

Prelims Fact Sheet

Your Monthly Guidance for UPSC Prelims



👉 Current Affairs Deep Dive

👉 History & Culture

👉 Environment & Ecology

👉 Polity & Economy

👉 Science & Technology

50+ Key Facts | Segregated Section wise

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PRELIM FACT SHEET

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POLITY & GOVERNANCE

1. Foreign Contribution (Regulation) Amendment Bill, 2026

Context:

The Foreign Contribution (Regulation) Amendment Bill, 2026, introduced by the Ministry of Home Affairs, seeks to amend the Foreign Contribution (Regulation) Act, 2010. The Act regulates the acceptance and use of foreign funds by individuals and NGOs to ensure they are not used against national interest. The amendment focuses on closing gaps in asset management, improving accountability, and strengthening regulatory oversight.

Key Provisions of the Amendment Bill:

- Introduces a **Designated Authority** to manage assets created from foreign funds when an organisation's FCRA registration is cancelled, surrendered, or not renewed.
- Provides for **provisional vesting** of assets during suspension, with possible return if registration is restored.
- Allows **permanent vesting** if the organisation fails to renew registration or becomes defunct.
- Permits transfer or sale of such assets, with proceeds credited to the **Consolidated Fund of India**.
- Introduces **automatic cessation of registration** if renewal is not applied for or denied.
- Expands the definition of **"key functionary"** to include directors, trustees, partners, and others controlling management, making them accountable.
- Imposes duties such as providing access to records, not transferring assets without approval, and operating under supervision.
- Requires **prior approval of the Central Government** before initiating any investigation under the Act.
- Reduces maximum imprisonment for offences from **5 years to 1 year**, with rationalised penalties.
- Expands prohibition on foreign funding to **any person engaged in news or current affairs activities**.
- Provides an **appeal mechanism** to the District Judge within 90 days.

Key Features of the FCRA, 2010:

- Regulates foreign contributions to prevent misuse for political or anti-national activities.
- Requires **mandatory registration or prior permission** to receive foreign funds.
- Registration valid for **5 years**, subject to renewal.
- Funds must be received in a **designated SBI account in New Delhi**.
- **No sub-granting** allowed to unregistered entities.
- Administrative expenses capped at **20% of total funds**.
- Prohibits foreign funding to political actors, judges, media persons, and government servants.

Significance:

- Addresses ambiguity regarding management of NGO assets after cancellation of registration.
- Strengthens accountability of organisations and their functionaries.
- Enhances regulatory clarity through timelines and structured asset handling.
- However, provisions like prior approval for investigation may raise concerns about **centralisation of power and reduced autonomy of civil society**.

Conclusion:

The 2026 amendment represents an attempt to balance regulation with accountability in the use of foreign funds. While it improves clarity and strengthens enforcement mechanisms, its success will depend on ensuring transparency, fairness, and protection of legitimate civil society activities.

2. Sixth Schedule and Tribal Autonomy in India

Context:

Recent developments, including amendments by the Garo Hills Autonomous District Council and renewed demands in Ladakh, have highlighted the relevance of the Sixth Schedule in ensuring tribal autonomy and governance.

About the Sixth Schedule:

- The Sixth Schedule, under **Articles 244(2) and 275(1)**, provides for autonomous administration of tribal areas based on the **Bordoloi Committee** recommendations. It applies to **Assam, Meghalaya, Tripura, and Mizoram**, creating a “State within a State” model.

Structure and Powers:

Autonomous District Councils (ADCs) consist of **30 members** (26 elected, 4 nominated). They have:

- **Legislative powers** over land, forests, and customary laws
- **Judicial powers** through village courts
- **Financial powers** including taxation. The Governor supervises by approving laws and reorganizing councils.

Demand in Ladakh:

Civil society groups in Ladakh demand Sixth Schedule status to protect land, culture, and local governance, especially after the detention of Sonam Wangchuk under the National Security Act, 1980.

Significance and Challenges:

- Ensures **tribal identity and self-governance**
- Promotes **decentralization and conflict resolution**
- Faces issues like **limited autonomy and administrative inefficiencies**

3. Justice G. Rohini Commission

Context:

Demand for OBC sub-categorisation has renewed focus on the Justice G. Rohini Commission (2017).

About Justice G. Rohini Commission:

- Constituted in 2017 under Article 340; headed by Justice G. Rohini.
- Mandate: Examine sub-categorisation of OBCs for equitable distribution of 27% reservation.
- Identified skewed distribution, with dominant groups cornering benefits.
- Proposed division of OBCs into sub-groups with separate quota shares.
- Report submitted in 2023 to the President.

4. Uniform Civil Code (UCC) in India

The Gujarat Legislative Assembly passed the UCC Bill, 2026, becoming the second state after Uttarakhand. The Supreme Court of India has also reiterated the importance of UCC under Article 44.

About UCC:

The Uniform Civil Code proposes a **common set of civil laws** governing marriage, divorce, adoption, and succession, applicable to all citizens irrespective of religion.

Constitutional and Legal Basis:

- **Article 44 (DPSP)**: Directs the State to secure a UCC (non-justiciable).
- Falls under **Concurrent List (Entry 5)** – allowing both Centre and States to legislate.
- Requires **Presidential assent (Article 254(2))** if conflicting with central laws.

About Article 44:

Feature	Details
Constitutional Provision	Article 44 of the Constitution of India
Part of Constitution	Part IV – Directive Principles of State Policy (DPSP)
Nature	Non-justiciable (not enforceable by courts)
Objective	The State shall endeavour to secure a Uniform Civil Code for all citizens throughout India

Current Scenario:

- India follows **religion-based personal laws** (Hindu, Muslim, Christian, Parsi).
- Goa is the only state with a form of UCC (Portuguese Civil Code, 1867).
- Uttarakhand (2024) and Gujarat (2026) mark recent legislative progress.

Objectives:

- Ensure **equality before law**
- Promote **gender justice**
- Strengthen **national integration**

Judicial View:

Key cases like **Shah Bano (1985)** and **Sarla Mudgal (1995)** emphasized the need for UCC to address legal disparities.

5. Corporate Laws (Amendment) Bill, 2026**Context:**

Lok Sabha referred the Corporate Laws (Amendment) Bill, 2026 to a Joint Parliamentary Committee (JPC) for detailed scrutiny.

Key Facts:

- Bill: Seeks to decriminalise minor corporate offences and rationalise penalties to improve ease of doing business
- Amends:** Companies Act, 2013 and Limited Liability Partnership (LLP) Act, 2008
- Companies Act, 2013: Governs incorporation, regulation, and governance of companies; replaced Companies Act, 1956
- CSR Rules: Mandatory 2% of average net profits (last 3 years) for eligible companies
- CSR Applicability: Net worth $\geq$ ₹500 crore OR turnover $\geq$ ₹1000 crore OR net profit $\geq$ ₹5 crore
- Amendment Concern: Changes in net profit calculation may affect CSR compliance
- JPC: Temporary parliamentary committee with members from Lok Sabha and Rajya Sabha
- Role of JPC: Conducts detailed scrutiny of bills and submits recommendations

6. National Symbols of India**Context:**

A recent complaint over alleged disrespect to the national flag and renewed debates on Vande Mataram have brought focus on rules and evolution of India's national symbols.

About National Symbols of India:

- National Flag: Adopted on 22 July 1947; based on design by Pingali Venkayya (1921)
- Evolution: Bhikaji Cama unfurled the flag at (Stuttgart, 1907)
- Feature: Ashoka Chakra (24 spokes) replaced charkha in final design

- Law: Governed by Flag Code of India, 2002 → allows citizens to hoist the flag with dignity (all days, subject to rules)
- Display Rules: Must be rectangular (3:2 ratio); saffron at top; should not touch ground/water or be used as drapery
- Restrictions: Prohibits use for commercial purposes, costume, or uniform
- Protection: Prevention of Insults to National Honour Act, 1971 penalises desecration

7. Section 69A of IT Act, 2000

Context:

The Centre is considering allowing more ministries to issue content blocking orders under **Section 69A of the Information Technology (IT) Act, 2000**.

About Section 69A:

- Provision: Empowers government to block public access to online content
- Authority: Currently exercised by Ministry of Electronics and Information Technology (MeitY)
- Grounds: Sovereignty, integrity, defence, security of State, public order
- Scope: Applies to websites, apps, and social media platforms
- Process: Requires reasoned order under IT Rules, 2009

Shreya Singhal v. Union of India (2015):

- Section 66A struck down (violates Article 19(1)(a) due to vague terms).
- Section 69A upheld due to procedural safeguards and due process

8. Anti-Defection Law

Context:

The Telangana Assembly Speaker dismissed disqualification petitions against some MLAs under the **Anti-Defection Law**.

About Anti-Defection Law:

Feature	Details
Constitutional Provision	Tenth Schedule
Introduced by	52nd Constitutional Amendment Act, 1985
Objective	Prevent political defections and government instability
Authority	Speaker/Chairman decides disqualification

Grounds for Disqualification:

A legislator is disqualified if they:

- Voluntarily give up party membership.
- Vote/abstain against party whip without permission.
- Independent member joins a party after election.
- Nominated member joins a party after six months.

Exception (Merger):

- Disqualification not applicable if two-thirds of members of a legislative party merge with another party. (*Split provision removed by 91st Constitutional Amendment Act, 2003.*)

Role of the Speaker:

- Acts as quasi-judicial authority deciding defection cases.
- Decision subject to judicial review.

Key Judgments:

- **Kihoto Hollohan v. Zachillhu (1992):** Upheld validity of the Tenth Schedule; allowed judicial review of Speaker's decision.
- **Keisham Meghachandra Singh (2020):** Court suggested defection cases be decided within about three months.

9. Rajasthan Panchayati Raj (Amendment) Bill, 2026**Context:**

The Rajasthan Panchayati Raj (Amendment) Bill, 2026 has scrapped the 30-year-old "two-child norm," removing the disqualification criteria for candidates with more than two children.

The 2026 Amendment: Key Changes

Feature	Old Provision (1995)	New Provision (2026)
Eligibility	Barred if > 2 children	No restriction based on child count
Focus	Population Control	Democratic Inclusivity
Status	Disqualification Active	Disqualification Scrapped

Justification for the Reversal:

The Rajasthan government cited decline in the **Total Fertility Rate (TFR)** in Rajasthan and improved grassroots awareness regarding family planning and reproductive health.

Judicial Position:

The constitutionality of such provisions was upheld by the **Javed v. State of Haryana (2003)**, where the Supreme Court of India ruled that:

- The two-child norm **does not violate fundamental rights**.
- It is a **reasonable measure to promote population control**.

10. Appointment of Governor**Context:**

The President of India appointed new Governors for several States and Union Territories.

Constitutional Framework:

The Governor acts as the **constitutional head of a State**, serving as a vital link between the Union and State governments.

Article	Key Provision
153	Each State must have a Governor (one person can serve multiple states).
155	Appointment is made by the President (Executive appointment).
156	Office is held during the " Pleasure of the President "; standard term is 5 years.
157	Qualifications: Must be a citizen of India and 35 years of age.
158	Cannot be a member of Parliament/Legislature or hold an office of profit.

The Appointment Process:

- **Method:** The President appoints the Governor based on the binding advice of the **Union Council of Ministers** headed by the PM.
- **Oath:** Administered by the **Chief Justice of the concerned High Court** (or the senior-most judge).
- **Removal:** Can resign via a letter to the President or be removed **by the President** at any time **without** a stated constitutional reason. This power cannot be exercised in an **arbitrary, capricious, or unreasonable manner**. (**B.P. Singhal v. Union of India**)

Conventions:

While not mandated by the Constitution, certain norms are generally followed:

- **"Outsider" Status:** The appointee is usually **not a resident of the state** to ensure political neutrality.
- **Consultation:** The **Chief Minister should be consulted** in the appointment.

Major Recommendations:

Two key commissions have proposed reforms to **depoliticize** the office:

Commission	Core Recommendations
Sarkaria (1988)	Appointee should be an eminent person from outside the state , not involved in active politics recently, and appointed after CM consultation .
Punchhi (2010)	Suggested a fixed tenure for Governors and a formal "Committee" approach for selection, including the Chief Minister.

11. Permanent Commission (PC) and pensionary benefits for women officers in Armed Forces**Context:**

The Supreme Court upheld Permanent Commission (PC) and pensionary benefits for women officers and highlighted systemic bias against Short Service Commission (SSC) officers in the armed forces.

About PC & SSC:

- **Type:** Two modes of officer entry in Armed Forces – PC (career service) and SSC (short tenure).
- **Permanent Commission:** Provides full career till retirement with pension and long-term benefits.
- **Short Service Commission:** Initial 10 years, extendable up to 14 years, without guaranteed career continuity.
- **Transition:** SSC officers may be considered for Permanent Commission based on selection.
- **Coverage:** Applicable across Army, Navy, and Air Force, for both men and women.
- **Legal Basis:** SC linked PC access to Articles 14, 15, and 16 (equality & non-discrimination).
- **Key Issue:** SSC officers (especially women) faced limited career progression and institutional bias.

12. Cross-voting in Rajya Sabha Elections**Context:**

Some MLAs in Odisha cross-voted in a recent Rajya Sabha election and challenged party show-cause notices as illegal and arbitrary.

Key Facts:

- **Nature of Election:** Rajya Sabha members are elected by MLAs through proportional representation (Single Transferable Voting) system
- **Voting Type:** Open ballot system (MLAs show vote to authorised party agent)
- **Whip Issue:** Political parties cannot legally compel voting in Rajya Sabha elections like in legislative votes (disputed area)
- **Undue Influence:** Forcing voting preference may attract provisions related to undue influence in elections (BNS/earlier IPC Sec 171)
- **Anti-Defection Law:** Tenth Schedule generally not applicable to Rajya Sabha elections (not a House vote)

- SC Judgment: Kuldip Nayar (2006) upheld open ballot and held that Rajya Sabha elections are an electoral process, not legislative voting thereby limiting strict application of party whip and anti-defection provisions.
- Implication: Cross-voting may invite party disciplinary action, but not automatic disqualification

13. Speaker of the Lok Sabha

Context:

A resolution seeking the **removal of Speaker Om Birla** was introduced and defeated in Lok Sabha.

1. Constitutional Framework:

Article	Provision
Art. 93	Election of Speaker & Deputy Speaker
Art. 94	Vacation, Resignation, and Removal
Art. 95	Deputy Speaker (or others) to perform duties when the office is vacant
Art. 96	Speaker/Deputy Speaker not to preside during their removal resolution

2. Appointment & Election:

- **Method:** Elected by the Lok Sabha from amongst its members by a **Simple Majority**.
- **Election Date:** Fixed by the **President**.
- **Presiding Authority:** The **Speaker Pro-tem** (appointed by the President) presides over the sitting where the Speaker is elected.
- **Oath:** The Speaker does not take a separate oath as Speaker; they take an oath only as a Member of Parliament (MP).

3. Tenure & Continuity:

- **Normal Tenure:** Coterminous with the Lok Sabha (usually 5 years).
- **Post-Dissolution:** The Speaker **does not vacate** office upon dissolution. They continue until immediately before the first sitting of the newly elected Lok Sabha.

4. Removal Procedure (Article 94):

- **Method:** Resolution passed by an **Effective Majority** (i.e., a majority of all the *then* members of the House).
- **Notice:** Requires at least **14 days'** prior notice.
- **During the Debate:**
 - The Speaker **cannot preside** but has the right to speak and take part in proceedings.
 - **Voting:** Can vote in the **first instance** (as a regular member) but **cannot exercise a casting vote** in case of a tie.

5. Resignation & Vacation:

- **Resignation:** Handed to the **Deputy Speaker** (and vice-versa).
- **Vacation:** Occurs if they cease to be a member of the Lok Sabha.

6. Institutional Powers & Features:

- **Casting Vote:** Exercises a casting vote only to resolve a tie (under normal circumstances).
- **Money Bills:** Final authority to certify whether a bill is a **Money Bill** (Art. 110).
- **Anti-Defection:** Decides on disqualification of members under the **10th Schedule** (Judicial review applies).
- **Precedence:** Ranks **7th** in the Table of Precedence (along with the Chief Justice of India).

14. Urban Challenge Fund (UCF)**Context:**

The Union Cabinet approved the **Urban Challenge Fund (UCF)** in 2026 to promote market-linked, reform-based urban infrastructure development.

Key Facts:

- **Type:** Centrally Sponsored Scheme with challenge-based funding model
- **Objective:** Develop cities as economic growth hubs, enable redevelopment, and improve water & sanitation systems
- **Corpus:** ₹1 lakh crore central assistance to catalyse approx ₹4 lakh crore total investment
- **Financing Model:** 25% Centre + 50% market finance (mandatory) + 25% State/ULB share
- **Fund Mobilisation:** Cities must raise market funds via municipal bonds, bank loans, and Public-Private Partnerships (PPPs)
- **Approach:** Competitive “challenge mode” selection of bankable, reform-oriented projects
- **Eligibility:** Cities ≥10 lakh population; all State/UT capitals; industrial cities >1 lakh; smaller/hilly/NE ULBs via credit guarantee window
- **Duration:** FY 2025–26 to FY 2030–31 (extendable)

15. Removal of the Chief Election Commissioner (CEC)**Context:**

Rajya Sabha Chairman and Lok Sabha Speaker reject Opposition's notice for Chief Election Commissioner's removal.

Constitutional & Institutional Framework:

- **Article 324:** Establishes the ECI as a permanent constitutional body.
- **Composition:** 1 CEC and 2 Election Commissioners (multi-member since 1993).
- **Status:** The CEC is “first among equals” with the same salary and powers as Election Commissioners.

Appointment Mechanism (Act of 2023):

The Chief Election Commissioner and Other Election Commissioners Act, 2023 regulates the process:

Aspect	Provision
Appointing Authority	President of India
Search Committee	Headed by the Cabinet Secretary; suggests 5 names.
Selection Committee	PM (Chair), Leader of Opposition/Single Largest Party (LS), and a Union Cabinet Minister (nominated by PM).
Tenure	6 years or up to 65 years of age (whichever is earlier).
Reappointment	Not eligible for reappointment.

Procedure for Removal of the CEC and EC:

The Constitution provides strong protection to ensure the independence of the Election Commission.

- **Initiation:** A removal motion may be introduced in either House of Parliament.
- **Notice Requirement:** Must be supported by at least 100 Lok Sabha MPs or 50 Rajya Sabha MPs.
- **Admission:** The Speaker (Lok Sabha) or Chairman (Rajya Sabha) may admit or reject the motion.

- **Inquiry:** If admitted, a **Judges Inquiry Committee** (Supreme Court judge, High Court Chief Justice, and a distinguished jurist) investigates the charges.
- **Parliamentary Approval:** If charges are proven, the motion must be passed in **both Houses by special majority** (majority of total membership + two-thirds of members present and voting).
- **Final Removal:** The **President of India** issues the removal order after parliamentary approval.

Election Commissioners (ECs):

- **Process:** Removed by the President **only on the recommendation of the CEC**.
- **Safeguard:** They do not require the parliamentary removal process (impeachment-style) but are protected from arbitrary executive dismissal by the CEC's recommendation requirement.

16. Directorate General of Civil Aviation (DGCA)

Context:

The office of DGCA is in news for various developments.

Legal Status & Origin of DGCA:

- **Established:** 1958; Headquartered in New Delhi.
- **Status:** An **Attached Office** under the **Ministry of Civil Aviation (MoCA)**.
- **Legal Framework:** Operates under the **Aircraft Act, 1934** and **Aircraft Rules, 1937**.
- **Nature:** It is a regulatory body functioning under executive and delegated legislative authority.

Core Mandate & Powers:

- **Safety Oversight:** Primary regulator for civil aviation safety, including airworthiness and operational standards.
- **Licensing Authority:** Issues licenses for Pilots, Aircraft Maintenance Engineers (AMEs), and Air Operator Permits (AOPs).
- **Rule Making:** Issues **Civil Aviation Requirements (CARs)** and **Aeronautical Information Circulars (AICs)**, which are binding under the Aircraft Rules.
- **Enforcement:** Empowered to ground aircraft, suspend/cancel licenses, and impose penalties for safety violations.
- **ICAO Compliance:** Ensures India adheres to the **International Civil Aviation Organization (ICAO)** Standards and Recommended Practices (SARPs).

17. Lokpal and Lokayuktas Act, 2013

Context:

A Parliamentary Committee sought details on operationalisation of the inquiry and prosecution wings under the Lokpal.

Key Facts:

- **Objective:** Establishes anti-corruption ombudsman – Lokpal (Centre) and Lokayukta (States)
- **Composition:** Chairperson + up to 8 members; 50% judicial; 50% from SC/ST/OBC/minorities/women
- **Appointment:** The Chairperson and Members of Lokpal are appointed by the President of India based on the recommendation of the Selection Committee.

- Selection Committee: PM (Chair), Speaker, LoP (or largest opposition leader), CJI/nominee, eminent jurist
- Jurisdiction: Covers PM (with safeguards), Ministers, MPs, and all central govt employees (Group A-D)
- Powers: Can order inquiry and direct agencies like CBI; has superintendence in referred cases
- Wings: Provides for Inquiry Wing and Prosecution Wing for handling corruption cases
- States: Mandates establishment of Lokayuktas within 1 year through state laws

18. Election Schedule & Model Code of Conduct (MCC)

Context:

The Election Commission of India announced Assembly election schedules for States including Assam, Kerala, Tamil Nadu, and West Bengal, bringing the Model Code of Conduct (MCC) into force.

Key Facts:

- Constitutional basis: Election conduct is vested in the Election Commission of India under Article 324.
- Election schedule: The Commission independently announces polling dates, nomination deadlines, scrutiny, withdrawal, and counting schedules.

Model Code of Conduct (MCC):

- Origin: First introduced during the 1960 Kerala Assembly elections and adopted nationwide in 1962.
- Nature: A non-statutory, consensus-based code where political parties voluntarily agreed to follow rules ensuring a level playing field during elections.
- Duration: Operates from the announcement of the election schedule until completion of the election process (including counting).
- Key restrictions: Prohibits new financial grants, ad-hoc appointments, misuse of official machinery, and inducements to voters.
- Enforcement: Violations may attract action under provisions of the Representation of the People Act, 1951 and the Indian Penal Code.

19. National Family Health Survey (NFHS-5) vs POSHAN TRACKER

Context:

A recent debate in the Gujarat Legislative Assembly has brought attention to **child malnutrition**, with disagreements arising over the comparison between **NFHS-5 data** and Poshan Tracker data. The discussion reflects broader concerns about **data reliability, policy interpretation, and the actual extent of malnutrition** in the state.

About NFHS-5:

- Conducted by: International Institute for Population Sciences (IIPS), Mumbai, under Ministry of Health & Family Welfare.
- Nature: Large-scale, nationally representative sample survey on health and nutrition.
- Coverage: Provides national, state, and district-level data.
- Indicators: Measures stunting (low height-for-age), wasting (low weight-for-height), underweight (low weight-for-age).
- National Averages (NFHS-5): Stunting – 36%; Wasting – 19.3%; Underweight – 32.1%.
- Periodicity: Conducted in multiple rounds (latest: 2019–21).
- Use: Basis for policy planning and monitoring (e.g., POSHAN Abhiyaan, NHM).

NFHS (NATIONAL FAMILY HEALTH SURVEY)	POSHAN TRACKER
▶ MINISTRY: MINISTRY OF HEALTH & FAMILY WELFARE ▶ CONDUCTED BY: IIPS & FIELD INVESTIGATORS ▶ SAMPLE SURVEY (PERIODIC) ▶ COVERAGE: REPRESENTATIVE HOUSEHOLDS ACROSS INDIA ▶ DATA: ▶ FERTILITY, MORTALITY, MATERNAL & CHILD HEALTH ▶ NUTRITION (STUNTING, WASTING), ▶ FAMILY PLANNING, ANAEMIA, ETC. ▶ DATA: ▶ FERTILITY, MORTALITY, MATERNAL & CHILD HEALTH ▶ NUTRITION (STUNTING, WASTING), ▶ FAMILY PLANNING, ANAEMIA, ETC.	▶ MINISTRY: MINISTRY OF WOMEN & CHILD DEVELOPMENT ▶ UNDER: POSHAN ABHIYAAN / ANGANWADI SERVICES ▶ COLLECTED BY: ANGANWADI WORKERS ▶ REAL-TIME ADMINISTRATIVE DATA ▶ DATA: ▶ CHILD GROWTH (HEIGHT, WEIGHT) ▶ PREGNANT & LACTATING WOMEN, ▶ SERVICE DELIVERY, ▶ BENEFICIARY MONITORING ▶ DATA: ▶ CHILD GROWTH (HEIGHT, WEIGHT) ▶ PREGNANT & LACTATING WOMEN, ▶ SERVICE DELIVERY

20. Jal Jeevan Mission (JJM)

Context:

The Centre has set conditions for States/UTs to receive funds under Jal Jeevan Mission, while extending it till 2028.

Key facts:

- Launched in 2019 under the Ministry of Jal Shakti to provide Functional Household Tap Connections (FHTC) to all rural households with 55 litres per capita per day (LPCD) of potable water.
- Coverage: Universal rural tap water supply across villages.
- Implementation: Executed by States/UTs through State Water & Sanitation Missions.
- Village Action Plans are prepared by Gram Panchayats/Paani Samitis.
- Monitoring: Water quality surveillance using field test kits and digital platforms (e.g., JJM dashboard,

INTERNATIONAL RELATIONS

1. Italy

Context:

Italian voters rejected a judicial reform proposal in a referendum, dealing a setback to Prime Minister Giorgia Meloni.

About Italy:

- Southern Europe; Mediterranean peninsula; capital: Rome
- Parliamentary republic; bicameral Parliament (Chamber of Deputies & Senate)
- Currency: Euro (€); member of EU, G7, NATO, OECD



- **Borders:** France, Switzerland, Austria, Slovenia; encloses Vatican City & San Marino
- **Geography:** Alps (north), Apennines (spine), Po (longest) & Tiber rivers
- **Islands:** Sicily, Sardinia; volcanoes: Etna, Vesuvius, Stromboli.

2. Kurdistan Region

Context:

Ongoing developments in West Asia continue to highlight the Kurdish issue and regional dynamics.

About Kurdistan:

- Refers to areas inhabited by Kurds across Turkey, Iraq, Iran, and Syria.
- Kurds: Largest stateless ethnic group (approx 30–40 million; Indo-Iranian origin).
- Iraqi Kurdistan: Autonomous region governed by the Kurdistan Regional Government (KRG) in northern Iraq.
- Geographically dominated by the Zagros Mountains; major rivers include Tigris and Greater Zab.
- Key issue: Demand for independence/autonomy across multiple countries.



3. Nigeria

Context:

Nigeria is frequently in news due to security issues, energy sector developments, and regional geopolitics in West Africa.

Key Facts:

- **Location:** West Africa; borders Niger, Chad, Cameroon, Benin; coast on Atlantic Ocean (Gulf of Guinea)
- **Capital:** Abuja; **Largest city:** Lagos, **Currency:** Naira
- **River:** Niger River and Benue River (confluence at Lokoja)
- **Economy:** One of Africa's largest; major crude oil producer (OPEC member)
- **Organization:** Member of ECOWAS (Economic Community of West African States)
- **Security:** Affected by Boko Haram insurgency in northeastern region
- **Demography:** Most populous country in Africa



4. Lebanon

Context:

Lebanon remains in news due to constant attacks from Israel.

About Lebanon:

- Location: Country in the Levant region (West Asia) on the eastern coast of the Mediterranean Sea; bordered by Syria (N & E) and Israel (S).
- Capital: Beirut; part of the Fertile Crescent ("Cradle of Civilization").
- Physical Features: Includes Lebanon Mountains, Anti-Lebanon ranges, and fertile Bekaa Valley.
- Rivers: Litani (major perennial river), Orontes.



5. Cuba

Context:

Cuba is in the news after the Cuban President confirmed talks with the United States to resolve bilateral differences in light of ongoing energy crisis in Cuba.

About Cuba (Capital: Havana):

- Location: Island country in the Caribbean Sea, south of the United States (Florida) and west of Haiti.
- Political System: Socialist republic governed by the Communist Party of Cuba.
- Geography: Largest island in the Caribbean, bordered by the Gulf of Mexico, Caribbean Sea, and Atlantic Ocean.
- Economy: Historically dependent on sugar exports, tourism, and remittances.



6. Cambodia–Thailand border**Context:**

The Preah Vihear Temple and Ta Moan Thom Temple have come into focus amid renewed Cambodia–Thailand border tensions.

About the Temples:

- **Location:** Both temples are situated in the Dangrek Mountains along the Cambodia–Thailand border.
- **Period:** Built during the Khmer Empire (11th–12th centuries).
- **Religion:** Originally Hindu temples dedicated to Lord Shiva, later associated with Buddhist worship.
- **Architecture:** Built mainly of sandstone in classical Khmer architectural style, located on elevated ridges.
- **Preah Vihear Temple:** A UNESCO World Heritage Site (2008); the International Court of Justice (1962; reaffirmed 2013) ruled that the temple lies in Cambodia.
- **Ta Moan Thom Temple:** Located directly on the border ridge and remains disputed between Cambodia and Thailand.

**7. Nepal****Context:**

Nepal has witnessed a major political transition following its recent general elections.

About Nepal:

Nepal is a **landlocked country in South Asia**, situated between two major powers—India and China.

- **Capital:** Kathmandu
- **Political System:** Federal Democratic Republic
- **Geography:**
 - Home to the **Himalayas**, including Mount Everest
 - Divided into mountains, hills, and plains (Terai region)
- **Economy:**
 - Primarily dependent on **agriculture, remittances, and tourism.**

The border between India and Nepal is one of the **most unique international borders in the world**, characterized by its **open and friendly nature**.

- **Total Length:** approx 1,751 km
- **Nature:** Open border (no visa/passport required for citizens)
- Based on the **India–Nepal Treaty of Peace and Friendship (1950)**

Bordering Indian States:

The India–Nepal border passes through five Indian states: Uttarakhand, Uttar Pradesh, Bihar, West Bengal and Sikkim



ECONOMY**1. New GDP Series****Context:**

The Government of India is releasing a new series of National Accounts with **base year 2022–23**.

The Update:

- NSO (MoSPI) transitioned from **2011–12** to **2022–23** base year.
- **Goal:** Capture structural shifts (digital economy, GST impact), improve informal sector capture, and align with **SNA 2008/2025** international standards.

Major Methodological Shifts:

Feature	Old Series (2011–12)	New Series (2022–23)
Core Data Sources	ASI, limited MCA-21, NSSO surveys	GSTN, comprehensive MCA-21, ASUSE
Informal Sector Estimation	Benchmark-indicator (proxy-based)	Direct survey-based (ASUSE) + PLFS integration
Corporate Sector Data	Extrapolated from old benchmarks	Direct annual filings (MCA-21 + GST data)
Financial Sector Coverage	Partial regulatory data	Full integration of RBI/SEBI/IRDAI datasets

New Data Sources & Technology:

- **GSTN Database:** Provides transaction-level and “Place of Supply” data, improving State/Regional GDP estimates and capturing formal-informal linkages more accurately.
- **MCA-21 (Ministry of Corporate Affairs):** Electronic filings of 10 lakh+ companies; enables direct use of annual financial statements and reduces shell-company distortions.
- **ASUSE (Annual Survey of Unincorporated Sector Enterprises):** Survey-based data on informal/MSME enterprises; improves measurement of output and value added in the unorganised sector.
- **PLFS (Periodic Labour Force Survey):** Employment and labour input data used to estimate value added where financial records are unavailable (Labour Input Method).

Expected Impacts:

- **Sectoral Weights:** Likely shift in weightage toward **Services** (IT, FinTech) and **Manufacturing** (PLI impact).
- **Informal Economy:** Better “visibility” of the unorganized sector, potentially leading to a more realistic (and often higher) GVA for trade and transport.
- **Fiscal Indicators:** Revision of absolute GDP figures often results in a marginal change in **Debt-to-GDP** and **Fiscal Deficit** ratios.

Institutional Framework for revision:

- **Nodal Agency:** National Statistical Office (NSO), Ministry of Statistics and Programme Implementation (MoSPI).
- **Advisory:** Advisory Committee on National Accounts Statistics (ACNAS).
- **Frequency:** Revision typically occurs every **7-10 years** (delayed this time due to COVID-19).

2. National Debt**Context:**

The U.S. national debt has crossed \$39 trillion amid increased fiscal spending linked to the Iran-related conflict.

Key Facts:

- Definition: National debt is the total accumulated borrowings of a government over time to finance deficits
- Components: Includes public debt (market borrowings) and intra-governmental liabilities
- High Debt Countries: USA, Japan, and China have among the highest debt levels globally (absolute terms and/or high debt-to-GDP ratios)
- USA Status: Largest absolute public debt globally
- India Debt Level: Centre's outstanding liabilities estimated at 55.6% of GDP (2026–27); combined (Centre + States) approx 80%+
- India Target: Government aims to reduce debt to approx 50% ± 1% of GDP by 2031
- Fiscal Indicators (India): Fiscal deficit targeted at 4.3% of GDP (2026–27); revenue deficit at 1.5% of GDP

3. Index of Eight Core Industries (ICI)**Context:**

Recent data showed a slowdown in the Index of Eight Core Industries, indicating weakening core sector growth.

Key Facts:

- Measures performance of 8 core infrastructure industries
- Released monthly by the Office of Economic Adviser, Ministry of Commerce & Industry. Base Year: 2011–12 = 100.
- Components: Coal, Crude Oil, Natural Gas, Refinery Products, Fertilisers, Steel, Cement, Electricity
- Weight: Accounts for approx 40% of IIP
- IIP: ICI forms a major part of Index of Industrial Production (IIP). Base Year: 2011–12 = 100
- Published by: National Statistical Office (NSO), Ministry of Statistics & Programme Implementation
- Sectors: Mining, Manufacturing (largest share), and Electricity

4. National Mineral Development Corporation (NMDC)**Context:**

NMDC signed an MoU with Gujarat Mineral Development Corporation (GMDC) to collaborate on exploration and development of Rare Earth Elements (REEs).

About NMDC

- Type: A Navratna Central Public Sector Enterprise (CPSE) under the Ministry of Steel.
- Headquarters: Hyderabad.
- Core Activity: India's largest producer of iron ore.
- Diversification: Engaged in exploration of strategic minerals including copper, rock phosphate, limestone, and Rare Earth Elements (REEs).

- REEs: Group of 17 metallic elements with unique properties, used in electronics, EVs, renewable energy (wind turbines), defence systems, and high-tech manufacturing. Examples: Neodymium (Nd), Dysprosium (Dy), Lanthanum (La)

5. Critical Mineral Blocks Auction

Context:

The Government of India has launched the 7th tranche of auctions for 19 critical and strategic mineral blocks across multiple states.

Key Facts:

- Authority: Conducted by Ministry of Mines under the Mines and Minerals (Development and Regulation) Act, 1957
- Critical minerals are essential for economic development and strategic sectors, with supply risk and limited substitutes
- Examples: Lithium, graphite, rare earth elements, tungsten, vanadium, titanium
- Type of Allocation: Mining lease and composite licence (prospecting + mining)
- Objective: Strengthen mineral security and reduce import dependence
- Usage: Key inputs for clean energy, electronics, fertilizers, and advanced technologies
- Significance: Supports energy transition and resilient supply chains

6. Captive Power Generation

Context:

The Union Government has amended the Electricity Rules, 2005 to strengthen and clarify the regulatory framework for captive power generation.

About Captive Power Generation:

- Meaning: Electricity generated by industries primarily for their own consumption instead of purchasing from the public grid.
- Legal basis: Provided under the Electricity Act, 2003 and regulated by the Electricity Rules, 2005.
- Ownership & consumption rule: Captive users must hold $\geq 26\%$ ownership in the plant and consume $\geq 51\%$ of the electricity generated annually.
- Group captive model: Multiple entities may jointly own a plant; power consumption must broadly match their equity share ($\pm 10\%$ variation allowed).
- Key benefit: Captive users are exempt from Cross-Subsidy Surcharge (CSS) and Additional Surcharge, making electricity cheaper.
- Recent amendment: Captive status will be verified for the entire financial year by Load Despatch Centres.
- Non-compliance: If ownership or consumption criteria are not met, the plant loses captive status for that year and surcharges become applicable.

7. Section 301 of the U.S. Trade Act

Context:

The United States has initiated Section 301 investigations under the Trade Act, 1974 against 16 countries, including India, China, Bangladesh, and Vietnam.

About Section 301:

- Enables the U.S. to act against unfair or discriminatory foreign trade practices harming U.S. commerce and to impose tariffs or other trade restrictions on imports.
- Scope: Covers issues such as intellectual property violations, subsidies, market access barriers, and forced labour.
- Special 301 Report: An annual report issued by the U.S. Trade Representative (USTR) that reviews the intellectual property protection of trading partners, placing countries on the Priority Watch List or Watch List for inadequate IPR safeguards.
- Issue flagged for India: Concerns over excess manufacturing capacity in the solar sector.

8. Foreign Portfolio Investors (FPIs)**Context:**

FPIs have net sold Indian equities worth about \$5.73 billion, putting pressure on the rupee and domestic equity markets.

About Foreign Portfolio Investors (FPIs):

- Definition: As per SEBI (Foreign Portfolio Investors) Regulations, 2019, FPIs are foreign entities investing in financial assets without management control.
- 10% Rule: Holding below 10% of a listed company's paid-up equity; beyond this it is treated as FDI.
- Nature: Highly liquid portfolio investment ("hot money"), often volatile.
- Categories of Investors:
 - Category I: Government entities, central banks, sovereign wealth funds, multilateral agencies.
 - Category II: individual foreign investors, Regulated funds, endowments, charities and corporate bodies.

Factors Affecting FPI Flows (India):

- Inflows Increase When: Strong GDP growth and corporate earnings, Indian interest rates higher than global rates, stable or appreciating rupee, stable fiscal deficit and current account deficit, predictable regulatory and tax environment, and favourable global market sentiment.
- Outflows Increase When: Economic slowdown, rise in US/global interest rates, rupee depreciation, widening fiscal deficit or current account deficit, policy uncertainty or higher taxes, and global geopolitical or financial shocks.

9. Foreign Direct Investment (FDI)**Context:**

The Union Cabinet has amended the 2020 FDI restrictions introduced through Press Note 3, easing certain curbs on investments from countries sharing a land border with India.

Key Terms:

- **Foreign Direct Investment (FDI):** Investment by a foreign entity in an Indian company to obtain ownership or lasting control/interest in the business.
- **Automatic Route:** FDI allowed without prior government approval; investor only needs to report the investment to RBI.

- **Government Route:** FDI that requires prior approval from the Government of India before investment. The application from Foreign Investment Facilitation Portal will be forwarded to the respective ministries which will act on the application.
- **Beneficial Ownership (BO):** The ultimate person/entity that actually owns or controls an investment, even if routed through intermediary companies or countries.

The New Framework:

Previously, all FDI from land-border countries (China, Pakistan, Bangladesh, Myanmar, Nepal, Bhutan, Afghanistan) required mandatory Government Approval.

- **The 10% Rule:** Investments where the Beneficial Ownership (BO) from a land-border country is up to 10% are now permitted via the Automatic Route.
- **Threshold:** If BO exceeds 10% or involves a shift in "control," the Government Route (Prior Approval) remains mandatory.
- **Pakistan/Bangladesh Restriction:** FDI from Pakistan remains prohibited in sensitive sectors (Defense, Space, Atomic Energy) and requires Government Route for all other sectors regardless of the 10% rule.

Strategic Fast-Track Approval

To support the India Semiconductor Mission, specific high-priority sectors now receive expedited security clearance (within 60 days):

- **Electronics Ecosystem:** Electronic capital goods, components, and assembly.
- **Semiconductor Value Chain:** Polysilicon, Ingots, and Wafer manufacturing.
- **Green Tech:** Advanced Chemistry Cells (ACC) and specialized solar components.

Administrative & Monitoring Mechanism

- **Nodal Agency:** Department for Promotion of Industry and Internal Trade (DPIIT).
- **Oversight:** A Committee of Secretaries (CoS) under the Cabinet Secretary monitors the "Beneficial Ownership" disclosures to prevent "treaty shopping" (routing Chinese capital through Singapore/Mauritius).

10. Economic Stabilisation Fund

Context:

The Union Government proposed an Economic Stabilisation Fund to provide fiscal space to manage global economic shocks.

About Economic Stabilisation Fund:

- **Purpose:** To provide cushion against global economic headwinds such as oil price shocks, supply-chain disruptions and external crises without deviating from fiscal consolidation targets.
- **Allocation:** Total proposed size of fund is Rs. 1 lakh crore. Currently allocated ₹57,381 crore.
- **Source of Funds:** Created through the Supplementary Demand for Grants approved by Parliament (under Article 115 for additional expenditure beyond the Union Budget).

11. Securities and Exchange Board of India (SEBI)

Context:

SEBI has revamped its conflict-of-interest framework for top officials and introduced measures to improve ease of doing business.

About SEBI:

- Type: Statutory regulator of securities and commodity derivatives market in India.
- Establishment: Set up in 1988; given statutory powers under SEBI Act, 1992, under the Ministry of Finance.
- Headquarters: Mumbai (regional offices in Delhi, Kolkata, Chennai, Ahmedabad).
- Role: Exercises quasi-legislative, executive, and judicial powers.
- Objectives: Protect investors, regulate market intermediaries, promote market development.

12. IRDAI**Context:**

The Insurance Regulatory and Development Authority of India (IRDAI) has proposed a Public Insurance Registry (PIR) to improve data sharing in the insurance sector.

Public Insurance Registry (PIR):

- Proposed consent-driven digital infrastructure to integrate insurance data across the policy lifecycle (issuance to claims & grievance redressal)
- Aims to reduce information asymmetry, enable interoperable data sharing, and improve fraud detection & regulatory oversight; To be linked with Bima Sugam platform.

About IRDAI:

- Statutory body under IRDA Act, 1999. Autonomous regulator under Ministry of Finance. Headquarters: Hyderabad
- Regulates insurance, reinsurance, and intermediaries. Ensures policyholder protection, fair practices, and financial stability

13. Bharat Audyogik Vikas Yojana (BHAVYA)**Context:**

The Union Cabinet has approved the BHAVYA scheme with an outlay of ₹33,660 crore to develop 100 industrial parks across India.

About BHAVYA:

- Type: Industrial infrastructure development scheme (plug-and-play parks)
- Objective: Create “future-ready” industrial parks with multimodal connectivity under PM Gati Shakti
- Target: 100 industrial parks across the country by 2032
- Implementation: Involves Centre, State governments, and private sector
- Financial Support: Up to ₹1 crore per acre by Union Government
- Land Norms: Minimum approx 100 acres (25 acres for hilly/Northeast); maximum 1,000 acres
- Timeline: Scheme duration 6 years (from 2026–27)
- Aim: Improve logistics efficiency, ease of doing business, and manufacturing productivity

SCIENCE AND TECHNOLOGY**1. Helium****Context:**

Rising geopolitical tensions in the Gulf region have raised concerns over global helium supply affecting MRI-based diagnostics.

About Helium:

- Type: Noble gas (Group 18), atomic number 2, chemically inert ($1s^2$ configuration).
- Physical Property: Has the lowest boiling point (-268.9°C) among all elements.
- Density: Second lightest element; non-flammable and non-toxic gas.
- Source: Formed by alpha decay of uranium and thorium in Earth's crust.
- Extraction: Obtained from natural gas deposits via fractional distillation.
- Key Use: Used in cryogenics to cool MRI superconducting magnets (approx -269°C).
- Applications: Used in rocketry (fuel pressurization), deep-sea diving (Heliox), semiconductors, balloons.
- Special Feature: Exhibits superfluidity (Helium II) near 2.17 K with zero viscosity.

2. Breast Cancer**Context:**

A new global analysis published in **The Lancet Oncology** projects a sharp rise in global breast cancer cases and mortality, with younger women increasingly affected.

About Breast Cancer:

- Uncontrolled growth of abnormal cells in breast tissue. Most common cancer among women globally.
- Can spread (metastasize) to lymph nodes and distant organs.

Risk Factors:

- Ageing population, Obesity, Physical inactivity, Alcohol consumption, Hormonal factors, Family history

Screening & Prevention:

- **Mammography** for early detection.
- Lifestyle modifications include regular physical activity, healthy body weight, reduced alcohol intake

Key Findings of the Study:**A Looming Crisis in India:**

- **Leading Cancer:** Breast cancer is the most common cancer among Indian women, accounting for approx 27% of all female cancers.
- **The "Age Shift":** Indian women are diagnosed **10 years younger** on average than their Western counterparts.
- **Stage at Diagnosis:** 50–70% of Indian patients present at **Stage III or IV**, compared to only 20% in the USA.
- **Hotspots:** Hyderabad recorded the highest age-adjusted incidence rate in India (54 per 100,000) in 2025-26.

3. Meningococcal Disease**Context:**

Following suspected deaths in Shillong, the Meghalaya Government has activated the **Integrated Disease Surveillance Programme (IDSP)** to contain *Neisseria meningitidis*.

The Pathogen: *Neisseria meningitidis*

- **Nature:** A Gram-negative bacterium; humans are the only natural reservoir.
- **Transmission:** Direct contact via **respiratory droplets** or oral secretions (coughing, kissing, sharing utensils).

- **Incubation:** Usually 3–4 days (range 2–10 days).
- **Key Risk:** High fatality rate if untreated; survivors may face long-term neurological damage or limb loss.

Clinical Presentation:

Meningococcal disease primarily manifests in two ways:

1. **Meningitis:** Inflammation of the brain/spinal cord membranes. Symptoms include neck stiffness, sudden high fever, severe headache, photophobia, and confusion.
2. **Meningococcemia (Septicaemia):** Bloodstream infection. Symptoms include Fatigue, vomiting, cold hands/feet, and a characteristic **non-blanching petechial rash** (purple spots).

Public Health Response:

- **Surveillance:** Active case searching and contact tracing by the District Surveillance Unit.
- **Chemoprophylaxis:** Administration of antibiotics (usually Rifampicin or Ciprofloxacin) to close contacts to "clear" asymptomatic carriage.
- **Lab Review:** Confirmation via Cerebrospinal Fluid (CSF) analysis or blood cultures.
- **Protocol:** Isolation of suspected cases and strict adherence to respiratory hygiene in crowded settings (e.g., hostels/training centers).

4. Nucleic Acid Testing (NAT)

Context:

The Supreme Court has agreed to examine the feasibility of making **Nucleic Acid Testing (NAT)** mandatory in blood banks to ensure safe blood transfusion, particularly considering reported HIV infections linked to contaminated transfusions.

About NAT:

- **Nucleic Acid Test (NAT)** is a highly sensitive **molecular diagnostic technique**.
- It detects the **genetic material (RNA/DNA)** of pathogens in donated blood.
- Used for early detection of transfusion-transmitted infections (TTIs).

Objective: To ensure **safe and infection-free blood transfusion**, thereby protecting the **Right to Life** under Article 21.

Pathogens Detected: NAT is primarily used to detect HIV, Hepatitis B Virus (HBV), Hepatitis C Virus (HCV).

NAT vs. ELISA (The "Window Period" Advantage):

The "Window Period" is the time between initial infection and when a test can detect it.

Feature	ELISA (Traditional)	NAT (Advanced)
Detection Basis	Detects Antibodies or Antigens.	Detects Viral RNA/DNA (Genetic material).
Window Period	Long (weeks to months).	Very Short (days).
Sensitivity	Lower in early stages of infection.	Ultra-high; detects very low viral loads.
False Negatives	Higher risk during the window period.	Significantly minimized.

Implementation Issues:

- Higher cost compared to ELISA.
- Infrastructure and technical expertise required.
- Not uniformly implemented across all States.

5. WHO Pandemic Agreement

Context:

Countries are negotiating implementation rules of the WHO Pandemic Agreement, including mechanisms for pathogen sharing and equitable benefits.

About the Agreement:

- **Adopted:** By the World Health Assembly in May 2025 after lessons from the COVID-19 pandemic.
- **Objective:** Strengthen global cooperation on pandemic prevention, preparedness and response.
- **PABS Mechanism:** Creates a Pathogen Access and Benefit-Sharing (PABS) system to share pathogen samples and genetic sequence data globally.
- **Benefit Sharing:** Countries providing pathogen materials receive monetary and non-monetary benefits from vaccines, diagnostics and medicines.
- **Implementation:** An Intergovernmental Working Group (IGWG) is finalizing operational rules before countries sign and ratify the treaty.
- **Group for Equity:** Coalition of 29 developing countries (including India, Brazil and South Africa) advocating legally binding provisions, equitable vaccine access and fair sharing of pandemic benefits.

6. Exercise Vayu Shakti-2026

Context:

The Indian Air Force (IAF) conducted Exercise Vayu Shakti-2026 at the Pokhran Field Firing Range, Rajasthan.

Details:

- A firepower demonstration exercise of the IAF.
- **Location:** Pokhran Field Firing Range, Jaisalmer
- **Theme:** "Achook, Abhedya aur Sateek"
- **Scale:** 130+ aircraft (fighters, transport, helicopters)
- **Chief Guest:** President Droupadi Murmu

7. INS Anjadip

Context:

The Indian Navy commissioned **INS Anjadip**, the fourth **Anti-Submarine Warfare Shallow Water Craft (ASW-SWC)**, to enhance India's coastal anti-submarine and littoral security capabilities.

About INS Anjadip:

- A 77-metre-long, indigenously designed and built ASW-SWC.
- Built by Garden Reach Shipbuilders & Engineers (GRSE), Kolkata.
- Constructed at Kattupalli (Tamil Nadu).
- Named after Anjadip Island off the Karwar coast (Karnataka).

Key Features:

1. **Advanced ASW Suite:** Integrated indigenous weapon-sensor package featuring shallow-water sonars, lightweight torpedoes, and anti-submarine rockets.
2. **Littoral Specialist:** High-agility design optimized for precision targeting in shallow coastal waters.

3. **Core Mission:** Real-time detection, tracking, and neutralization of enemy submarines in coastal zones.
4. **Multi-Role Versatility:** Supports coastal surveillance, low-intensity maritime operations, and Search and Rescue (SAR).

8. Superconductivity

Context:

Researchers have achieved a record increase in superconducting temperature using a new pressure-based technique.

About Superconductivity:

- Phenomenon where a material shows zero electrical resistance and expels magnetic field (Meissner effect)
- Occurs typically at very low temperatures (near absolute zero)
- High-temperature superconductors work at relatively higher temperatures but still require cooling
- Recent studies achieved superconductivity up to around -13°C under extremely high pressure
- Applications: lossless power transmission, MRI, maglev trains, efficient electric motors
- Limitation: Requires very high pressure, making large-scale use difficult
- Key challenge: Achieving superconductivity at room temperature and normal pressure

9. Large Hadron Collider (LHC)

Context:

Scientists at CERN have discovered a new particle “Xi-cc⁺⁺” using the Large Hadron Collider.

Xi-cc⁺⁺ Particle:

- It is 4× heavier than a proton.
- Validates Standard Model predictions on quark interactions.

About Large Hadron Collider (LHC):

- World’s largest particle accelerator at CERN (Geneva, Switzerland–France border), built in a 27 km underground circular tunnel.
- Accelerates protons to near speed of light for high-energy collisions.
- Uses superconducting magnets maintained at 1.9 K (-271.3°C) via cryogenics.
- Recreates conditions of the early universe (Big Bang).
- Discovered Higgs Boson (2012) and several hadrons.
- Hadron: A quark-based composite particle bound by the strong nuclear force.

ENVIRONMENT

1. Project Cheetah

Context:

- African cheetahs released in Kuno National Park (Madhya Pradesh) have dispersed into the Gandhi Sagar Wildlife Sanctuary landscape (MP–Rajasthan region), reflecting natural movement across habitats.
- Recently, additional cheetahs translocated from Botswana have increased India’s total cheetah population to around 48.

About Project Cheetah:

- It is the world's first intercontinental large wild carnivore translocation project.
- The objective is the reintroduction of cheetahs in India, after they were declared extinct in 1952.
- The African cheetah is classified as **Vulnerable**, while the Asiatic cheetah is **Critically Endangered**, now restricted to Iran with an estimated population of 30–50 individuals.

**Institutional Framework**

- The **National Tiger Conservation Authority (NTCA)** is the nodal implementing agency.
- The project is governed internationally under **CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora)**.

Key Features of the Project

- The **Kuno–Gandhi Sagar landscape plan** anticipates inter-state movement of cheetahs between Madhya Pradesh and Rajasthan.
- Cheetahs are **satellite-tracked using radio collars** for real-time monitoring.
- Management is carried out by **joint inter-state teams and wildlife experts**.

Behavioural Aspect:

- **Long-distance dispersal** is a natural behaviour of cheetahs as they explore territory and search for suitable habitats.
- Movement from Kuno to Gandhi Sagar reflects **normal ecological adaptation**, not abnormality.

Indian Sites:

- Major sites include **Kuno National Park** and the **Gandhi Sagar Wildlife Sanctuary landscape**.

Significance:

- **Ecological:** Helps in restoring the **grassland and savanna ecosystems** in India.
- **Diplomatic:** Strengthens **South-South cooperation** through international conservation partnerships.

Limitations / Issues:

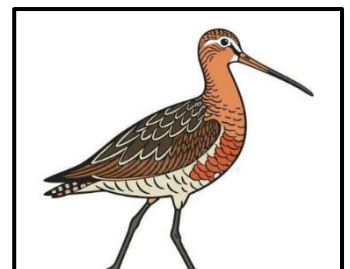
- **Adaptation challenges** such as mismatch in seasonal patterns (e.g., winter coat development) and acclimatization to Indian conditions.
- **Survival concerns** due to mortality observed in earlier batches from Namibia and South Africa, requiring improved management strategies.

2. Hudsonian Godwit**Context:**

Global conservation efforts are being strengthened to protect the Hudsonian Godwit due to risks to its long-distance migratory routes.

About Hudsonian Godwit:

- Type: Long-distance migratory shorebird (family Scolopacidae).
- Scientific Name: *Limosa haemastica*.
- Habitat: Breeds in subarctic Alaska and Canada; winters in southern South America.
- Migration: Undertakes approx 30,000 km annual round-trip migration.
- Route: Uses key wetland stopover sites (e.g., James Bay), showing migratory connectivity.
- Feeding: Probing feeder, consumes invertebrates like mollusks and crustaceans.
- Conservation Status: **Vulnerable** (IUCN Red List).



3. Vela carli**Context:**

A freshwater crab species (*Vela carli*) found in Silent Valley exhibited both male and female biological traits.

About Gynandromorphy:

- **Definition:** A biological condition where an organism shows both male and female characteristics.
- **Cause:** Results from genetic or chromosomal anomalies during early cell division.
- **Pattern:** Often shows bilateral division (one half male, other female).
- **Occurrence:** Reported in some insects, birds, crustaceans, and rare vertebrates.
- **Rarity:** Extremely rare in nature, especially in vertebrates.
- **Related Concept:** Different from hermaphroditism (e.g., earthworms, snails possess both reproductive organs simultaneously).
- **Silent Valley:** Located in Palakkad district of Kerala, it is a tropical evergreen rainforest region forming part of the Nilgiri Biosphere Reserve.

**4. Eurasian Diving Duck (Smew)****Context:**

The 7th waterbird census (January 2026) in **Kaziranga National Park** recorded the first-ever sighting of the Eurasian diving duck (Smew).

Species Profile: Smew (*Mergellus albellus*)

- **Classification:** Smallest Eurasian diving duck (Family: *Anatidae*).
- **Breeding Ground:** Eurasian Taiga (Northern Europe/Asia).
- **Status in India:** Rare winter visitor; typically stays in Northern/Central India
- **2026 Record:** First-ever sighting in **Kaziranga** (Rowmari–Donduwa wetlands).
- **Role:** **Indicator Species** for wetland health and climate-driven range shifts.

**Ecological Significance & Concerns:**

- **Range Shift:** The Smew's presence in Assam suggests **altered migration patterns** or habitat stress in traditional zones, likely due to climate change.
- **Global Population:** approx 130,000 (Trend: **Declining**).
- **Threats:** Habitat loss, human disturbance, and wetland degradation.
- **Migratory Route:** **Central Asian Flyway (CAF)**.
- **IBA Status:** Kaziranga is an **Important Bird Area** identified by BirdLife International.
- **Habitat:** Prefers freshwater lakes, sheltered wetlands, and floodplains.

BIRDLIFE INTERNATIONAL**Core Identity**

- **Nature:** World's largest **global** partnership of NGOs (not an inter-governmental body).
- **Established:** 1922 (as ICBP); HQ in Cambridge, UK.
- **India Partner:** Bombay Natural History Society (BNHS)
- **Flagship Program:** Important Bird & Biodiversity Areas (IBA)

Conservation Authority

- **IUCN Red List:** Official scientific authority for all bird species on the Red List.
- **IBA Program:** Identifies sites of global significance for bird conservation using standardized criteria (Threatened species, Congregations, etc.).
- **Flyways:** Lead role in the **Central Asian Flyway (CAF)** and protecting migratory routes.

Important Bird Areas (IBA) Criteria

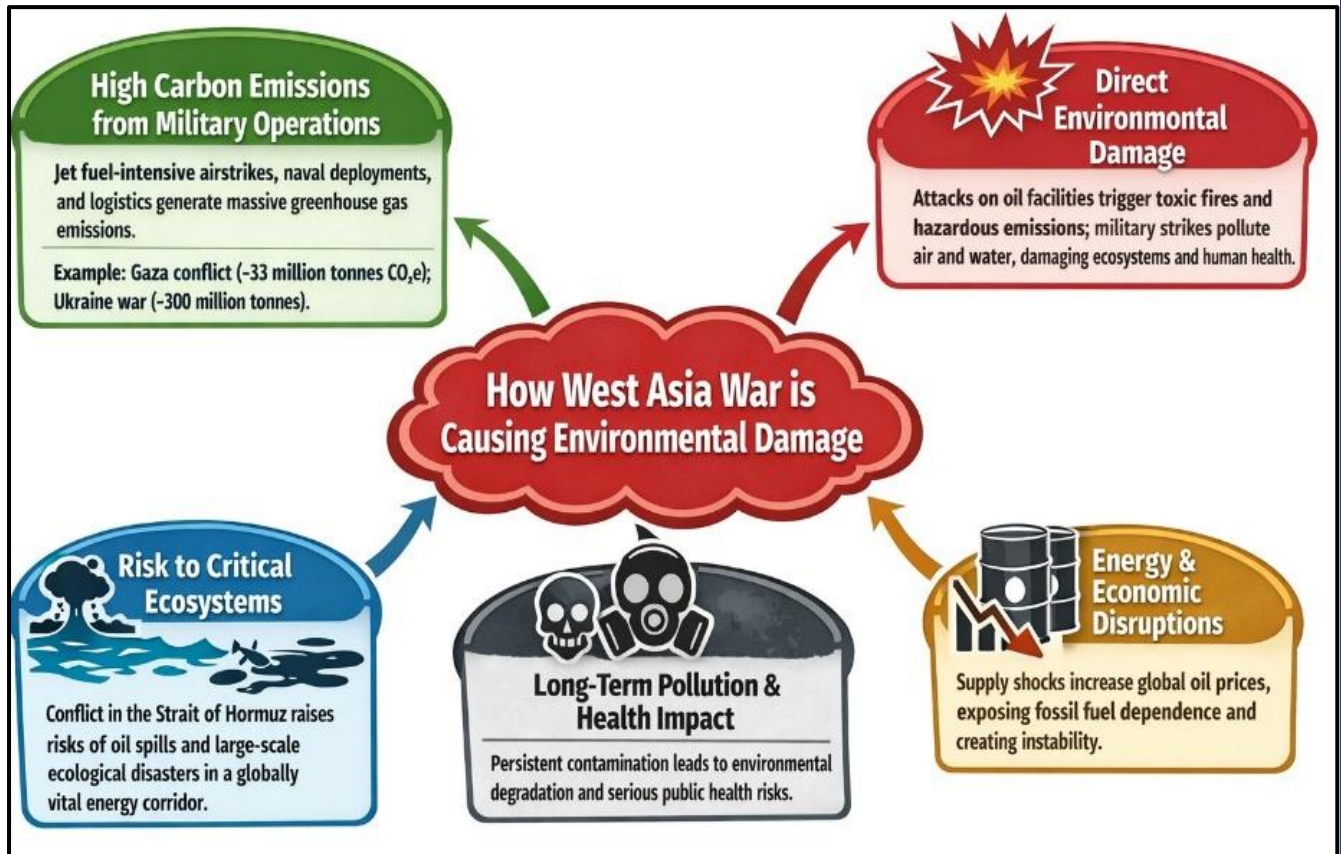
A site is an IBA if it holds:

- ☐ Globally Threatened species (CR, EN, VU).
- ☐ Restricted-range or Biome-restricted species.
- ☐ Large Congregations (e.g., 1% of a global population).

5. Environment: Yet Another Casualty of The West Asia War

Context:

The West Asia conflict is not only a humanitarian crisis but also a major environmental challenge, with military operations, fossil fuel use, and ecosystem destruction significantly increasing emissions and ecological damage.



6. Oleum Gas

Context:

A major **oleum gas leak** from a chemical unit in **Palghar district (MH)** led to the evacuation of over 2,600 people after dense white fumes spread across nearby areas.

Nature of the Substance:

- Definition:** Oleum is Fuming Sulphuric Acid. It is a solution of Sulphur Trioxide (SO₃) dissolved in Sulphuric Acid (H₂SO₄).
- Physical Appearance:** An oily, colorless-to-dark liquid that emits **dense white fumes** upon exposure to air.

The "White Fume" Phenomenon:

- Reaction:** When Oleum leaks, the dissolved SO₃ gas reacts instantly with **atmospheric moisture**.
- Result:** This creates a fine mist of **Sulphuric Acid aerosol**. The "white smoke" is actually a cloud of tiny, highly corrosive acid droplets.
- Heat Generation:** The reaction is **highly exothermic** (releases significant heat), which can further volatilize the liquid and spread the plume.

Impact Profile:

Category	Effects
Health	Severe corneal burns (eyes), pulmonary edema (fluid in lungs), and chemical skin burns.
Environment	Rapid acidification of local soil/water; "acid burn" on surrounding vegetation.
Infrastructure	Highly corrosive to metals, electronics, and stone (calcium carbonate).

7. Domestic Sourcing of Solar Wafers & Ingots**Context:**

The government has extended domestic sourcing norms for solar equipment to include wafers and ingots from June 2028.

About Domestic Sourcing Policy:

- Solar Module life cycle: polysilicon → ingot → wafer → cell → module.
- Upstream (polysilicon–ingot–wafer) is weak and import-dependent, while downstream (cell–module) is relatively strong in India.
- Aims to reduce import dependence (especially on China) for wafers and ingots.
- ALMM (Approved List of Models & Manufacturers): Maintained by MNRE, lists eligible domestic manufacturers for government-backed projects.
- Introduces ALMM List-III (wafers) along with List-I (modules) and List-II (cells).
- Mandates cascading sourcing → modules must use domestic cells, and cells must use domestic wafers from approved lists.

8. Khavda Solar Project**Context:**

NTPC Renewable Energy Ltd has commissioned 165 MW from the 1200 MW Khavda-II solar project in Gujarat.

About Khavda Solar Project:

- Located in Khavda (Kutch district, Gujarat) near the Rann of Kutch.
- Part of the Gujarat Hybrid Renewable Energy Park (solar + wind).
- Planned capacity: approx 30 GW expected to be the largest hybrid renewable energy park globally.
- Implemented by Gujarat govt agencies (GUVNL/GPCL) with NTPC Renewable Energy Ltd.

9. World Meteorological Organization (WMO)**Context:**

The WMO highlighted rising “surplus heat” and record climate indicators in its latest State of the Global Climate report.

Key Facts:

- Establishment: 1950; specialized UN agency headquartered in Geneva, Switzerland
- Membership: 193 Member States and 6 Territories; India is a founding member
- Mandate: Coordinates meteorological, climatological, and hydrological services globally

- Data Role: Promotes free and unrestricted exchange of weather and climate data
- Reports: Publishes State of the Global Climate Report and Global Annual to Decadal Climate Update
- Recent Findings: Record global temperatures (approx 1.45–1.54°C above pre-industrial levels); ocean heat content at record highs
- Initiatives: Early Warnings for All (EW4All) and Global Framework for Climate Services (GFCS)

10. Forest Survey of India (FSI)

Context:

The Forest Survey of India has halted the AI-based fortnightly deforestation alerts issued to states through the Anavaran portal.

Anavaran Deforestation Alert System:

- AI-based deforestation monitoring system developed by FSI.
- Operational since January 2024 as a pilot project.

Forest Survey of India (FSI):

- Nodal national organisation responsible for assessment and monitoring of India's forest resources.
- Functions under the Ministry of Environment, Forest and Climate Change.
- Headquartered in Dehradun.
- Established in 1981, succeeding the Pre-Investment Survey of Forest Resources (PISFR).
- Major Reports: India State of Forest Report (ISFR) - Published biennially, National Forest Inventory (NFI) reports.

Geography

1. Strategic Petroleum Reserves (SPR)

Context:

India's strategic petroleum reserve capacity of approx 5.33 million tonnes is only partially filled, with about 36% remaining unutilized.

About SPR:

- Emergency crude oil stockpile for energy security during supply disruptions. Stored in underground rock caverns for safety and strategic security.
- Concept emerged after the 1973 Oil Crisis.
- Maintained by Indian Strategic Petroleum Reserves Limited (ISPRL).
- **Storage Locations:** Phase-I: Visakhapatnam, Mangaluru, & Padur. Phase-II Expansion: Proposed at Chandikhol (Odisha) and Padur (expansion); Future sites include Bikaner (Rajasthan) and Rajkot (Gujarat).

2. Lipulekh Pass

Context:

Border trade between India and China via Lipulekh Pass is set to resume after a six-year hiatus.

Key Facts:

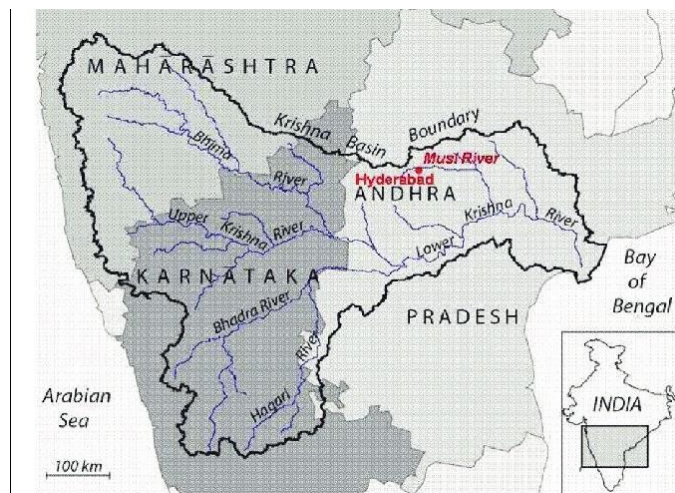
- Location: Pithoragarh (Uttarakhand), Kumaon Himalayas; approx 5,200 m; near India–Nepal–China (Tibet) tri-junction
- Connectivity: Provides access to Tibet Autonomous Region of China
- Border Trade: One of three India–China trade routes (along with Nathu La and Shipki La)
- Operation: Seasonal trade (June–September) with limited, regulated goods
- Other Significance: Route for Kailash Mansarovar Yatra; linked to India–Nepal Kalapani dispute

**3. Musi River****Context:**

The Telangana government is implementing the Musi Riverfront Development Project along the Musi River in Hyderabad.

About Musi River:

- Origin: Ananthagiri Hills, located on the eastern edge of the Deccan Plateau.
- Course: Flows eastward through Hyderabad.
- Tributary: The Musi meets the Krishna River at Wadapally
- Reservoirs: Osman Sagar and Himayat Sagar built for flood control and drinking water supply.

**4. Geomagnetic Reversal****Context:**

A recent study published in Communications Earth & Environment suggests that some geomagnetic reversals may last up to 70,000 years, longer than earlier estimates.

About Geomagnetic Reversal:

- Definition: Process in which Earth's magnetic north and south poles interchange positions.
- Origin: Caused by disturbances in the geodynamo—the motion of molten iron in the Earth's outer core that generates the magnetic field.
- Occurrence: Hundreds of reversals have occurred during Earth's geological history.

- Evidence: Alternating magnetic polarity recorded in basaltic rocks and ocean-floor sediments, forming magnetic stripes along mid-ocean ridges (e.g., Mid-Atlantic Ridge).
- Duration: Earlier estimates suggested reversals lasted approx 10,000 years, but recent research indicates some may persist 18,000–70,000 years.
- Nature: Reversal is a gradual process during which the magnetic field weakens and may temporarily develop multiple magnetic poles.

5. Mapping in News:

- **South Pars gas field (Iran) & Ras Laffan LNG hub (Qatar):** South Pars is the world's largest gas field (shared by Iran/Qatar), Ras Laffan is its primary Qatari LNG processing hub.



- **Diego Garcia:** Diego Garcia is a major US-UK military base in Indian ocean targeted during the ongoing West Asia conflict by Iran.



Miscellaneous

1. World Happiness Report

Context:

The World Happiness Report 2026 ranked Finland as the happiest country and flagged the adverse impact of excessive social media use on well-being.

About World Happiness Report:

- Published by UN Sustainable Development Solutions Network (SDSN).
- Uses self-reported life evaluation (0–10 scale).
- Key indicators: income, social support, life expectancy, freedom, generosity, corruption perception.
- Rankings use 3-year averaged data.
- India's Rank (2026): 126th.

2. United States Commission on International Religious Freedom (USCIRF)

Context:

The Ministry of External Affairs criticized the latest USCIRF report for presenting a distorted picture of India.

About USCIRF:

- Nature: Independent, bipartisan U.S. federal commission.
- Monitors religious freedom conditions globally and reports violations.
- Function: Recommends designation of Countries of Particular Concern (CPCs).
- Powers: Advisory only; recommendations are not binding on the U.S. government.
- Reports: Publishes annual reports submitted to the U.S. President and Congress.
- Concern on India: Highlighted alleged religious freedom violations and suggested targeted sanctions on certain entities.

3. World Obesity Atlas 2026

Context:

According to the World Obesity Atlas 2026, India ranks 2nd globally (after China) in the number of overweight and obese children aged 5–19 years.

About World Obesity Atlas:

- Publisher: World Obesity Federation.
- Nature: Global analytical report tracking obesity trends, health risks and projections.
- Coverage: Provides country-wise data and projections up to 2040 on overweight, obesity and related diseases.

Major Drivers of Childhood Obesity	Associated Health Risks
Ultra-processed foods & sugary drinks	Type-2 Diabetes
Sedentary lifestyle / physical inactivity	Hypertension
Urbanisation and lifestyle changes	Cardiovascular diseases
Aggressive marketing of unhealthy foods to children	Higher probability of adult obesity

4. World Athletics Indoor Championships 2028

Context:

Bhubaneswar (Odisha) has been selected to host the World Athletics Indoor Championships 2028.

About World Athletics Indoor Championships:

- Organized by World Athletics (global governing body for athletics). Held biennially (every 2 years).
- Features indoor track & field events (shorter tracks, typically 200 m indoor track).
- Includes events like sprints, hurdles, jumps, throws, combined events.
- India will host the event for the first time.

Additional information:

- India will also host the 2030 Commonwealth Games (Ahmedabad) and has bid for the 2036 Olympic Games (proposed Ahmedabad).