors may amount to cruelty.
- **Supreme Court (2026)**: Loss of employment due to such complaints may also reduce the husband's capacity to pay maintenance.

Employer's Legal Position

Private Sector

- Mere allegations **do not justify termination**.
- Employer should conduct a **fair inquiry** as per employment contract/service rules.
- Wrongful termination can be challenged before labour forums.

Government Service

- Governed by **Central/State Conduct Rules**.
- Mere complaint generally does **not** warrant dismissal.
- Suspension is ordinarily triggered when an employee is **detained in custody for more than 48 hours**, subject to applicable service rules.

Way Forward

- Discourage misuse of complaints as litigation tools.
- Ensure **due process**, natural justice and protection of reputation.

- Balance the rights of spouses with the need to enforce maintenance and protect employment.



Probable UPSC Mains Question

“The right to reputation and livelihood must be balanced with access to legal remedies in matrimonial disputes. Discuss the legal principles governing complaints made to an employer during marital litigation.” (150 words)



Prelims Pointer

- Section 356 → under the BNS, deals with criminal defamation.

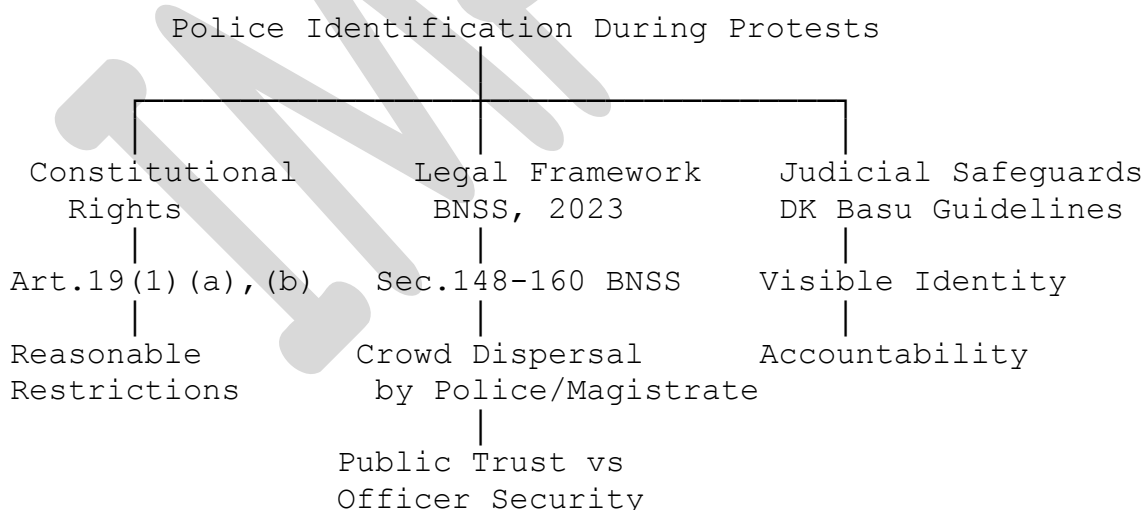
GS – II / IV

Police Identification During Protests **– Accountability vs Public Order**

Brief

- Videos from the "Sansad Chalo" protests in New Delhi (2026) allegedly showed police personnel in **plain clothes or without visible nameplates**, raising concerns over **police accountability, transparency, and citizens' rights**.

Mind Map



Key Highlights

1. Constitutional Basis

- **Article 19(1)(a):** Freedom of Speech & Expression.

- **Article 19(1)(b):** Right to Assemble Peacefully.
- Subject to **reasonable restrictions** under **Articles 19(2) & 19(3)** for **public order, sovereignty, security, morality**, etc.

2. Legal Framework

- **BNSS, 2023 (Sections 148–160)** governs maintenance of public order (replacing relevant CrPC provisions).
- Though BNSS does **not expressly mandate visible identification**, only a **police officer or Executive Magistrate** can legally order dispersal of an unlawful assembly, making identification essential for legitimacy.

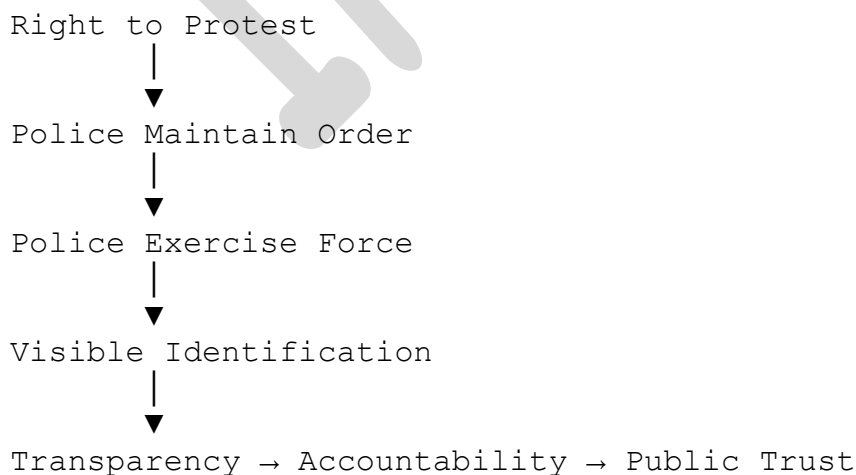
3. Judicial Position

- **D.K. Basu v. State of West Bengal (1997):**
 - Arresting officers must display **clear identification and name tags**.
 - Reinforces transparency and accountability.
- **Andhra Pradesh High Court (2025):**
 - Questioned how citizens can recognise **plainclothes personnel** exercising police powers.

4. Why Police Sometimes Avoid Identification

- Protection from:
 - Terror threats
 - Online harassment
 - Personal targeting
- Practice evolved from conflict zones like **J&K, Punjab, and Chhattisgarh**, but its use in routine policing remains controversial.

Simple Diagram



Significance for Governance

- Enhances **Rule of Law**.
- Prevents misuse of force.
- Strengthens **citizen confidence** in policing.
- Balances **public order** with **civil liberties**.

Way Forward

- Mandatory **visible nameplates/body numbers** during ordinary policing.
- Wider deployment of **body-worn cameras**.
- Standard Operating Procedures (SOPs) for protest management.
- Independent oversight and periodic training on **human rights** and **crowd-control practices**.

Prelims Facts

- Article 19(1)(a): Freedom of speech.
- Article 19(1)(b): Right to peaceful assembly.
- BNSS Sections 148-160: Public order and unlawful assemblies.
- D.K. Basu Case (1997): Mandatory identification during arrest.

Probable UPSC Prelims Question

Q. With reference to police powers during protests, consider the following statements:

1. The Constitution guarantees the right to peaceful assembly under Article 19(1)(b).
2. BNSS expressly mandates that every police officer engaged in crowd control must wear a visible nameplate.
3. The Supreme Court in *D.K. Basu v. State of West Bengal* emphasized clear identification of arresting officers.

Which of the statements given above is/are correct?

- A. 1 and 3 only
- B. 1 only
- C. 2 and 3 only
- D. 1, 2 and 3

Answer: A

Probable UPSC Mains Question (GS-II)

"The right to peaceful protest is fundamental to a democracy, but its regulation must uphold the principles of transparency and accountability." Discuss the legal framework governing protests in India and examine whether mandatory identification of police personnel strengthens democratic policing. (250 words)

24.07.2026

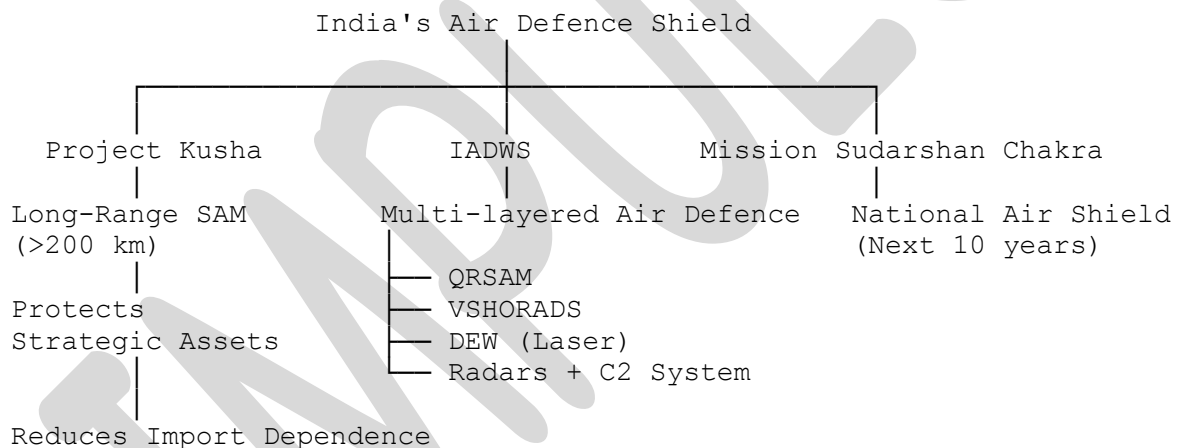
GS- III

Project Kusha & Integrated Air Defence Weapon System (IADWS)

Brief

- **DRDO** successfully conducted the **maiden flight test of Project Kusha**, India's indigenous **Long-Range Surface-to-Air Missile (LR-SAM)**, from **APJ Abdul Kalam Island, Odisha**. It is a key component of **Mission Sudarshan Chakra**, aimed at building a nationwide indigenous air defence shield.

Mind Map



Key Highlights

1. Project Kusha

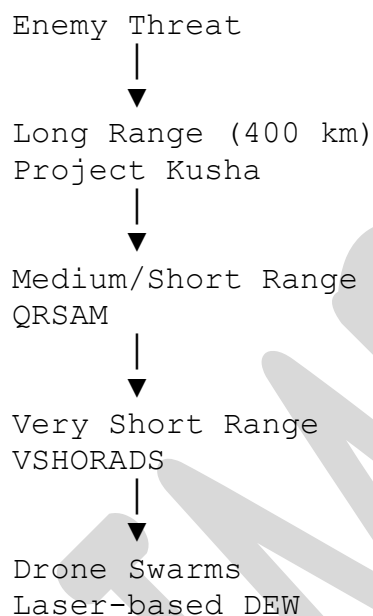
- Indigenous **Long-Range Surface-to-Air Missile (LR-SAM)** developed by **DRDO**.
- Expected operational range: **up to 400 km**.
- Designed to intercept:
 - Fighter aircraft
 - Cruise missiles
 - Ballistic missile threats (limited capability)
 - UAVs and large aerial platforms
- Comparable in role to the **Russian S-400**, but indigenously developed.

2. Integrated Air Defence Weapon System (IADWS)

A **multi-layered indigenous air defence network** integrating:

- **QRSAM (Quick Reaction Surface-to-Air Missile):**
 - Neutralizes *short-range* aerial threats.
- **VSHORADS (Very Short Range Air Defence System):**
 - Portable missile *against low-flying* aircraft and drones.
- **Directed Energy Weapon (DEW):**
 - *High-power laser system* for drones and swarm attacks.
- Integrated with:
 - Advanced radars
 - Command & Control (C2) systems
 - Real-time target tracking

Layered Air Defence Diagram



Strategic Significance

Security

- Strengthens India's **Integrated Air Defence**.
- Enhances protection of strategic cities, military bases, and critical infrastructure.
- Improves preparedness against **multi-domain warfare**.

Aatmanirbhar Bharat

- Reduces dependence on imported systems such as the **S-400**.
- Boosts indigenous defence manufacturing and exports.

Technological

- Demonstrates India's growing capability in:
 - Missile technology
 - Radar systems
 - Artificial Intelligence-enabled command networks
 - Directed Energy Weapons

Challenges

- High development and deployment costs.
- Integration with existing air defence architecture.
- Need for continuous upgrades against hypersonic and stealth threats.

Way Forward

- Accelerate induction into the Armed Forces.
- Integrate with **ISRO satellites**, early warning systems, and the **Integrated Air Command & Control System (IACCS)**.
- Promote private sector participation in advanced defence technologies.

Prelims Facts

- **Project Kusha:** Indigenous Long-Range Surface-to-Air Missile (LR-SAM).
- **Developer:** DRDO.
- **Range:** Up to 400 km.
- **Mission Sudarshan Chakra:** Proposed indigenous nationwide air defence shield.
- **QRSAM:** Quick Reaction Surface-to-Air Missile.
- **VSHORADS:** Very Short Range Air Defence System.
- **DEW:** Directed Energy Weapon (laser-based).

Probable UPSC Prelims Question

Q. With reference to Project Kusha, consider the following statements:

1. It is an indigenous Long-Range Surface-to-Air Missile (LR-SAM) being developed by DRDO.
2. It is designed to provide air defence against aircraft, missiles, and UAVs.
3. It is a submarine-launched ballistic missile with a range exceeding 1,000 km.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

Answer: A

Probable UPSC Mains Question

"Indigenous multi-layered air defence systems are central to India's goal of strategic autonomy and national security." Discuss the significance of Project Kusha and the Integrated Air Defence Weapon System (IADWS) in strengthening India's defence preparedness. (250 words)

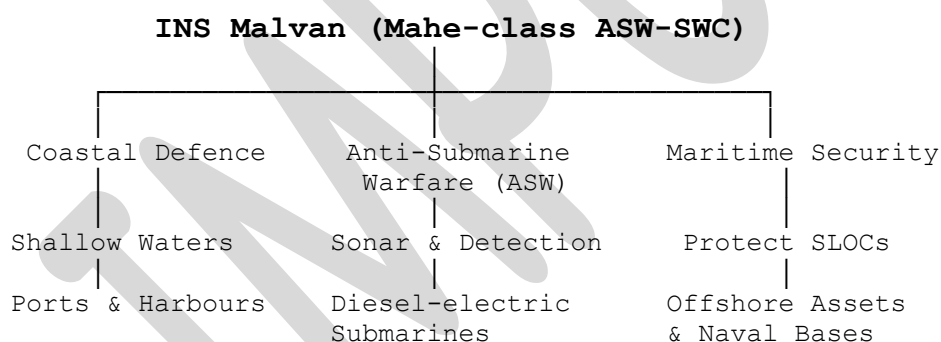
GS- III

INS Malvan & Mahe-class ASW Shallow Water Craft

Brief

- The **Indian Navy** commissioned **INS Malvan**, the **second Mahe-class Anti-Submarine Warfare Shallow Water Craft (ASW-SWC)**, at **Karwar, Karnataka**. It strengthens India's coastal defence against underwater threats.

Mind Map



Key Highlights

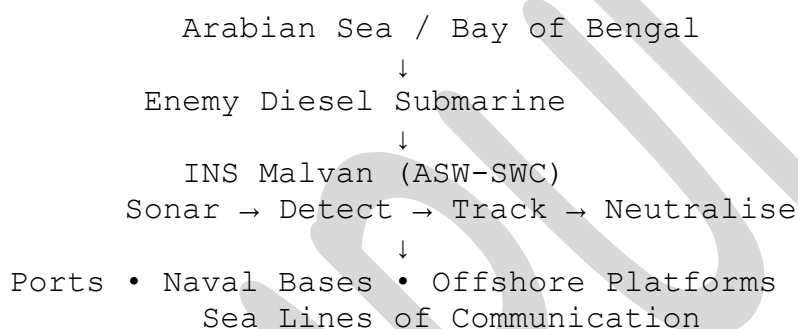
What is INS Malvan?

- **Second Mahe-class Anti-Submarine Warfare Shallow Water Craft (ASW-SWC).**
- Built by **Cochin Shipyard Limited (CSL), Kochi.**
- Named after **Malvan (Maharashtra)**, reflecting the maritime legacy of **Chhatrapati Shivaji Maharaj.**
- Ship's crest features **Bagh Nakh (Wagh Nakh).**
- Motto: **"Silent Claws"** symbolising **stealth, agility, and precision.**

Features of Mahe-class ASW-SWC

<i>Feature</i>	<i>Details</i>
Primary Role	Anti-Submarine Warfare (ASW)
Operational Zone	Shallow coastal (Littoral) waters
Builder	Cochin Shipyard Ltd
Planned Ships	8 Mahe-class (16 ASW-SWC overall)
Key Equipment	Advanced sonar, lightweight torpedoes, mines
Other Roles	Underwater surveillance, Search & Rescue (SAR), mine-laying, Low-Intensity Maritime Operations (LIMO)

Diagram: India's Coastal Defence



Strategic Importance

1. Strengthens Coastal Security

- Detects and neutralises **stealthy diesel-electric submarines**.
- Protects **ports, harbours, offshore energy infrastructure**, and naval bases.

2. Safeguards Sea Lines of Communication (SLOCs)

- Ensures uninterrupted maritime trade.
- Critical for India's energy imports and exports.

3. Supports Blue-Water Navy

- Coastal ASW vessels free larger destroyers and frigates for **deep-sea (blue-water) operations**.

4. Enhances Maritime Domain Awareness (MDA)

- Improves underwater surveillance in India's **7,500-km coastline** and **1,197 islands**.

Challenges

- Rising submarine deployments in the **Indian Ocean Region (IOR)**.
- Expanding Chinese naval presence.
- Need for integrated underwater sensor networks and faster induction of remaining ASW vessels.

Way Forward

- Complete induction of all **16 ASW-SWCs** (Mahe & Arnala classes).
- Integrate ASW platforms with **P-8I aircraft, MH-60R helicopters, UAVs, seabed sensors, and Information Management and Analysis Centre (IMAC)**.
- Strengthen indigenous shipbuilding under **Aatmanirbhar Bharat** and the **SAGAR (Security and Growth for All in the Region)** vision.

Prelims Facts

- **INS Malvan:** Second **Mahe-class ASW-SWC**.
- **Builder:** Cochin Shipyard Limited (CSL).
- **Primary Role:** Anti-Submarine Warfare in shallow coastal waters.
- **First Mahe-class vessel:** **INS Mahe** (commissioned in 2025).
- **Total ASW-SWC planned:** **16** (8 Mahe-class by CSL + 8 Arnala-class by GRSE).
- **Ship Motto:** *Silent Claws*.

Probable UPSC Prelims Question

Q. With reference to the Mahe-class Anti-Submarine Warfare Shallow Water Craft (ASW-SWC), consider the following statements:

1. They are primarily designed for anti-submarine operations in shallow coastal waters.
2. They are being built by both Cochin Shipyard Limited and Garden Reach Shipbuilders & Engineers.
3. Their primary role is long-range ballistic missile defence.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 only
- D. 1, 2 and 3

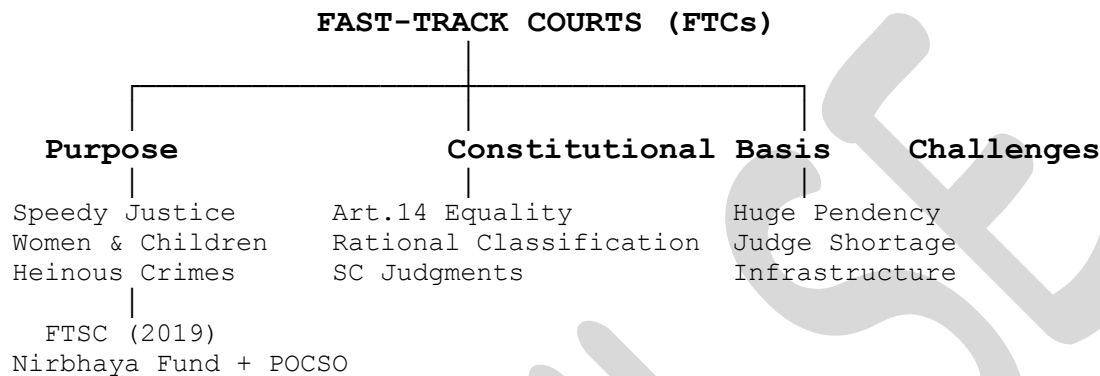
Answer: A → ASW-SWCs are dedicated **coastal anti-submarine warfare platforms**, not ballistic missile defence systems.

Fast-Track Courts (FTCs) in India

Brief

- The Prime Minister's proposal to establish **Fast-Track Courts (FTCs)** for **paper leak cases** has renewed debate on their constitutional validity, effectiveness, and role in reducing judicial delays.

Mind Map



Key Highlights

What are Fast-Track Courts (FTCs)?

- **Special courts** established to ensure **speedy disposal** of priority cases.
- No separate constitutional or statutory status; created through **government schemes** and judicial directions.
- **14th Finance Commission (2015–20)** recommended FTCs for:
 - Heinous crimes
 - Cases pending for over **5 years**
 - Matters involving **women, children, senior citizens, and vulnerable groups**.

Fast Track Special Courts (FTSCs)

- Launched in **2019** as a **Centrally Sponsored Scheme**.
- Funded partly through the **Nirbhaya Fund**.
- Deal exclusively with:
 - **Rape cases**
 - **POCSO Act offences**

Constitutional & Judicial Perspective

Article 14

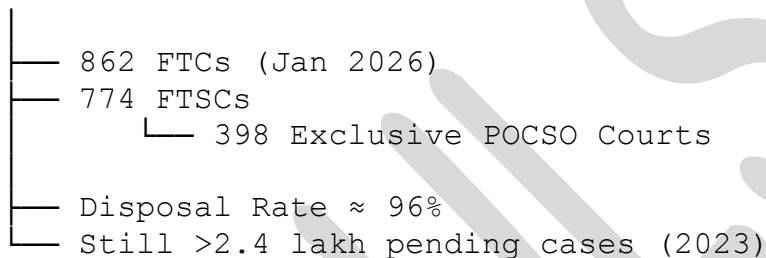
- Special courts must satisfy **reasonable classification** and **non-arbitrariness**.

Important Judgments

- **State of West Bengal v. Anwar Ali Sarkar (1952):**
 - Arbitrary selection of cases for special courts violates **Article 14**.
- **P. Ramachandra Rao v. State of Karnataka (2002):**
 - Supreme Court held **no universal time limit** can be fixed for criminal trials.
- **2G Spectrum Case:**
 - SC directed **day-to-day trial** through a special court due to exceptional public importance.

Performance

Fast-Track Courts



Advantages

- Faster justice in sensitive cases.
- Reduces pendency.
- Improves victim confidence.
- Supports **Article 21 (Right to Speedy Trial)**.

Challenges

- Acute shortage of judges.
- Poor infrastructure and forensic support.
- Heavy case backlog.
- Delays in investigation and witness examination.
- Speed alone cannot guarantee quality justice.

Way Forward

- Increase judicial appointments.
- Strengthen digital courts, forensic capacity, and prosecution.
- Establish FTCs based on **objective criteria**, not public pressure.
- Improve monitoring and case management systems.

Prelims Facts

- **2019:** Fast Track Special Courts (FTSCs) launched.
- **Funding:** Centrally Sponsored Scheme + **Nirbhaya Fund**.
- **Focus:** Rape and **POCSO** cases.
- **Article 14:** Equality before law.
- **Article 21:** Right to life includes **speedy justice** (judicial interpretation).

Probable UPSC Prelims Question

Q. With reference to Fast-Track Courts (FTCs) in India, consider the following statements:

1. Fast Track Special Courts (FTSCs) were launched primarily for rape and POCSO cases.
2. Fast-Track Courts have been established through a specific constitutional amendment.
3. The Supreme Court has held that criminal trials must always be completed within two years.

Which of the statements given above is/are correct?

- A. 1 only
- B. 1 and 2 only
- C. 2 and 3 only
- D. 1, 2 and 3

Answer: A.....FTSCs were launched in 2019 for rape and POCSO cases. There is **no constitutional amendment** creating FTCs, and the Supreme Court in **P. Ramachandra Rao (2002)** rejected fixed universal time limits for criminal trials.

Probable UPSC Mains Question (GS-II)

"Fast-Track Courts are intended to ensure speedy justice, but speed alone cannot address systemic judicial delays." Critically examine the role, constitutional basis, and limitations of Fast-Track Courts in India's justice delivery system. (250 words)

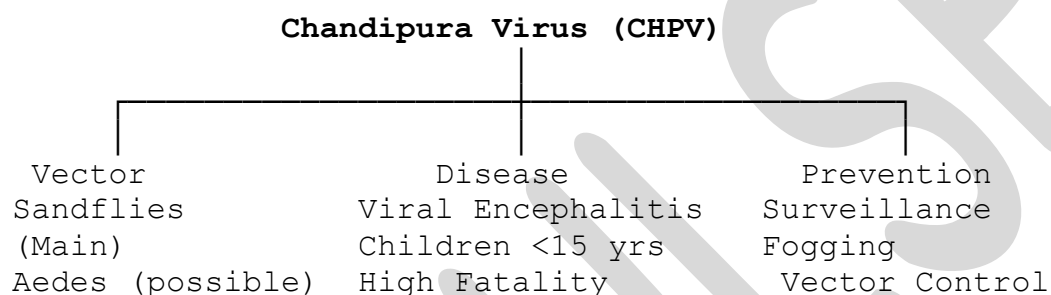
25.07.2026

Chandipura Virus (CHPV) Outbreak 2026

Brief

- Two children from Rajasthan died after testing positive for **Chandipura Virus (CHPV)** in Gujarat.
- Rajasthan intensified **surveillance, fogging, and awareness campaigns** in border districts.

Mind Map



Key Facts (Prelims)

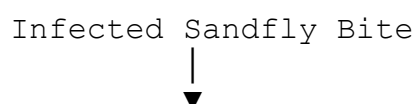
About CHPV

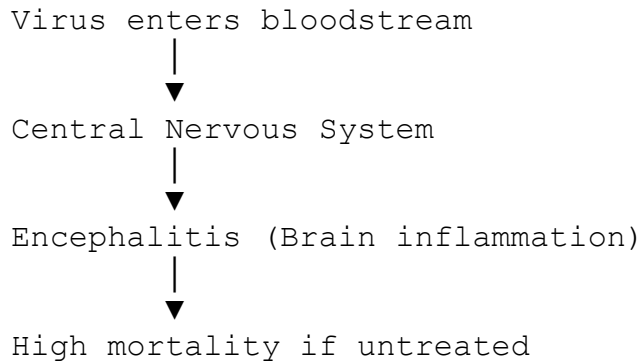
- Family: Rhabdoviridae (**same family as Rabies virus**)
- First identified: 1965, Chandipura village, Maharashtra.
- Vector: Mainly **Phlebotomine sandflies**; *Aedes aegypti* may also act as a vector.
- Season: **Monsoon** (vector breeding increases).
- Most vulnerable: **Children (<15 years)**.

Symptoms

- High fever
- Vomiting
- Convulsions (seizures)
- Altered consciousness
- Rapid progression to **Acute Encephalitis Syndrome (AES)**.

Disease Transmission Diagram





Mains add on ✨

Challenges

- No specific antiviral treatment or licensed vaccine.
- Rapid disease progression.
- Poor rural sanitation and vector breeding.
- Delayed diagnosis due to similarity with other viral fevers.

Way Forward

- **Integrated Vector Management (IVM).**
- Active surveillance under **Integrated Disease Surveillance Programme (IDSP).**
- Early referral of suspected AES cases.
- Community awareness, sanitation, and fogging during monsoon.
- Strengthen laboratory capacity and One Health surveillance.

Value Addition

Difference:

- **CHPV:** Sandfly-borne viral encephalitis.
- **Japanese Encephalitis:** Mosquito (*Culex*)-borne.
- **Rabies:** Animal bite transmission (same virus family but different disease).

Probable UPSC Prelims Question

Q. Consider the following statements regarding Chandipura Virus (CHPV):

1. It belongs to the Rhabdoviridae family.
2. It is primarily transmitted by Phlebotomine sandflies.
3. It only affects children and may cause encephalitis.
4. An effective licensed vaccine is available in India.

Select the correct answer:

- A. 1, 2 and 3 only

- B. 1 and 2 only
- C. 2 and 3 only
- D. 1, 2, 3 and 4

Answer: (B)

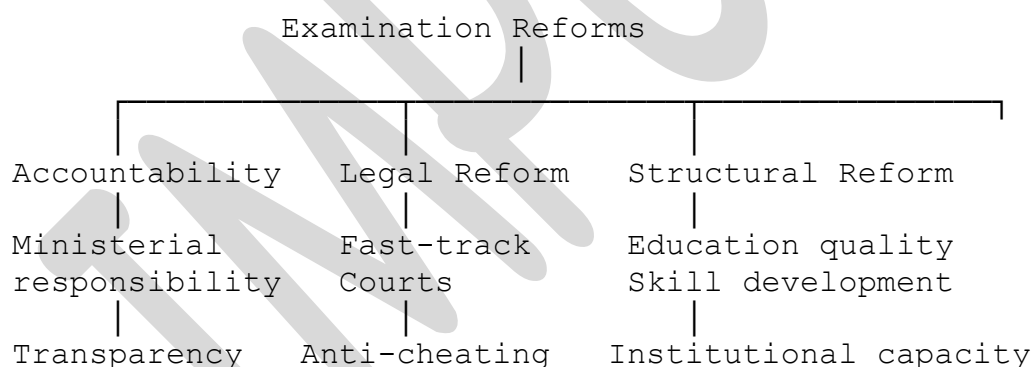
GS – II / IV

PM Promise, Sonam Step Back, Show the Way

Brief

- **Sonam Wangchuk** ended his **26-day hunger strike** after the Union Government announced:
 - **Fast-track courts (FTCs)** for paper leak cases.
 - A **stricter anti-paper leak law** to protect the integrity of public examinations.
- The issue has reignited debate on **education governance, accountability, and examination reforms.**

Mind Map



Key Highlights (Prelims + Mains)

Immediate Government Measures

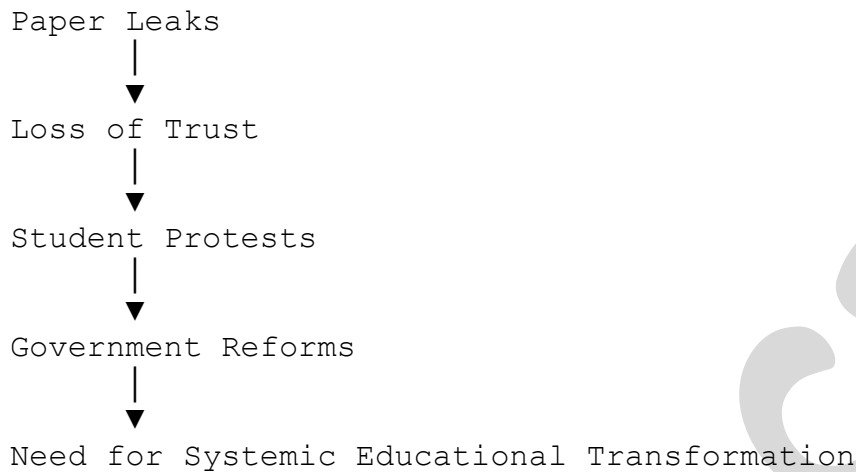
- Establishment of **Fast-Track Courts (FTCs)** for speedy disposal of paper leak cases.
- Proposal for a **stronger anti-paper leak legislation.**
- Aim: Restore **credibility of competitive examinations.**

Underlying Structural Issues

- Repeated **NEET and recruitment exam leaks** indicate governance failures.
- Delayed investigations and judicial proceedings weaken deterrence.

- Overdependence on **single high-stakes examinations**.
- Expansion of coaching culture and psychological stress among youth.

Cause–Effect Diagram



Constitutional & Governance Dimensions

- **Article 14:** Equality of opportunity demands fair examinations.
- **Article 21:** Fair procedures are linked to the right to life and dignity.
- **Article 41 & DPSPs:** Promote education and employment opportunities.
- Good governance principles:
 - Transparency
 - Accountability
 - Rule of Law
 - Citizen-centric administration

Challenges

- Fast-track courts address **punishment**, not **prevention**.
- Weak cybersecurity and examination management.
- Lack of institutional autonomy and accountability.
- Limited higher education and quality employment opportunities.

Way Forward

- Establish an independent **National Examination Authority** with robust digital security.
- Introduce AI-enabled monitoring, encrypted question papers, and biometric verification.
- Strengthen investigation agencies and time-bound prosecution.
- Expand quality higher education and skill development to reduce excessive competition.
- Build reforms through **Parliamentary debate** and stakeholder consultation.

Value Addition

Quote: "Education is the most powerful weapon which you can use to change the world." — **Nelson Mandela**

UPSC Prelims Practice Question

Q. Consider the following statements regarding Fast-Track Courts (FTCs):

1. They are created through a constitutional amendment.
2. They are intended to expedite trials of specified categories of cases.
3. Their establishment is primarily the responsibility of State Governments in consultation with the High Courts.

Which of the statements given above is/are correct?

- A. 2 and 3 only
- B. 1 and 2 only
- C. 1 and 3 only
- D. 1, 2 and 3

Answer: (A)

Probable UPSC Mains Question

"Paper leak incidents reflect deeper governance and institutional challenges rather than merely criminal misconduct. Examine. Suggest reforms to ensure transparency, accountability and credibility in India's public examination system." (250 words)

GS - II / III

Trump's Saudi Nuclear Gambit

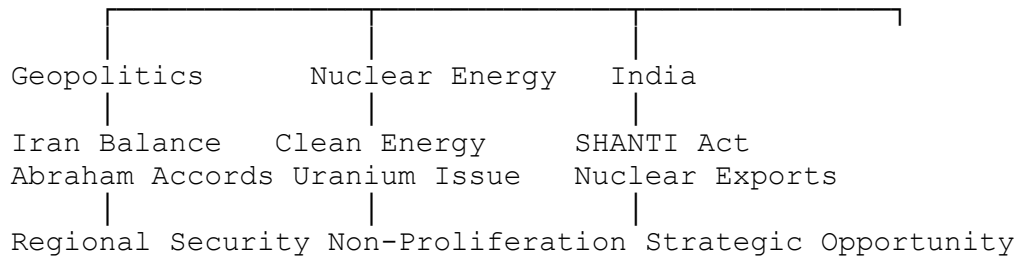
Brief

- The **United States** has signed a **Civil Nuclear Cooperation Agreement** with **Saudi Arabia**, marking a significant geopolitical shift in the Middle East.
- The deal aims to strengthen Saudi Arabia's civilian nuclear programme while deepening US strategic influence in the region.

Mind Map

US-Saudi Nuclear Deal

|



Key Highlights

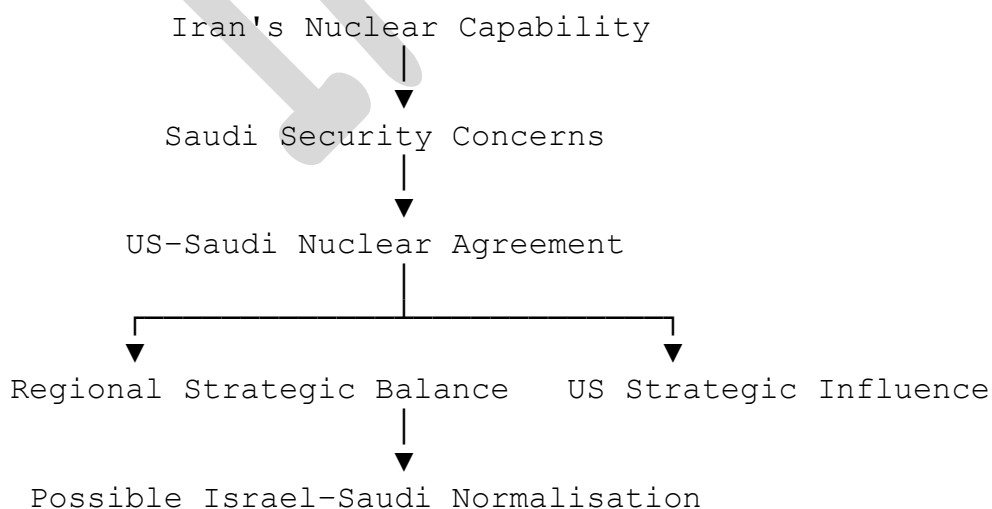
What is the Agreement?

- US will assist Saudi Arabia in developing a **civilian nuclear energy programme**.
- American companies are expected to build nuclear reactors.
- Objective:
 - Diversify Saudi energy sources beyond oil.
 - Expand US strategic and commercial presence.
 - Counter China's and Russia's influence.

Major Strategic Significance

- Addresses Saudi concerns over **Iran's nuclear capabilities**.
- May permit **uranium enrichment** under strict US safeguards.
- Could become part of broader negotiations involving:
 - **Saudi recognition of Israel (Abraham Accords)**.
 - Regional security architecture.
 - Palestinian statehood discussions.

Geopolitical Diagram



Implications for India

Opportunities

- Potential market for Indian nuclear manufacturing and engineering.
- Strengthen India–Saudi strategic partnership.
- Boost exports under the **SHANTI (Strategic Hydrogen and Nuclear Technology Initiative)** framework.
- Expand India's role in peaceful nuclear cooperation.

Challenges

- Risk of nuclear proliferation if safeguards weaken.
- Regional arms race involving Iran and Gulf countries.
- Increased strategic competition among the US, China and Russia.

Value Addition

NPT Context

- Saudi Arabia is a **Non-Proliferation Treaty (NPT)** signatory.
- Any enrichment facility would require **IAEA safeguards** and robust monitoring.

India's Position

- Supports **peaceful uses of nuclear energy** under international safeguards.
- Can leverage its experience in civil nuclear cooperation and reactor technology.

UPSC Prelims Practice Question

Q. With reference to civilian nuclear cooperation, consider the following statements:

1. The International Atomic Energy Agency (IAEA) promotes the peaceful use of nuclear energy.
2. Uranium enrichment can be used for both civilian and military purposes.
3. Saudi Arabia is a signatory to the Nuclear Non-Proliferation Treaty (NPT).

Which of the statements given above are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1, 2 and 3
- D. 1 only

Answer: (C)

Probable UPSC Mains Question

The US-Saudi Civil Nuclear Cooperation Agreement represents both an energy partnership and a strategic realignment in West Asia. Discuss its geopolitical implications and examine the opportunities and challenges it presents for India's foreign policy. (250 words)

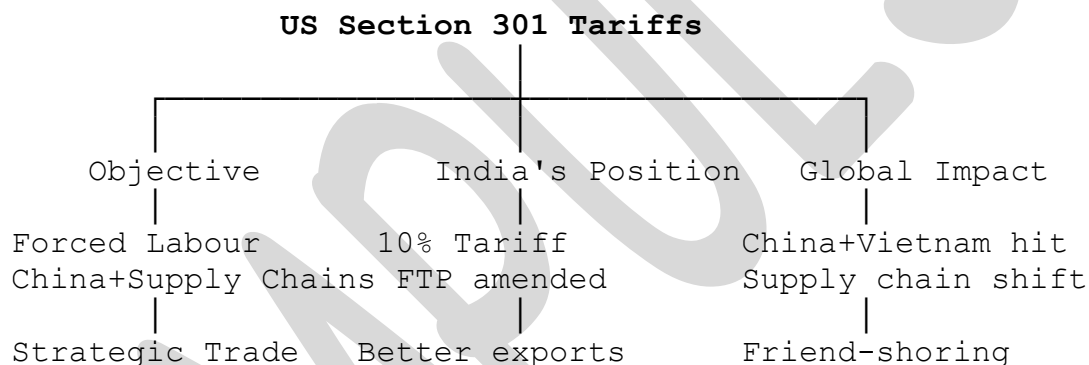
New US Section 301 Tariffs:

Why India is Better Placed than Competitors

Brief

- The **US** has imposed new **Section 301 tariffs** under the **Trade Act of 1974**, targeting imports linked to **forced labour**.
- **India** faces a **lower tariff burden (10%)** compared to key competitors like **China** and **Vietnam (12.5%)**, improving its export competitiveness.

Mind Map



Key Highlights

What are Section 301 Tariffs?

- Imposed under the **US Trade Act, 1974**.
- Allow the US to take unilateral trade action against countries engaging in **unfair trade practices**.
- Current justification: **Imports made using forced labour**.
- Broader strategic objective:
Reduce global dependence on Chinese supply chains.

Four-tier US Tariff Structure

EU & Taiwan → Most Favoured (Effective cap: 10%)

India Group → +10% over MFN tariff

(India, Pakistan, UK, Canada, Mexico, Bangladesh, etc.)

**Japan, Korea,
Switzerland** → Effective cap: 12.5%

**China, Vietnam,
Russia, Brazil** → +12.5% over MFN tariff

Why India Gains?

Positive Factors

- Tariff reduced from **12.5% to 10%**.
- India amended its **Foreign Trade Policy (2026)** to prohibit imports produced through **forced labour**.
- Ongoing India–US trade negotiations.
- Increased energy imports from the US and tariff rationalisation on select US goods.

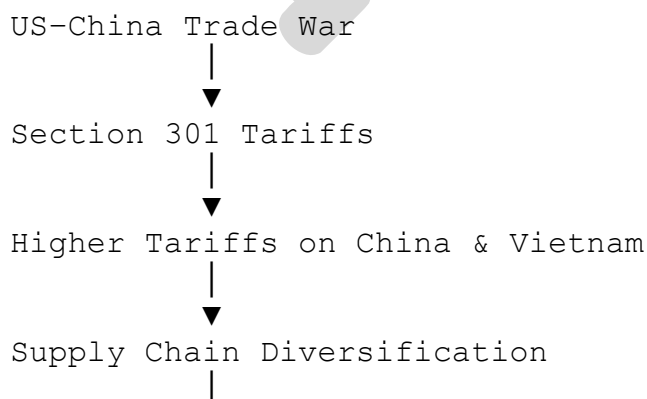
Strategic Opportunity

- Higher tariffs on **China and Vietnam** may encourage **global companies to shift sourcing to India (China+1 strategy)**.
- Potential boost for sectors such as:
 - Textiles
 - Engineering goods
 - Auto components
 - Chemicals

Challenges

- Exports of **non-exempt products** to the US have declined.
- Dependence on the US market remains high.
- Further Section 301 investigations are ongoing.
- India must improve logistics, manufacturing competitiveness, and labour standards.

Flow Diagram



▼
Opportunity for India (China+1)

Value Addition

Key Terms

- **MFN (Most Favoured Nation):** Standard non-discriminatory tariff applied to WTO members.
- **Friend-shoring:** Relocating supply chains to politically trusted countries.
- **China+1 Strategy:** Diversifying manufacturing beyond China to reduce geopolitical risks.

UPSC Prelims Practice Question

Q. Consider the following statements regarding Section 301 of the US Trade Act:

1. It authorises the US to impose unilateral trade measures against unfair trade practices.
2. It is a provision under the World Trade Organization (WTO).
3. The current US tariffs have been justified on the grounds of preventing imports made using forced labour.

Which of the statements given above is/are correct?

- A. 1 and 3 only
- B. 2 and 3 only
- C. 1 and 2 only
- D. 1, 2 and 3

Answer: (A)

Probable UPSC Mains Question

Recent US Section 301 tariffs reflect the increasing use of trade policy as a geopolitical instrument. Examine their implications for global supply chains and analyse the opportunities and challenges they present for India's manufacturing and export sectors. (250 words)

• The four-tier US tariff structure

Brackets countries based on measures they have taken to prevent imports of products made through forced labour

	Section 301 tariffs	Number of countries
Most favourable group	10% net of MFN tariff rate	EU, Taiwan
Second-most favourable group	Flat 10% (on top of MFN tariff rate)	17 (including India , Pakistan, Sri Lanka, Canada, Mexico)
Third-most favourable group	12.5% net of MFN tariff rate	3 (Japan, South Korea, Switzerland)
Least favourable	Flat 12.5% (on top of MFN tariff rate)	38 (including China, Vietnam, Russia, Brazil)

SOURCE: GLOBAL TRADE ALERT, USTR; NOTE: MFN REFERS TO MOST-FAVOURLED NATION

- USTR took action against 60 countries in a forced-labour Section 301 investigation
- Exemption given to Scotch whisky, medical devices, semiconductors



26.07.2026

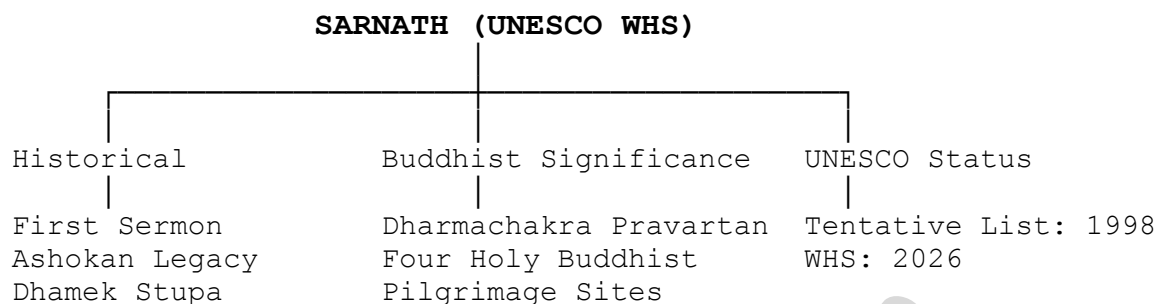
Sarnath

Inscribed as UNESCO World Heritage Site (2026)

Brief

- **Sarnath (Uttar Pradesh)** has been inscribed on the **UNESCO World Heritage List** during the 48th Session of the World Heritage Committee held in Busan, South Korea.
- It becomes India's 45th UNESCO World Heritage Site and Uttar Pradesh's 4th.

Mind Map



Key Highlights (Prelims + Mains)

About Sarnath

- Located near **Varanasi, Uttar Pradesh**.
- Ancient name: **Rishipattana (Isipatana)** or **Mrigadava (Deer Park)**.
- **Lord Buddha delivered his first sermon** (*Dhammacakkappavattana Sutta*) here after attaining enlightenment at Bodh Gaya.
- Marks the beginning of the **Buddhist Sangha** and the "**Dharmachakra Pravartan**" (Turning of the Wheel of Dharma).

Major Monuments

Buddha's Enlightenment (Bodh Gaya)



First Sermon at Sarnath



Establishment of Buddhist Sangha



Spread of Buddhism across Asia

- **Dhamek Stupa** – Marks the site of the First Sermon.
- **Chaukhandi Stupa** – Commemorates Buddha's meeting with his first disciples.
- **Ashokan Pillar** – Features the **Lion Capital**, adopted as the **National Emblem of India**.
- Ancient monasteries, stupas, and archaeological remains.

UNESCO Significance

- Included in UNESCO's **Tentative List in 1998**.

- Recognised for its **Outstanding Universal Value (OUV)**.
- Reflects **living Buddhist pilgrimage traditions** spanning nearly **2,500 years**.
- Expected to boost:
 - Cultural diplomacy
 - Religious tourism
 - Conservation and heritage management

Value Addition

Buddhist Circuit

- Lumbini (Birth)
- Bodh Gaya (Enlightenment)
- Sarnath (First Sermon)
- Kushinagar (Mahaparinirvana)

UNESCO Criteria (Broadly)

- Cultural significance
- Authenticity and integrity
- Outstanding Universal Value
- Long-term conservation

UPSC Prelims Practice Question

Q. With reference to Sarnath, consider the following statements:

1. It is the place where Gautama Buddha delivered his first sermon.
2. The Lion Capital of Ashoka, India's National Emblem, was discovered at Sarnath.
3. Sarnath is located in Bihar.

Which of the statements given above is/are correct?

- A. 1 and 2 only 
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

Answer: (A)

UPSC Quick Facts Box

Fact	Details
Location	Varanasi, Uttar Pradesh
Ancient Name	Rishipattana (Isipatana), Mrigadava
Importance	First Sermon of Buddha (<i>Dharmachakra Pravartan</i>)
Major Monument	Dhamek Stupa
Ashokan Legacy	Lion Capital (National Emblem)
UNESCO Status	45th World Heritage Site of India (2026)
UP UNESCO Sites	Taj Mahal, Agra Fort, Fatehpur Sikri, Sarnath

27.07.2026

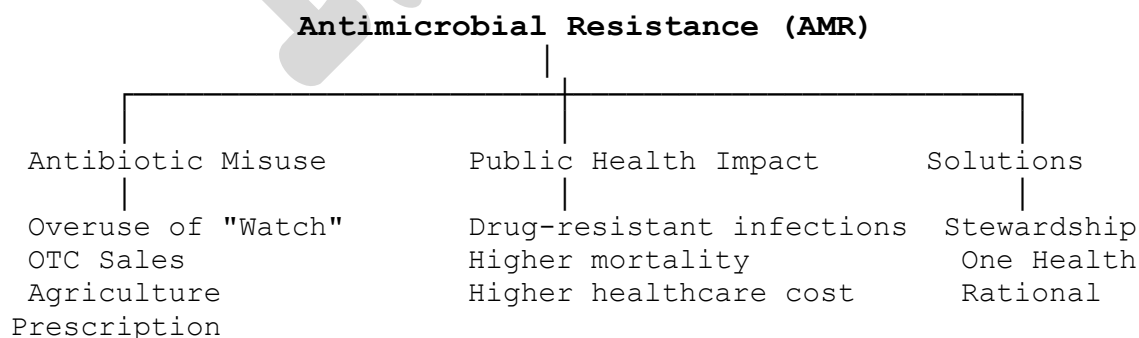
GS - II / III

Antibiotic Stewardship in India: **The Right Dose is Restraint**

Brief

- A study published in **The Lancet Public Health** highlights that **India overuses broad-spectrum ("Watch") antibiotics while underusing first-line ("Access") antibiotics**, increasing the risk of **Antimicrobial Resistance (AMR)**.
- The findings underscore the need to strengthen India's **National Action Plan on AMR 2.0 (2025–2029)**.

Mind Map



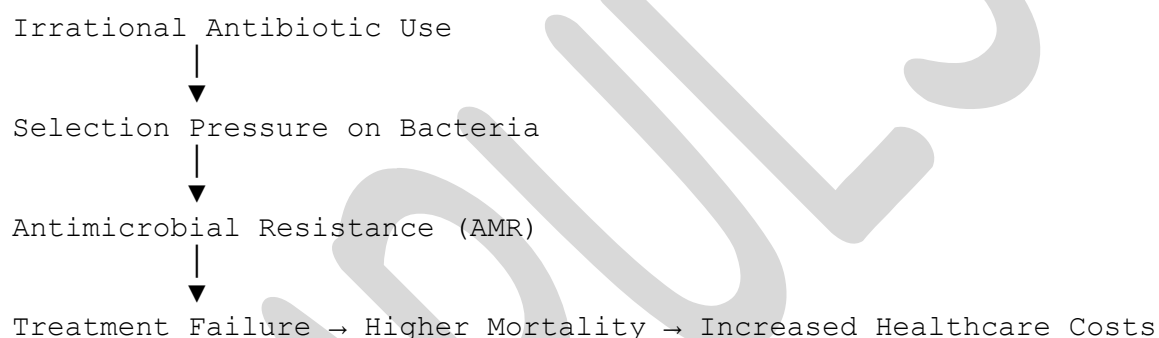
WHO AWaRe Classification

<i>Category</i>	<i>Purpose</i>	<i>Example</i>
● Access	First-line treatment for common infections	Amoxicillin
● Watch	Broad-spectrum; use with caution	Ciprofloxacin, Ceftriaxone
● Reserve	Last resort for multidrug-resistant infections	Colistin, Linezolid

Key Findings

- **Optimal antibiotic use: 9.9–14.7 Defined Daily Doses (DDD) per 1,000 people/day.**
- **India's actual use: 18.3 DDD/1,000/day.**
- Excessive use of **Watch antibiotics** and inadequate use of **Access antibiotics**.

Cause–Effect Diagram



Challenges

- Over-the-counter sale of antibiotics.
- Self-medication and incomplete treatment courses.
- Lack of rapid diagnostic facilities.
- Antibiotic use in livestock and agriculture.
- Inadequate antimicrobial stewardship in hospitals.

Way Forward

- Strengthen **National Action Plan on AMR 2.0 (2025–2029)**.
- Promote **Antimicrobial Stewardship Programmes (AMSPs)** in healthcare institutions.
- Enforce **Schedule H and H1** regulations to curb irrational OTC sales.
- Expand laboratory diagnostics and surveillance through the **One Health** approach.
- Raise public awareness on responsible antibiotic use.

Value Addition

One Health Approach

- Recognises that human health, animal health, and environmental health are interconnected and is central to combating AMR.

Important Organisations

- World Health Organization (WHO)
- Indian Council of Medical Research (ICMR)
- National Centre for Disease Control (NCDC)

UPSC Prelims Practice Question

Q. With reference to the WHO AWaRe classification of antibiotics, consider the following statements:

1. Access antibiotics are recommended as first-line treatment for common infections.
2. Watch antibiotics should be used routinely for all bacterial infections.
3. Reserve antibiotics are intended for multidrug-resistant infections.

Which of the statements given above is/are correct?

- A. 1 and 3 only
- B. 2 and 3 only
- C. 1 and 2 only
- D. 1, 2 and 3

Answer: (A)

Probable UPSC Mains Question

Antimicrobial Resistance (AMR) is one of the greatest public health threats of the 21st century. Discuss the causes of irrational antibiotic use in India and evaluate the role of the One Health approach and antimicrobial stewardship in addressing this challenge. (250 words)

29.07.2026

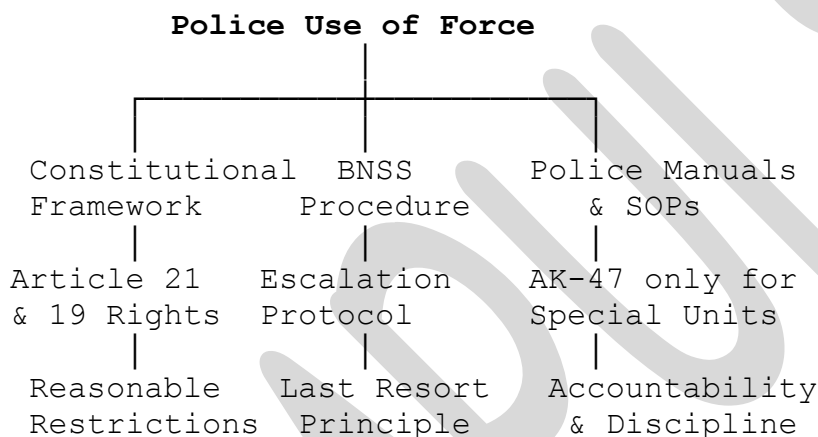
GS – II / III

Use of Sophisticated Weapons **by Police During Protests**

Brief

- Bihar Police suspended a constable for firing **four rounds from an AK-47** during a protest in Siwan, reviving the debate on the **legal limits of police use of force**.

Mind Map



Legal Framework

1. Constitutional Provisions

- **Article 19(1)(a) & 19(1)(b):** Freedom of speech and peaceful assembly.
- **Article 21:** Right to life; police force must satisfy **necessity** and **proportionality**.

2. BNSS, 2023

Police may use force **only as the last resort** after:

- Verbal warnings
- Negotiation
- Barricading
- Water cannons
- Tear gas
- Lathi charge
- Non-lethal ammunition

➡ **Lethal firearms** are permissible only:

- In **self-defence against imminent lethal threats**
- To prevent **loss of life**
- To stop seizure/looting of police armouries.

AK-47: Why its use is restricted?

Sophisticated weapons are issued only to:

- Anti-Naxal Forces
- Counter-Terror Units
- Special Task Force (STF)
- Special Security Group (VIP Protection)
- High-threat operational zones

✗ **Routine law-and-order policing** generally prohibits deployment of automatic assault rifles.

Issues

- **Excessive use of force** undermines civil liberties.
- Difficulty distinguishing **violent mobs** from peaceful protests.
- Lack of uniform national SOPs across States.
- Public trust suffers when accountability is weak.

Way Forward

- Uniform national **Use of Force Guidelines**.
- Mandatory **body cameras** and identification badges.
- Better **riot-control equipment** and de-escalation training.
- Independent inquiry into firearm use during protests.
- Strict adherence to the principles of **necessity, proportionality, and accountability**.

Flow Diagram

```
Protest
|
Verbal Warning
|
Negotiation
|
Barricading
|
```

Water Cannon
|
Tear Gas
|
Lathi Charge
|
Non-lethal Weapons
|
Lethal Firearms (ONLY if imminent threat to life)

Prelims Pointer 💡

- **Police & Public Order** are **State Subjects** under the **State List (Seventh Schedule)**.
- **AK-47** is classified as a **Prohibited Bore weapon** and is normally reserved for specialised units.

Probable UPSC Prelims Question

Q. Consider the following statements regarding police use of force during protests in India:

1. Police and Public Order are State subjects under the Constitution.
2. Automatic rifles like the AK-47 are routinely issued for crowd-control duties.
3. Under the BNSS framework, use of lethal firearms is permitted only as a last resort in situations involving imminent threat to life.

Which of the statements given above is/are correct?

- A. 1 and 3 only ✓
- B. 2 and 3 only
- C. 1 only
- D. 1, 2 and 3

Answer: A

Probable UPSC Mains Question

Q. Discuss the constitutional and legal principles governing police use of force during public protests. How can India balance public order with the protection of civil liberties? (250 Words)

31.07.2026

GS - III

SC sets 'public interest' test on retrospective green nod

The judgment has sought to strike a middle path, closing the door on blanket regularisation but leaving limited room for government action

• SC's EVOLVING ENVIRONMENTAL JURISPRUDENCE

MAR 14, 2017: The Environment Ministry issues notification establishing a six-month window for non-compliant projects or activities to apply for environmental clearance (EC).

AUG 2, 2017: In *Common Cause v. Union of India*, the Supreme Court declares retrospective ECs invalid and 'completely alien to environmental jurisprudence'.

APR 1, 2020: In *Alembic Pharmaceuticals Ltd v. Rohit Prajapati*, the Supreme Court reiterates 'ex post facto clearance is alien to environmental jurisprudence'. But adopts a 'balanced approach' by imposing penalties instead of ordering closure of long-operating units.

MAY 24, 2021: The National Green Tribunal, in *Tanaji B. Gambhire v. Chief Secretary, Govt of Maharashtra*, directs Environment Ministry to for-

mulate a proper SOP to address frequency of projects without prior EC.

JUL 7, 2021: Ministry issues office memorandum (OM) establishing an SOP for projects that failed to obtain prior EC to get regularised after paying penalties.

DEC 9, 2021: In *Electrosteel Steels Ltd v. Union of India*, Supreme Court says ex post facto ECs can be granted in 'exceptional circumstances' to protect livelihoods and the economy.

MAY 16, 2025: In *Vanashakti v. Union of India*, Supreme Court strikes down 2017 notification and 2021 OM as illegal. It

rules that they were in violation of the principles laid down in *Common Cause* and *Alembic*.

NOV 18, 2025: In review petition, the Supreme Court recalls May 2025 ruling. Then-CJI BR Gavai holds that the *Vanashakti* order went against the *Electrosteel* judgement and that a 'balanced approach' is necessary to avoid waste of money spent on building projects. SC orders fresh adjudication of the matter.

JUL 29, 2026: Supreme Court upholds 2017 notification but quashes 2021 OM, holding that post facto EC can be granted only through statutory notifications, not administrative actions.

— COMPILED BY VINEET BHALLA



No blanket amnesty or bar

The court held that ex-post facto environmental clearances can't be created through an office memorandum.

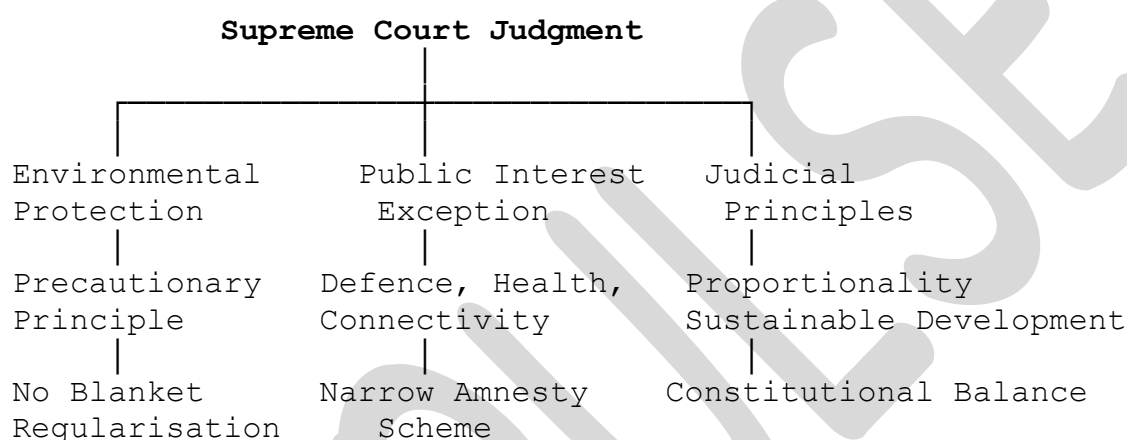
But it recognised that the government may, in exceptional circumstances and in public interest, provide such a mechanism.

Supreme Court on **Post-Facto Environmental Clearance** – Balancing Ecology & Public Interest

Brief

- The **Supreme Court** struck down the **2021 Office Memorandum (OM)** permitting blanket **post-facto Environmental Clearances (ECs)**, while allowing only a **narrow, public-interest-based exception**.

Mind Map



Background

- **Environmental Impact Assessment (EIA)** follows the **Precautionary Principle**—environmental risks must be assessed **before** project approval.
- **2017 Notification:** Allowed a **one-time window** for projects started without prior Environmental Clearance (EC).
- **2021 Office Memorandum:** Institutionalised **post-facto environmental clearances** for violators.

Supreme Court Judgment (2026)

Key Ruling

- **✗** Struck down the **2021 OM** permitting blanket regularisation.
- **✓** Allowed only a "**narrowly tailored amnesty scheme**" in **exceptional cases justified by public interest**.

Constitutional Principles Applied

- **Article 21:** Right to life includes the **right to a healthy environment**.
- **Precautionary Principle:** Prevention is superior to post-damage compensation.
- **Doctrine of Proportionality:** Any relaxation must be:

- Necessary,
- Reasonable,
- Supported by compelling public interest.

Evolution of Judicial Position

<i>Case</i>	<i>Principle</i>
Alembic Pharmaceuticals v. Rohit Prajapati (2020)	Post-facto ECs violate environmental law.
SC Judgment (May 2025)	Complete prohibition on post-facto ECs.
SC Judgment (2026)	Blanket ECs invalid, but limited exceptions allowed in public interest.

Significance

Positives

- Prevents developers from **violating first and seeking approval later**.
- Strengthens **EIA compliance**.
- Balances **development** with **environmental sustainability**.
- Restricts arbitrary executive discretion.

Possible Exceptions

- National defence projects.
- Emergency healthcare infrastructure.
- Critical connectivity in remote areas.

Way Forward

- Strengthen **EIA enforcement** and monitoring.
- Ensure transparent public consultation.
- Adopt **scientific environmental audits**.
- Integrate climate resilience into project approvals.
- Recognise that **environmental protection itself is a component of public interest**.

Quick Revision Diagram

```

Project Proposal
|
Prior Environmental Clearance (Mandatory)

```

Environmental Impact Assessment
|
Project Approval
|
Implementation

✗ Not Allowed:
Project → Construction → EC Later

✓ Exception:
Only if compelling Public Interest
+ Strict Judicial Scrutiny

Prelims Pointer 💡

- Environmental Impact Assessment (EIA) is based on the **Precautionary Principle**.
- Article 21 has been judicially interpreted to include the **right to a clean and healthy environment**.
- **Post-facto Environmental Clearance** is **not a general rule** and may be permitted only in exceptional, narrowly defined public-interest cases.

Probable UPSC Prelims Question

- Q. Consider the following statements regarding Environmental Clearance (EC) in India:
1. The Environmental Impact Assessment framework is guided by the Precautionary Principle.
 2. The Supreme Court has upheld blanket post-facto environmental clearances for all development projects.
 3. The right to a healthy environment has been read into Article 21 of the Constitution.

Which of the statements given above is/are correct?

- A. 1 and 3 only
- B. 2 and 3 only
- C. 1 only
- D. 1, 2 and 3

Answer: A

Probable UPSC Mains Question

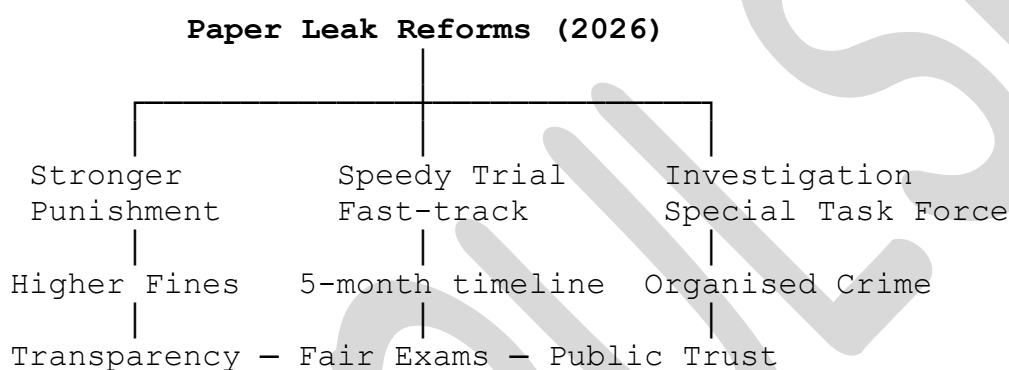
Q. The Supreme Court has sought to balance environmental protection with developmental imperatives by limiting post-facto environmental clearances. Examine the constitutional principles underlying this approach. (250 Words)

Public Examination (Prevention of Unfair Means) Amendment Bill, 2026

Brief

- Parliament passed the **Public Examination (Prevention of Unfair Means) Amendment Bill, 2026** following the **NEET paper leak protests**, strengthening the **2024 Act** through **stricter punishments, fast-track courts, and a Special Task Force (STF)**.

Mind Map



Background

- The **Public Examination (Prevention of Unfair Means) Act, 2024** criminalised:
 - Paper leaks
 - Cheating syndicates
 - Tampering with examinations conducted by **UPSC, SSC, RRB, IBPS, NTA (NEET)** etc.
- The **2026 Amendment** was introduced after repeated examination leaks and public protests.

Key Provisions of the 2026 Bill

1. Enhanced Punishments

Category	2024 Act	2026 Amendment
Individuals	3–5 years + ₹10 lakh	5–10 years + ₹50 lakh
Service Providers	₹1 crore + 4-year ban	₹5 crore + 8-year ban
Directors/Management	≥3 years + ₹1 crore	≥5 years + ₹5 crore
Organised Crime	5–10 years + ₹1 crore	≥7 years + ₹10 crore

2. Fast-track Courts

- **Statutory** provision for **Fast-track Courts (FTCs)**.
- Investigation and trial to be completed within **5 months**.
- Initially proposed in High Courts handling NEET-related cases.

3. Special Task Force (STF)

The Union Government **may** constitute an **STF** to:

- Investigate organised paper leak networks.
- Coordinate inter-state investigations.
- Strengthen examination security.

Significance

Advantages

- Enhances credibility of public examinations.
- Acts as a deterrent against organised cheating mafias.
- Ensures quicker justice through dedicated courts.
- Protects merit and equal opportunity.

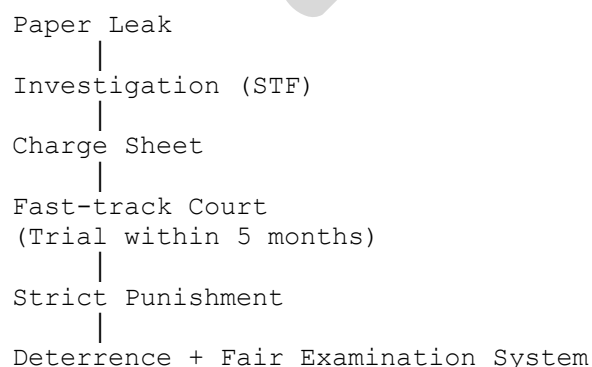
Challenges

- Fast-track courts face **high pendency** (≈2.45 lakh cases by Dec 2025).
- Success depends on quality investigation and digital security.
- Criminal penalties alone cannot address systemic flaws in the examination ecosystem.

Way Forward

- Adopt **AI-based encryption** and secure digital paper transmission.
- Strengthen cyber-forensics and inter-state coordination.
- Increase examination centres and diversify evaluation methods.
- Improve transparency and accountability in recruitment agencies.

Flow Diagram



Prelims Pointer

- The **2024 Act** applies to examinations conducted by UPSC, SSC, RRB, IBPS, NTA, etc.
- The **2026 Amendment** introduces:
 - Higher imprisonment and fines
 - Fast-track courts
 - Special Task Force (STF)

Probable UPSC Prelims Question

Q. Consider the following statements regarding the Public Examination (Prevention of Unfair Means) Amendment Bill, 2026:

1. It provides statutory backing for Fast-track Courts to try offences under the Act.
2. It empowers the Union Government to establish a Special Task Force for investigation of examination-related offences.
3. It reduces the maximum punishment for organised paper leak syndicates but increases punishment for individual leaking.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 only
- D. 1, 2 and 3

Answer: A

Probable UPSC Mains Question

Q. The Public Examination (Prevention of Unfair Means) Amendment Bill, 2026 seeks to restore public confidence in India's examination system. Critically examine its key provisions and limitations. (250 Words)

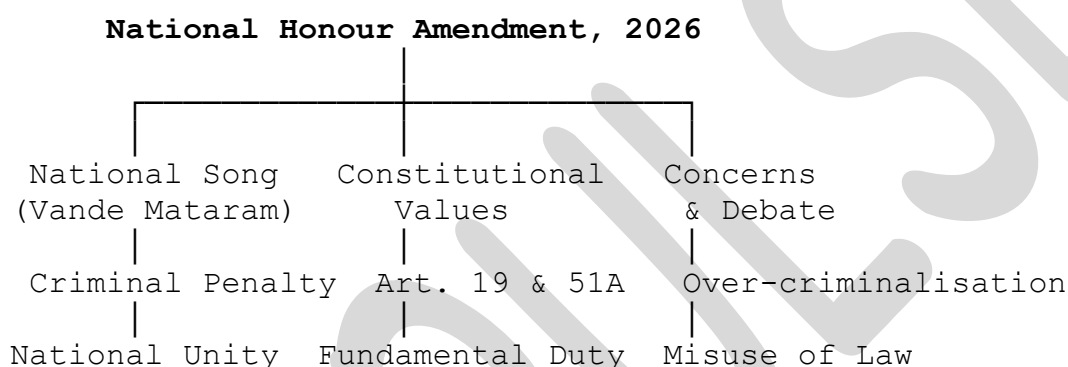
Prevention of Insults to National Honour (Amendment) Bill,

2026 – Criminalising Insult to *Vande Mataram*

Brief

- Parliament passed the **Prevention of Insults to National Honour (Amendment) Bill, 2026**, making **intentional insult to the National Song (*Vande Mataram*)** punishable with imprisonment of **up to 3 years**, *placing it on par with the National Anthem*.

Mind Map



Background

- The **Prevention of Insults to National Honour Act, 1971** criminalised insults to:
 - National Flag
 - National Anthem
 - Constitution of India
- The **2026 Amendment** extends similar protection to **Vande Mataram (National Song)**.

Key Provisions

- Intentional insult, obstruction or disruption relating to **Vande Mataram** becomes a **criminal offence**.
- Punishment:** Imprisonment up to **3 years**, fine, or both.
- Places the **National Song** at par with the **National Anthem** under the Act.

Constitutional Dimensions

Supports

- Promotes **national unity and patriotism**.
- Reinforces **Fundamental Duty (Article 51A(a))** to respect national symbols.

Concerns

- **Article 19(1)(a)**: Freedom of speech and expression.
- Risk of **over-criminalisation** and misuse against dissent.
- Respect for national symbols should ideally arise from **constitutional morality**, not fear of punishment.

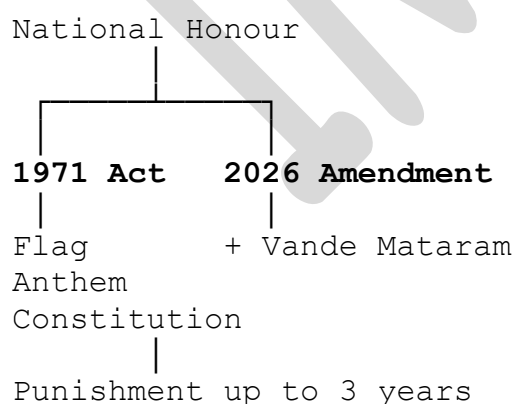
Issues Highlighted

- NCRB data (2014–2024):
 - 1,102 arrests
 - **Only 60 convictions**
 - **Low incidence of offences but high pendency.**
- May increase litigation despite the government's broader **decriminalisation agenda** under the **Jan Vishwas reforms**.

Way Forward

- ☐ Clearly define what constitutes an "intentional insult".
- ☐ Prevent arbitrary arrests through strict procedural safeguards.
- ☐ Promote constitutional values through **civic education** rather than excessive criminal sanctions.
- ☐ Balance **national honour** with **fundamental freedoms**.

Quick Revision Diagram



Prelims Pointer

- **National Anthem:** *Jana Gana Mana*.
- **National Song:** *Vande Mataram* (first two stanzas have official status).
- **Article 51A(a):** It is the **Fundamental Duty** of every citizen to respect the Constitution, National Flag and National Anthem.

Probable UPSC Prelims Question

Q. Consider the following statements:

1. The Prevention of Insults to National Honour Act, 1971 originally covered the National Flag, National Anthem and the Constitution.
2. The Prevention of Insults to National Honour (Amendment) Bill, 2026 extends legal protection to Vande Mataram.
3. Respect for the National Anthem is expressly mentioned as a Fundamental Duty under Article 51A(a).

Which of the statements given above are correct?

- A. 1, 2 and 3
- B. 1 and 2 only
- C. 2 and 3 only
- D. 1 only

Answer: A

Probable UPSC Mains Question

Q. Can respect for national symbols be effectively enforced through criminal law? Discuss in the context of the Prevention of Insults to National Honour (Amendment) Bill, 2026 and the balance between Fundamental Rights and Fundamental Duties. (250 Words)