NEXT IAS

THE CRUX

June Issue; 2026

Chief Editor

B. Singh

CMD, NEXT IAS & MADE EASY Group

Published by:

MADE EASY Publications Pvt. Ltd.

Corporate Office: 44-A/4, Kalu Sarai, New Delhi-110016

Visit us at: www. madeeasypublications. org

☎ 011-45124660, 8860378007

E-mail: infomep@madeeasy. in

© Copyright 2026

MADE EASY Publications Pvt. Ltd. has taken due care in collecting the data before publishing this book. Inspite of this, if any inaccuracy or printing error occurs then MADE EASY Publications owes no responsibility. MADE EASY Publications will be grateful if you could point out any such error. Your suggestions will be appreciated. © All rights reserved by MADE EASY Publications Pvt. Ltd. No part of this book may be reproduced or utilized in any form without the written permission from the publisher.

Disclaimer: The views and opinions expressed in this magazine are those of the authors and do not necessarily reflect policy or position of CURRENT AFFAIRS Magazine or MADE EASY Publications. They should be understood as the personal opinions of the author/ authors. The MADE EASY assumes no responsibility for views and opinions expressed nor does it vouch for any claims made in the advertisements published in the Magazine. While painstaking effort has been made to ensure the accuracy and authenticity of the informations published in the Magazine, neither Publisher, Editor or any of its employee does not accept any claim for compensation, if any data is wrong, abbreviated, cancelled, omitted or inserted incorrect.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without either the prior written permission of the Publisher.

Compilation of UPSC relevant news from 1st June to 30th June 2026

Contents

Cover Story

Citizenship in India 6

Anti-Defection Law 9

Fundamental Right to Walk 12

FCRA Amendment Rules, 2026 14

Feature Articles

Inclusive Transformation 16

India–Nepal 18

India–Oman CEPA 20

Paper Leaks 22

G7 Summit 2026 24

Ecologically Sensitive Areas 26

Changing Weather Patterns 28

Microfinance vs Meso-Finance 29

World's Top Ship Recycling Nation 30

Ashtalakshmi 31

India-Slovakia 33

SIPRI Yearbook, 2026 35

Digital Sovereignty 37

National Food Security (Amendment) Bill, 2026 39

UNSC's Permanent Membership 41

India–Iran 43

India–Seychelles 45

Disclaimer:
MADE EASY Publications Pvt. Ltd. has taken due care in collecting the data before publishing this book. Inspite of this, if any inaccuracy or printing error occurs then MADE EASY Publications owes no responsibility. MADE EASY Publications will be grateful if you could point out any such error. Your suggestions will be appreciated. © All rights reserved by MADE EASY Publications Pvt. Ltd. No part of this book may be reproduced or utilized in any form without the written permission from the publisher.

Contents | In-Shorts

THE CRUX
June Issue; 2026

1. Polity & Governance

Jal Sanchay Jan Bhagidari Initiative....47
Mission Senehjori....47
Right to be Forgotten....48
FRA–PESA Task Force Controversy....48
Draft Regulations on Artificial Intelligence in Judiciary....49
National Awards for e-Governance 2026....49
Fire Safety Governance in India....50
PMRC Scheme, 2026....50
Internationalisation of Higher Education in India....51
PAC Flags Gaps in PMKVY....51
Victim Protection Plan for Human Trafficking Survivors....52
Economic Advisory Council to the Prime Minister (EAC-PM)....52
Jan Samarth Portal....53
Pradhan Mantri Surakshit Matritva Abhiyaan....53
Preventive Detention....53
Pradhan Mantri Ujjwala Yojana....54
State Finance Commissions (SFCs)....54
Prime Minister of India....55
Rules Governing Election Symbols in India....55
Viksit Bharat–Guarantee for Rozgar and Ajeevika Mission Gramin (VB-G RAM G)....56
Frequent Disruptions in Legislative Houses....56
AFSPA, 1958....57
Draft Telecommunications (Television, Radio and Associated Services) Rules, 2026....57
Telegram Ban....58
Aadhaar Misuse....59
State Finances Report 2024–25....59
Nirbhay Chetna....60
SHe-Box 2.0 Portal under Mission Shakti....60
Abhigyan App....61
RSS and Legal Entity....61
Three-Language Formula in Education....61
Pre-Conception and Pre-Natal Diagnostic Techniques Act, 1994....62
Air Suvidha 2.0 Portal....62
Rural Internal Audit Portal....63
Delhi Electric Vehicle (EV) Policy 2.0....63
DIKSHA....64
PM Awas Yojana–Urban 2.0....64

2. International Relations

Shangri-La Dialogue....65
India-Australia Defence & Strategic Partnership....65
8th India-Indonesia Joint Commission Meeting....66
India-Venezuela Relations....66
AUKUS Alliance....67
Blue Helmets....67
Indian Ocean Rim Association (IORA)....68
Financial Action Task Force (FATF)....68
UN Military Gender Advocate of the Year Award....68
Protecting Indian Seafarers in the Gulf....69
BRICS Indore Declaration....70
Legal Brain Drain in India....70
Operation Amistad....71

3. Economy

Smart Seed Coating Technology....72
Seafood Exports....72
India's Cotton Mission....73
Index of Services Production....73
Navachar Mantra Initiative....74
Drunix Platform....74
Khurasani Imli....75
Zero Risk Weight for ECLGS 5.0 Loans....75
TReDS Platform....75
BHARATI Programme....76
Coal Exchange Rules, 2026....76
Acute Hunger in 13 HotSpots....77
Energy Transition Index (ETI) 2026....77
Higher Interest Rates to NRIs/PIOs FOREX....78
AI-Based Smart Warehousing System....78
Bilateral Investment Treaty Model....79

4. Environment

The Aravallis Prevents Desertification....80
Banni Grasslands....80
Biomimicry....81
Yellow-throated Marten....81
Surha Tal: India's 100th Ramsar Site....82
Summer Air Pollution and Ground-Level Ozone....82
UN Reports on AI Power Consumption....83
New Norm for Caustic Soda Waste water....83
Bandipur and Nagarahole Tiger Reserves....84
India's ABS Framework....84
Coral Translocation....85

5. Geography

Majuli Island....87
Padma Barrage....87
Caspian Sea....88
Estonia....88
Zimbabwe....88
Zojila Tunnel....89

6. Internal Security

RudraM-II Missile....90
Gallantry Awards....90
Project Kusha....90
Army Uniforms-2026 Manual....91
High Mobility Artillery Rocket System....91
Multi-Layered Ballistic Missile Defence....91
India's Record Defence Production....92

7. Science & Technology

Blood Test that Predicts Lung Cancer Early....93
Shigellosis Outbreak....93
Arbuscular Mycorrhizal (AM) Fungi....94
Emerging Power of Synthetic Biology....94
Chandrayaan-3 Reveals Deep Lunar Secrets from Shiv Shakti Point....95
GRAPES-3....95
100 Years of Solar Data....96
Indigenous AI Model Varya....96
High Energy Medical Cyclotron Project....97
Epichlorohydrin....98
Amplifying' Random Numbers....98
Cervavac's in NIP....99
World's fastest Supercomputer....99

8. Society

Evolution of LGBTQ+ Rights in India....101
Rung Community....102
Declining Fertility Rate in India....102

9. Cultural & History

Lokmata Ahilyabai Holkar (1725–95)....103
Birsa Munda (1875–1900)....103
India–China Joint UNESCO Nomination for Xuanzang's Records....103
NCERT Dancing Girl Row....104
GI Tag for Jharkhand's Traditional Heritage....104
Rakhigarhi....105
Kheer Bhawani Mela....105
Chapekar Brothers....106
Thewa Art....106
Maharshi Sushruta....106
Rani Lakshmibai....107

10. Miscellaneous

QS World University Rankings 2027....108
Food Planet Prize 2026....108
Operation DRISHTI....109
Pradhan Mantri Rashtriya Bal Puraskar....109
Padma Awards....109
Thunderstorms....110

Data Recap....111
Test Yourself....112

Advt.

MADE EASY

Leading Institute for ESE, GATE & PSUs

Announcing

CLASSROOM COURSES
for ESE 2027-28 • GATE 2027-28

- Classes by experienced & renowned faculties.
- Systematic subject sequence & timely completion of syllabus.
- Comprehensive & updated study material.
- Regular performance assessment through class tests.
- Exam oriented learning ecosystem.
- Result oriented teaching with comprehensive coverage.
- Concept of problems solving through workbooks.
- Similar teaching pedagogy in online and offline classes.

CLASSROOM COURSES — Admissions Open — Scan to Enroll

LIVE-ONLINE COURSES — Admissions Open — Scan to Enroll

TABLET COURSES — Admissions Open — Scan to Enroll

RECORDED COURSES — Admissions Open — Scan to Enroll

MADE EASY is the most trusted and preferred institute which has consistently produced **Top Rankers** in **ESE** & **GATE** with largest number of selections.

MADE EASY students top in ESE 2025

AIR 1 CE — MOHAMMAD SHAQUIB — Live Online Foundation Course

AIR 1 ME — NIMESH CHANDRA — Classroom Foundation Course

AIR 1 EE — RAJAN KUMAR — Classroom Foundation Course

AIR 1 E&T — UTKARSH PATHAK — Live Online Foundation Course

4 Streams, 4 Toppers, all 4 MADE EASY Students

39 out of 40 in Top 10 (All Streams) | **434** Selections out of **458** Vacancies | **95%** of Total Selections are from MADE EASY

MADE EASY students top in GATE 2025

AIR 1 CE — ABHAY SINGH — CLASSROOM COURSE

AIR 1 ME — RAJNEESH BIJARNIYA — CLASSROOM COURSE

AIR 1 IN — KAILASH GOYAL — CLASSROOM COURSE

AIR 1 ES — YASH JAIN — CLASSROOM COURSE

AIR 1 EE — PRADIP CHAUHAN — TEST SERIES

AIR 2 CE — HARSHVARDHAN SINGH — CLASSROOM COURSE

AIR 2 ME — GOLLANGI SATEESH — ONLINE COURSE

AIR 2 EE — KAILASH GOYAL — CLASSROOM COURSE

AIR 2 IN — SHANKHA BHATTACHARYA — TEST SERIES

AIR 2 EC — ANKUSH PHILIP JOHN — POSTAL PACKAGE & TEST SERIES

AIR 2 ES — TARUN YADAV — CLASSROOM COURSE

AIR 2 ES — JITESH CHOUDHARY — CLASSROOM COURSE

AIR 3 XE — ROHAN K. BISWAL — TEST SERIES

AIR 3 ME — NIMESH CHANDRA — CLASSROOM COURSE

AIR 3 CE — PANKAJ MEENA — CLASSROOM COURSE

AIR 3 PI — ADITYA KUMAR PRASAD — CLASSROOM COURSE

5 All India Ranks — CE, ME, IN, ES & EE

45 in Top 10 — Including all streams

399 in Top 100 — Including all streams

Corporate Office : 44 - A/1, Kalu Sarai, Near Hauz Khas Metro, New Delhi - 110016 | **Ph :** 9021300500

MADE EASY Centres : • Delhi • Bhopal • Hyderabad • Jaipur • Pune

www.madeeasy.in

NEXT IAS

BIG LEARNINGS MADE EASY

GENERAL STUDIES : FIRST STEP

Step-up for CSE after Class XII

This course is especially designed for undergraduate college going UPSC aspirants.

Key Features

- **NCERT Based Curriculum:**
  NCERT is a proven best resource to start building one's base in General Studies. It not only offers in-depth knowledge in easy language and helps in building fundamental concepts but is also closely aligned with syllabus of many competitive examinations.
- **Offline / Online Mode:**
  Classes will be conducted in Offline as well as online mode keeping in mind the requirements of college going students. Moreover, extra doubt clearing sessions and tests will be conducted at regular intervals during the course.
- **High Quality Teaching:**
  Lectures will be delivered by experienced and knowledgeable faculties. Lecture plan is designed to cover the basics from scratch in order to cater the requirements of fresher students.
- **Focus on Concepts and Analytical Ability:**
  Conceptual clarity and analytical ability is an essential condition for laying a strong foundation for success in Civil Services Examination. FIRST STEP course is designed to clear concepts and develop analytical ability of the students for the basic subjects which are part of Civil Services Exam.
- **Answer Writing & Strategy Sessions:**
  Good answer writing skill is essential to clear Mains (Stage-II) of CSE. FIRST STEP course aims to improve answer writing skills through specially designed sessions by CSE qualified rank holders at periodic intervals.
- **Provision of Academic Coach:**
  The course provides facility of interaction with highly qualified Academic Coaches for personalized and dedicated academic support, mentor-ship and guidance.
- **Performance Assessment:**
  Students will be assessed regularly through objective and subjective questions based tests at regular intervals for performance evaluation and continuous improvement.
- **Exclusive Study Materials.**
  High quality lectures will be supplemented with latest and updated study materials, made exclusively for FIRST STEP course students.

Subjects Covered: History, Geography, Economy, Polity, General Science & Technology, Environment & General Knowledge

Course Duration: 12 Months • Classes 4 days in a week (Tuesday, Wednesday, Saturday & Sunday)

Admission Open • For more details, visit : **www.nextias.com**

DELHI

Corporate Tower (Vivekananda House) :
6-B, Pusa Road, Metro Pillar No. 111,
Near Karol Bagh Metro Station,
New Delhi - 110060 | Ph : 8081300200

Tagore House: 27-B, Pusa Road,
Metro Pillar No. 118, Near Karol Bagh Metro,
New Delhi - 110060 | Ph : 8081300200

Tilak House : 42-B, Radio Colony,
Parmanand Marg, Mukherjee Nagar,
New Delhi-110009 | Ph : 9311667076

JAIPUR

6 & 7, 3rd Floor, Sree Gopal Nagar,
Gopalpura Bypass, Above Zudio Showroom
Jaipur, Rajasthan - 302015
Ph : 9358200511

PRAYAGRAJ

13A/1B KP Complex, Tashkand Marg Civil Lines,
Prayagraj, Uttar Pradesh - 211001
Ph: 9958857757

www.nextias.com

info@nextias.com

CITIZENSHIP IN INDIA

A senior official clarified that an Indian passport cannot challenge electoral list exclusions, stating it functions strictly as a travel document rather than definitive proof of citizenship.

Citizenship

- **Definition:** It is the legal relationship between an individual and a state, granting the person specific civil and political rights (like voting and property ownership) and imposing duties (such as paying taxes and obeying laws).

Citizenship vs. Nationality

- **Nationality:** Generally indicates a person's country of origin or belonging to a specific nation, often tied to a passport.
- **Citizenship:** It is the specific legal status granted by a government that determines active political and civil participation within that state.

Citizenship Definition by Various Thinkers

- **Aristotle:** Defined a citizen functionally as one who participates in deliberative or judicial administration, emphasizing public virtue and ruling while being ruled.
- **John Locke:** Argued that citizenship is about the state protecting pre-existing natural rights (life, liberty, property).
- **Thomas Hobbes:** Grounded citizenship in a social contract where individuals surrender some freedom in exchange for state security and protection
- **Immanuel Kant (Cosmopolitanism):** Pushed beyond the physical borders of the state, envisioning a moral universe where individuals are citizens of a world polity
- **Hannah Arendt** viewed citizenship as the most fundamental human right, famously dubbing it "the right to have rights". She argued that human rights are meaningless without a political community to enforce them, and that true freedom requires active, participatory engagement in the public sphere.

Core Concept behind Idea of Citizenship in India

- Citizenship is just status of a person's legal right over the country's but how long this status remains depends on parliament's law according to ARTICLE 11 of constitution
- To acquire certain documents in India, Citizenship is criteria
- Documents like **Aadhar Card, Passport, Voter ID, and PAN etc.** e.g. for filling UPSC FORM graduation degree is a criteria, but Filling UPSC form is not proof that you are graduated
- Citizenship determining factor in India is
  - Place of birth
  - Nationality of parents

Documents that Prove Indian Citizenship

Citizenship in India must establish by using documents relating to your date and place of birth, as well as your parentage

- **Birth Certificate:** The primary and most widely accepted proof of birthplace and parentage
- **Parent's Citizenship/Nationality Records:** Includes parent's birth certificates, Indian passports, or other official records verifying their Indian citizenship.
- **Citizenship Certificate:** Officially issued only to those who acquire citizenship through **Registration or Naturalization** (under Section 5 or 6 of the Citizenship Act).

Comparative Analysis

Feature	Census	National Population Register (NPR)	National Register of Citizens (NRC)
Primary Objective	To gather comprehensive socio-economic and demographic data for policymaking.	To create a comprehensive identity database of all usual residents in India.	To identify, document, and register all legitimate citizens of India.
Target Population	Covers every individual residing in India during the enumeration period.	Covers all "usual residents" (a person who has lived in an area for 6 months or intends to stay for 6 months or more).	Covers only those who can legally prove their Indian citizenship.
Data Types	Demographics, economic activity, housing conditions, literacy, etc.	Demographics along with specific biometric and identity details.	Proof of lineage and documents establishing citizenship.
Legal Backing	Census Act, 1948	Citizenship Rules, 2003 (framed under the Citizenship Act, 1955)	Citizenship Rules, 2003
Citizenship Status	Includes both citizens and foreign nationals currently residing in India.	Includes both citizens and foreign residents.	Excludes foreign nationals and illegal migrants.
Confidentiality	Highly confidential; data cannot be used to target individuals.	Data feeds into the central database for targeted service delivery.	Open to scrutiny; individuals must prove their citizenship status.

Documents that are NOT Proof of Citizenship

Government authorities (including the Ministry of External Affairs) have clarified that travel and identity documents do not confer or act as definitive proof of citizenship

- **Passport:** Primarily a *travel document* attesting to your nationality abroad, not a citizenship document.
- **Aadhaar, Voter ID, and PAN etc.:** These cards primarily establish your identity, residence, and electoral registration within the country, not your citizenship status.

Constitutional Provision of citizenship

Articles 5 to 11 of the Indian Constitution (Part II) outline the foundational provisions for acquiring, retaining, and regulating Indian citizenship at the time of the Constitution's commencement on January 26, 1950.

- **Article 5:** Grants citizenship at the commencement of the Constitution to individuals domiciled in India who were born in India, had either parent born in India, or had been ordinarily resident in India for at least five years.
- **Article 6:** Deals with the citizenship rights of individuals who migrated from Pakistan to India prior to the commencement of the Constitution, establishing distinct permits and registration timelines based on when they arrived.
- **Article 7:** Specifies that individuals who migrated from India to Pakistan after March 1, 1947, lost their Indian citizenship, though it allowed for a return under a specific resettlement permit system.
- **Article 8:** Extends citizenship rights to persons of Indian origin residing outside of undivided India, provided they registered with an Indian diplomatic or consular representative.
- **Article 9:** Enforces the principle of single citizenship by declaring that any person who voluntarily acquires the citizenship of a foreign state ceases to be an Indian citizen.
- **Article 10:** Guarantees that every person who is deemed an Indian citizen under the preceding articles shall continue to be a citizen, subject to any laws enacted by Parliament.
- **Article 11:** Grants Parliament the absolute power to regulate the right of citizenship by law, which subsequently led to the creation of the comprehensive.

The Citizenship Act, 1955

The Citizenship Act of 1955 is the principal legislation governing the acquisition and termination of Indian citizenship.

- **Acquisition of Citizenship:**
  - **By Birth:** Governed by strict rules to prevent illegal migration. Generally, anyone born in India on or after January 26, 1950, qualifies, but subsequent amendments mandate that at least one parent must be an Indian citizen and the other must not be an illegal migrant.
  - **By Descent:** Generally applies to individuals born outside India whose parents (or at least one parent) were Indian citizens at the time of their birth.
  - **By Registration:** Available to persons of Indian origin (PIO) who have ordinarily resided in India for a specific period, or to individuals married to an Indian citizen.
  - **By Naturalization:** Applies to foreigners (not being illegal migrants) who have resided in India or served the Government of India for a prescribed period, demonstrating good character and knowledge of an Indian language.
  - **By Incorporation of Territory:** If any new territory becomes a part of India, the Government of India specifies the persons of that territory who shall be citizens of India.
- **Loss of Citizenship:**
  - **Renunciation:** Any citizen of full age and capacity can declare to renounce their citizenship. Upon registration of the declaration, they cease to be an Indian citizen
  - **Termination:** If an Indian citizen voluntarily acquires the citizenship of another country, their Indian citizenship is automatically terminated, as India does not permit dual citizenship.
  - **Deprivation:** The Central Government can forcibly deprive a person of their citizenship if it was obtained by fraud, if the person has shown disloyalty to the Constitution of India, or if they unlawfully traded or communicated with an enemy during a war.

Previous Amendments to the Citizenship Act, 1955

- **1986:** Restricted citizenship by birth, requiring at least one parent to be an Indian citizen.
- **1992**: Allowed descent through a mother (passed to children outside India) if the mother was an Indian citizen at the time of birth.
- **2003**: Defined and penalized illegal migrants, and introduced the framework for the National Register of Citizens (NRC).
- **2005**: Introduced Overseas Citizen of India (OCI) provisions.
- **2015**: Merged the Persons of Indian Origin (PIO) and OCI card schemes.
- **2019**: Provided a fast-track pathway to citizenship for undocumented Hindus, Sikhs, Buddhists, Jains, Parsis, and Christians who fled religious persecution in Pakistan, Bangladesh, and Afghanistan and entered India on or before December 31, 2014.

Supreme Court Judgements on Indian Citizenship

- **Izhar Ahmad Khan v. Union of India (1962):** It upheld the constitutional validity of Section 9 and Schedule III of the Citizenship Rules, which dictate that acquiring a foreign passport serves as conclusive proof of the termination of Indian citizenship.
- **Sarbananda Sonowal v. Union of India (2005):** The Court struck down the Illegal Migrants (Determination by Tribunals) Act of 1983, ruling that the specific procedures applied only in Assam created an "insurmountable hurdle" for the deportation

of undocumented immigrants, thus violating the Union's duty to protect states from external aggression.

- **Pranav Srinivasan v. Union of India (2024):** The Court ruled on the citizenship rights of children born to parents who acquired foreign nationality. It clarified that automatic termination of Indian citizenship under Section 9(1) of the Act, due to the acquisition of a foreign passport, does not equate to "voluntarily renouncing" citizenship, impacting a child's right to resume Indian citizenship upon reaching adulthood.
- **In Re: Section 6A of the Citizenship Act, 1955 (2024):** In a 4:1 majority verdict, the Supreme Court upheld the constitutionality of Section 6A. This provision granted Indian citizenship to immigrants who entered Assam from Bangladesh before the cut-off date of March 25, 1971, which was a core component of the historic Assam Accord.

Global Citizenship Documentation by Region

- **United States:** U.S. citizenship is primarily proven with a U.S. birth certificate, a Consular Report of Birth Abroad (CRBA), a Certificate of Citizenship, or a Certificate of Naturalization. A valid U.S. passport is also universally accepted for most routine and legal processes.
- **European Union:** EU member states rely heavily on official **National Identity Cards**, which explicitly state the holder's nationality. Passports are also universally accepted, but many citizens prefer to use their government-issued ID cards for daily administrative and domestic tasks.
- **United Kingdom:** British citizenship is proven using a British passport, a UK birth certificate (combined with parents' immigration status if born after 1983), or a Certificate of Registration/Naturalization.
- **Australia & New Zealand:** Citizenship is proven by a Citizenship Certificate, a birth certificate (if born prior to specific cutoff dates), or a valid, unexpired national passport.

Conclusion

- Foundational proof of citizenship differs entirely from domestic "proof of identity" or "proof of residence". ***For example***, in India, documents like the Aadhar card, Voter ID, and PAN card only serve as proof of identity and local residence, and cannot independently be used to claim citizenship status.
- Definitive citizenship there is governed strictly by the foundational rules of the Citizenship Act, verified through birth and descent records.

ASSAM ACCORD AND SPECIAL INTENSIVE REVISION

The Assam Accord (1985)

- It was a tripartite Memorandum of Settlement aimed at resolving the contentious issue of illegal migration from Bangladesh into Assam.
- **Key Pillars:**
  - **Background:** Signed on Aug 15, 1985, by the central/state governments and student leaders (AASU/AAGSP) to end the 6-year Assam Movement.
  - **Citizenship Cut-offs:** Established **March 24, 1971,** as the cutoff for detecting foreigners, with varying citizenship rights based on entry date.
  - **Clause 6:** Focuses on protecting the cultural, social, and linguistic identity of the "Assamese people" through legislative and constitutional safeguards.
- **Recent Developments**
  - **Section 6A Ruling:** The Supreme Court recently upheld the constitutionality of Section 6A, which implemented the Accord's cut-off dates within the Citizenship Act.
  - **Clause 6 Implementation:** Reviewing the Justice Biplab Sarma Committee report (2020) for defining and protecting indigenous groups.
  - **Data Revealed in the Legislative Assembly:** The state government disclosed in the state assembly that 1,72,673 illegal foreigners have been officially detected under the Assam Accord framework, with 31,789 individuals deported or repatriated so far.

Special Intensive Revision (SIR) vs. Citizenship

- The debate over SIR vs. Citizenship centers on whether the ECI can investigate and verify voters' citizenship while updating electoral rolls. This process prompted a landmark Supreme Court of India ruling in May 2026.
- **Key differences and debates in this issue include:**
  - **Scope of Authority:** The ECI is constitutionally mandated to prepare and update accurate electoral rolls under the Representation of the People Act, which requires removing non-citizens.
    - However, the Supreme Court ruled that while the ECI can scrutinize rolls to fulfill electoral purposes, it does not possess the legal authority to formally determine or revoke a person's Indian citizenship.
  - **Burden of Proof:** Historically, being on an electoral roll carried a presumption of citizenship. During SIR drives, individuals can be asked to provide documentary proof verifying their citizenship, shifting the burden onto the citizen.
  - **`The "Citizenship Determination" Process:** Indian law lacks a single conclusive document that proves citizenship. Under the Supreme Court's directives, if the ECI strikes a voter's name off the list due to unresolved citizenship doubts, they cannot arbitrarily deport the individual; instead, they must refer the case to the competent authorities (such as the Ministry of Home Affairs or Foreigners Tribunals).

ANTI-DEFECTION LAW

Recently legislators from AAP switched to BJP and many similar stances in several states have been reported. This highlights the shortcoming in Tenth Schedule i.e. Antidefection law.

Defection

- Under the anti-defection law, defined in the Tenth Schedule of the Indian Constitution, defection is the act by which an elected Member of Parliament (MP) or Member of Legislative Assembly (MLA) is disqualified from their seat for switching political allegiance.
- Trust of people weakens and Bigger parties dominate over smaller parties.

Anti-Defection

It is a preventive measure inserted in the Constitution through the 52nd Constitutional Amendment Act (CAA), 1985 under the Rajiv Gandhi Government.

- **52nd Constitutional Amendment Act, 1985:**
  - Added the Tenth Schedule.
  - **Articles amended:** Article 101; Article 102; Article 190; Article 191
- **Ensuring Political Stability:** It prevents frequent floor-crossing and unprincipled party-hopping which frequently destabilized governments and hindered legislative progress.
- **Upholding Party Discipline:** It aims to strengthen political parties by ensuring that elected members adhere to the party mandate and do not vote or abstain against their party's official whip.
- **Curbing Political Corruption:** By penalizing arbitrary party switching, the law seeks to minimize the corrupting influence of money and lucrative promises, such as ministerial berths, used to poach legislators.
- **Honoring Voter Mandate:** It respects the electorate's choice by ensuring that a legislator, elected on a specific party's ticket, cannot arbitrarily abandon that party without risking their seat in the House.

Classification of Political Parties

- **Based on Party System:**
  - One-Party System – China, Cuba
  - Two-Party System – USA
  - Multi-Party System – India
- **Based on Electoral Recognition:**
  - National Party
  - State Party
  - Registered Unrecognized Political Parties

A party is recognized as a National Party if it satisfies any of these conditions:

1. Recognized as a State Party in at least four states.
2. Secures at least 6% of valid votes in four or more states in a general election (Lok Sabha or Assembly) and wins at least 4 Lok Sabha seats.
3. Wins at least 2% of total Lok Sabha seats, with candidates elected from at least three different states

A party is recognized as a State Party if it meets any of these criteria in a specific state:

1. Wins at least 3% of the total Assembly seats or a minimum of 3 seats, whichever is higher.
2. Wins at least 1 Lok Sabha seat for every 25 seats allocated to the state (or fraction thereof).
3. Secures 6% of valid votes in the state in a general election (Lok Sabha or Assembly) and wins 1 Lok Sabha seat or 2 Assembly seats.
4. Secures at least 8% of the total valid votes in the state in a general election, under liberalized criteria

Concept of Registered Political Party and Recognized Political Party

- **Registered Unrecognized Party (RUPP):**
  - A newly formed party that has completed the basic registration process with the Election Commission of India (ECI) but has not met the conditions to become a State Party or National Party.
  - **Registration:** Section 29A of the Representation of the People Act, 1951.
- **Recognized Party:**
  - A registered party that has secured the required vote share or seat count in previous Lok Sabha or State Legislative Assembly elections.
  - **Recognition:** Election Symbols (Reservation and Allotment) Order, 1968.

Constitutional Provisions

Disqualification:

I. **Elected Member:** A member is disqualified if
   - **Voluntary Resignation:** If an elected member voluntarily gives up their membership in the political party on whose ticket they were elected..
   - **Violation of Party Whip:** If they vote or abstain from voting in the House contrary to any directive (whip) issued by their political party without prior permission.

II. **Independent Member:** If an independently elected member joins any political party after the elections.

III. **Nominated Member:** If a nominated member joins any political party after the expiry of six months from the date they take their seat in the House.

Exceptions:

Anti-defection provisions do not apply in the following cases:

I. **Merger:** If a party merges with another, but only if at least two-thirds of the legislators in the original party agree to the merger.

II. **Member Elected as Presiding Officer:** If a member is elected as the Speaker or Chairman of a House and voluntarily resigns from their political party, they will not face disqualification as long as they maintain strict neutrality or rejoin their party after ceasing to hold that office.

***Note:** After the 91st Constitutional Amendment Act, 2003, defectors no longer enjoy protection on the ground of split.*

Deciding Authority:

- Decision is made by the Presiding Officer (Speaker/Chairman).
- Earlier Position- Decision of the Presiding Officer was final and could not be questioned in any court.
- Later Position - brought under Judicial Review.

Supreme Court Cases

1. **Kihoto Hollohan vs Zachillhu (1992):** Decision of the Presiding Officer under the Tenth Schedule is subject to Judicial Review.
2. **Ravi S. Naik vs Union of India (1994):** Membership can be inferred from a member's conduct.
   - **Voluntarily** giving up membership includes not only formal resignation but also actions, speeches, and conduct against the party.
3. **G. Viswanathan vs Speaker (1996):**
   - Tamil Nadu Legislative Assembly
   - Important ruling regarding disqualification and party membership.
4. **Keisham Meghachandra Singh vs Speaker (2020):** Manipur Legislative Assembly addressed delays in deciding disqualification petitions.

Role of Election Commission

- Under the Tenth Schedule, the Election Commission of India **has no direct role** in anti-defection matters
- **Indirect Role:** When defection leads to a split within a political party, the ECI resolves intra-party disputes. It determines which faction is the real political party.
  - **Example:** Maharashtra – Shiv Sena split.

Merger of Political Party vs Split of Political Party

- **Split:** When members of an existing political party separate and form a new political party it is called a split.
- **Merger:** When members of two different political parties agree to combine, it is called a merger.

Political Party Members

- **Legislators** - Members who are elected to the House.
- **Administrators/Organizational Members** - Members who are part of the party organization.

Merger of Legislators vs Merger of Party

- **Merger of Legislators**: When elected legislators leave their existing party and merge with another political party.
  - **Example:** *Raghav Chadha and other Aam Aadmi party MPs joined BJP* - they legally bypassed the anti-defection law by utilizing the *"merger"* exception under the Tenth Schedule of the Constitution. By securing the defection of exactly two-thirds (7 out of 10) of the Aam Aadmi Party's (AAP) Rajya Sabha members
- **Merger of Political Party :** Refers to both the organizational wing and legislative wing combining with another political party.

Criticism of Anti-Defection Law

- The law does not clearly differentiate between dissent and defection.
- It compromises the freedom of conscience of legislators.
- It differentiates between individual defection and group defection, which is often considered irrational.
- Discrimination exists between independent members and nominated members.
- Decision-making authority is vested in the Presiding Officer, leading to concerns regarding:
  - Impartiality and bias.
  - Lack of legal knowledge and experience

Significance of Anti-Defection Law

- Provides greater stability to political parties.
- Enables democratic realignment of parties in the legislature through mergers.
- Reduces political corruption and horse-trading of legislators.
- Makes legislators accountable for their conduct.
- Ensures party discipline through the whip system.
- Allows the ruling party to focus on governance and development rather than continuously protecting its majority.

Reforms Required in Anti-Defection Law

- **Narrowing the Whip:**
  - The 170th Law Commission Report suggested that whips should be legally binding only in matters such as: No-confidence motions; Budget and Money Bills etc.
  - For other legislative matters, members should be allowed to vote according to their own judgment and discretion.
- **Independent Adjudication:** Transfer power of final decision over defection from Presiding Officer to some independent authority like Election Commission.

91st Constitutional Amendment Act

- **Reason:**
  - Curb defection.
  - Dinesh Goswami Committee and 170th Law Commission recommendation to omit the exemption from disqualification in case of split.

- **Provision:**
  - Total number of ministers, including PM, shall not exceed 15% of total strength.
  - A member who has been disqualified as a defector shall also be disqualified from being:
    - Appointed as a minister.
    - Holding any remunerative political post.
  - Total number of ministers, including CM shall not exceed 15% of total strength.

International-Laws or Constitutional Provisions similar to India's Anti-Defection Law

- **Bangladesh**: Under Article 70 of the Constitution, an elected Member of Parliament (MP) automatically vacates their seat if they resign from their nominating party or vote against it on the floor.
- **South Africa:** The constitution enforces a "floor-crossing" framework. A legislator loses their seat if they cease to be a member of the political party that nominated them to the legislature.
- **New Zealand:**
  - Operates under "waka-jumping" (party-switching) legislation.
  - If an MP resigns from their party or is expelled and declares their allegiance to another, the party leader can request the Speaker to declare their seat vacant.
- **Kenya**: Under the Political Parties Act, a member of parliament who resigns from their sponsoring party or joins a new one is deemed to have vacated their seat.
- **Singapore**: Lawmakers lose their parliamentary seats if they resign from or are expelled from the political party under which they were elected.

How Other Mature Democracies Handle Defection

Most mature democracies rely on political conventions and public accountability rather than strict legal bans, allowing their lawmakers to switch parties or sit as independents without facing forced resignation.

- **United Kingdom:**
  - While there is no law against switching sides, political parties can heavily discipline rebels by withdrawing the party whip.
  - Defectors usually face the judgment of voters in the next general election.
- **United States & Canada:** Lawmakers are legally free to switch parties.However, doing so can result in losing committee assignments, funding, and party support
- **Germany:**
  - The system prioritizes organizational cohesion and ideological commitment.
  - The Constitution does not legally prohibit an MP from defecting or voting against their party.

Anti-Defection at Local Self Government

- In India, the anti-defection law is not governed by the Constitution's Tenth Schedule for local self-government.
- Because local governance (Panchayats and Municipalities) is a State subject under the Constitution, whether a local representative can be disqualified for switching parties depends entirely on individual State legislation.

Legal Frameworks Across States

While some States have enacted specific legislation to prevent floor-crossing, others have no such laws, leaving party-switching unchecked at the grassroots level.

- **Kerala:** The Kerala Local Authorities (Prohibition of Defection) Act, 1999 is strictly implemented. Members face disqualification if they voluntarily give up their party membership, vote against the party whip, or join another party after being elected. *State Election Commissions frequently use this to disqualify defectors.*
- **Karnataka**: The Karnataka Local Authorities (Prohibition of Defection) Act prohibits councillors and members of municipal/ panchayat bodies from defecting from the political parties that fielded them.
- **Arunachal Pradesh:** The state implemented the Local Authorities (Prohibition of Defection) Act, 2003 to curb political instability in Panchayati Raj institutions.
- **Other States:** In several states, there are no robust anti-defection provisions for local bodies, meaning "horse-trading" and unseating of local civic leaders frequently occur with little to no legal consequence.

Grounds for Disqualification (Local Self-Government)

Where anti-defection laws apply to local bodies, members typically face disqualification on similar grounds to MPs and MLAs.

- **Voluntary Resignation:** Formally resigning or acting in direct opposition to the party.
- **Whip Violation:** Voting or abstaining from a vote in contradiction to the party's official directive.
- **Independents:** An independent member joining a political party after election.
- **Nominated Members:** Joining a political party beyond the permitted time frame (often six months from taking the oath).

Conclusion

- The Anti-Defection Law was introduced to ensure political stability and prevent opportunistic party switching by legislators.
- While it has helped maintain stable governments and reduce political corruption, concerns remain regarding excessive party control, limited legislative independence, and delays in decision-making.
- Therefore, reforms such as narrowing the scope of the whip and ensuring impartial adjudication are necessary to balance party discipline with democratic debate and accountability.

FUNDAMENTAL RIGHT TO WALK

In a landmark judgment, the Supreme Court declared that the right to safe, demarcated footpaths is a fundamental right. The Court emphasized that pedestrians must take priority over motorized vehicles.

Road Accident

Behind Supreme Court order on right to walk on footpaths, a there is a surge in India's pedestrian deaths.

India's Deadly Roads			
Year	**Total Road Deaths**	**Pedestrian Deaths**	**Share of Pedestrian Deaths (%)**
2015	146,133	13,894	9.50%
2016	150,785	15,746	10.50%
2017	147,913	20,457	13.80%
2018	151,417	22,656	15.00%
2019	151,113	25,858	17.10%
2020	131,714	23,483	17.80%
2021	153,972	29,124	18.90%
2022	168,491	32,825	19.48%
2023	172,890	35,221	20.37%
2024	177,175	36,526	20.61%

The years 2020 and 2021 were affected by the COVID-19 pandemic period.

Supreme Court's Directions

The Court issued a set of sweeping directions to ensure nationwide compliance and structural reforms:

- **Mandatory Accessibility:** Footpaths must be designed and maintained to be accessible and usable by persons with disabilities.
- **Encroachment Removal:** All encroachments from footpaths must be removed without exception.
- **Universal Footway Standards:** Every public road must have proper, inclusive footpaths or walkways.
- **Policy Mandate:** All States and Union Territories must evolve and implement policies for the construction, maintenance, and protection of accessible footpaths.

Compliance Timeline

- States and UTs must frame guidelines in line with those issued by the Bombay High Court in High Court.
- The Union of India is directed to place on record existing or new national guidelines within two months.

Authority Involved for Maintaining Footpaths in India

In India, footpaths fall under the jurisdiction of Urban Local Bodies (municipal corporations, municipalities, or development authorities) and local Panchayats in rural areas.

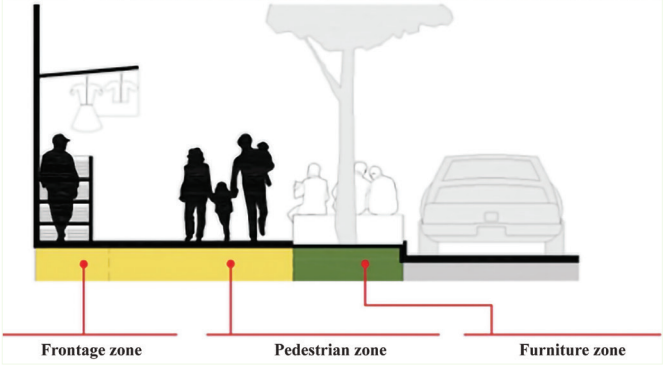
- **Urban Local Bodies (ULBs):** Entities like the Municipal Corporation of Delhi (MCD) or the New Delhi Municipal Council (NDMC) handle the construction, upkeep, and removal of encroachments for most city streets and internal roads.
- **Public Works Department (PWD):** The state-level PWD generally holds responsibility for major arterial roads, state highways, and associated pedestrian infrastructure.
- **National Highways Authority of India (NHAI):** Manages pedestrian infrastructure along designated National Highways.
- **Traffic Police:** While they do not own or build the footpaths, the traffic police share enforcement jurisdiction. They are responsible for penalizing illegal parking on footpaths and prosecuting vendors or vehicles that obstruct pedestrian movement.

Footpath

- Under the Indian Roads Congress (IRC) guidelines (such as IRC:103-2012), a footpath (or sidewalk) is defined as a dedicated, paved right-of-way separated from the motorized carriageway.
- It is designed to provide safe, continuous, and accessible passage for pedestrians of all abilities.

Footpath and Design

The IRC divides properly designed footpaths into three specific functional zones:



- **Frontage Zone:** The strip directly adjacent to buildings, compound walls, or property lines, this is often utilized as temporary space for shop displays or informal vending
- **Pedestrian Zone:** The clear, unobstructed central walking strip dedicated solely to pedestrian movement.
- **Furniture Zone:** The outer strip located between the pedestrian zone and the road. It houses street utilities, manholes, streetlights, trees, and signage so they do not block the walking path.

Observations of Judiciary on Pedestrians

- **Bombay High Court Model:** The progressive precedent on footpath design, accessibility, and encroachment-free pedestrian zones. This reinforces the principle that access to infrastructure must be inclusive by design, not adjusted retroactively.
- **Maniyar Iliyaz Shaik Riyaz vs P. Ayyappan (2026):** A landmark case declaring that walking on demarcated footpaths is a fundamental right, prioritizing pedestrians over motor vehicles.
- **Removal of Encroachments:** The court directed all states and union territories to remove encroachments and ensure accessible, barrier-free pathways.
- **S. Rajaseekaran vs. Union of India (2026):** The Supreme Court recognized "**Right to have unobstructed and disabled-friendly footpaths is guaranteed under Article 21," the Court unequivocally stated.**

Reason for Defunct Footpaths

- The absence of a pedestrian zone forces pedestrians to walk in the carriageway.
- Excessive heights make footpaths hard to use, and many pedestrians prefer to walk in the carriageway. An uneven surface can make a footpath difficult to use.
- A footpath that constantly changes levels discourages pedestrians from using it. Pedestrians prefer to walk on the carriageway instead. If streets do not provide designated zones for vending, these activities can become obstructions to the movement of pedestrians.
- Angular and perpendicular parking occupy a large portion of the right-of-way. Exiting the parking bay can be dangerous because drivers have limited visibility.
- The absence of raised a traffic-calmed crossing allows for vehicles to drive at high speeds, making it dangerous for pedestrians to cross the road.

Probable Solution

- Footpaths designed as per the zoning system provide uninterrupted walking space for pedestrians. Footpaths with a height of no more than 150 mm are more likely to be used.
- Footpaths with proper surfacing can be used by pedestrians.
- Footpaths should be designed such that there is sufficient space for vending outside of the pedestrian zone (IRC:103-2012, 6.11.2)
- Parallel parking for cars is preferred over angular or perpendicular parking.
- Raised crossings compel vehicles to reduce their speed, thereby increasing pedestrian safety.

Global Scenario regarding Footpaths

Germany and Central Europe

- **Strict Usage Rules:** Pedestrians are legally obliged to use sidewalks where they exist. The only exceptions are individuals carrying large, cumbersome objects that would obstruct the path.
- **Direction:** If an individual is forced to walk on the side of a road lacking a sidewalk, they must walk facing oncoming traffic. Conversely, groups of pedestrians (like a marching parade) must walk in the direction of traffic.

Australia and New Zealand

- **Pedestrian Flow:** In countries where vehicles drive on the left side of the road, pedestrians typically keep to the left side of the footpath to manage foot traffic organically, though tourist hotspots often see mixed patterns.
- **Shared Spaces:**
  - Regulations prioritize pedestrian safety on footpaths.
  - Many regional transport authorities strictly regulate the use of e-scooters on pavements, dictating maximum speeds and requiring bells or verbal warnings when passing pedestrians.

Japan

- **Zoning & Right of Way:** Japan has highly formalized footpaths, often explicitly separating cyclists from pedestrians through painted lines or signage.
- Pedestrians have absolute right of way on designated sidewalks, and cyclists are expected to yield to walkers or stay in the street depending on municipal ordinance.

Cooperation of People and Vendor required

- Attitudinal and behavioural change towards civic sense
- Following proper parking Rules to avoid conjuction
- Treating footpaths as collective property rather than encroachments of it for personal use
- Voluntarily contribution in form of small value funds for proper maintenance of footpaths
- Avoiding dog or animals feedings over footpaths to keep footpaths save from dog bites

Conclusion

- Supreme Court recent verdict on walking on footpaths a fundamental right is urgent need to curb accidents.
- The real challenge is implementation and mobilization of vendors and daily earners from footpaths provide them alternative which need gradual step and cooperation from common public to reach win-win solution for all in long run.

FCRA AMENDMENT RULES, 2026

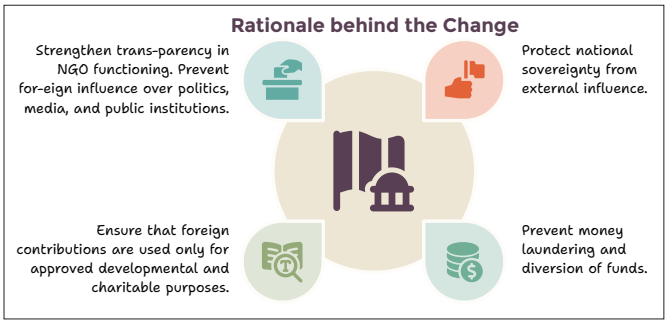
The Ministry of Home Affairs (MHA) has notified the Foreign Contribution (Regulation) Amendment Rules, 2026. Alongside this, the Foreign Contribution (Regulation) Amendment Bill, 2026 has been introduced in Parliament.

Evolution

- **Historical Basis:** The original FCRA, 1976 was enacted during the Emergency to regulate foreign influence in India's domestic affairs. It was later repealed and replaced by the FCRA, 2010, which created a stricter legal framework for foreign funding.
- **Constitutional Basis:**
  - Article 19(1)(c) guarantees the right to form associations.
  - However, under Article 19(4), reasonable restrictions can be imposed in the interests of sovereignty, integrity, and public order.
  - In Noel Harper v. Union of India (2022), the Supreme Court upheld FCRA restrictions as constitutionally valid.
- **Regulatory Evolution:** The 2010 Act strengthened oversight over social, cultural, educational, religious, and charitable organisations. The 2020 amendments made the law stricter by:
  - Mandating all foreign funds to be received only through the State Bank of India (SBI), New Delhi Main Branch.
  - Reducing the administrative expenditure cap from 50% to 20%.
  - Completely prohibiting sub-granting of foreign funds to any person or organisation.
  - Expanding suspension powers of the government.
- **Current Scale:**
  - Around **16,000 NGOs** are registered under FCRA.
  - They collectively receive nearly **₹22,000 crore annually**, making FCRA one of India's most significant civil society regulatory laws.

Changes

- **Activity-Based Registration:** NGOs must now specify exact activities under five categories i.e. **social, economic, educational, cultural, and religious.**
  - Separate fees must be paid for each category and for every State/Union Territory. This marks a shift from entity-based regulation to function-based regulation, allowing tighter monitoring of specific activities.
- **Geographical Specification:** Registration certificates must clearly specify the States or Union Territories where the organisation will operate. Existing NGOs have been given one year to align with this requirement.
- **Religious Regulation:** Foreign funds can be used for worship, religious education, heritage preservation, and community kitchens. However, they cannot be used for proselytisation (religious conversion).
  - This aligns with Article 25 and the Supreme Court's ruling in **Rev. Stainislaus v. State of Madhya Pradesh (1977),** which held that the right to propagate religion does not include the right to convert another person.
- **Expanded Key Functionaries:** The definition of key functionaries now includes trustees, partners, directors, office-bearers, governing body members, and even the Karta of a Hindu Undivided Family (HUF).
  - Associations having foreign nationals (except Persons of Indian Origin) as key functionaries will ordinarily not be eligible for registration.
- **Financial Tightening:** NGOs must utilise at least 75% of previous funds before receiving fresh installments. For renewal, they must spend at least ₹10 lakh on approved activities over two years.
- **Mandatory Disclosure:** NGOs must disclose the ultimate donor, official websites, social media handles, and publications to improve transparency.
- **Asset Vesting:** A Designated Authority will take temporary or permanent control of foreign-funded assets when registration is cancelled, surrendered, or expires. If registration is not restored, these assets may permanently vest with the government.
- **Automatic Cessation:** Registration will automatically cease if renewal is not applied for, denied, or not obtained before expiry.
- **Media Restrictions:** Foreign contributions are now prohibited for persons involved in news production, publication, or current affairs broadcasting.
- **Centralisation of Investigation**: Any FCRA investigation will now require prior approval from the Central Government, reducing the independent role of State agencies.
- **Rationalisation of Penalty:** Maximum imprisonment for violations has been reduced from five years to one year, though fines remain.



Key Concerns

- **Procedural Burden:** Multiple activity-specific registrations and separate fees increase compliance costs, especially for smaller organisations.

- **Operational Rigidity:** NGOs may lose flexibility in responding to changing social and humanitarian needs due to strict purpose-based approvals.
- **Procedural Paralysis:** Automatic cessation under **Section 14B** can stop NGO operations due to paperwork delays even without proven wrongdoing.
- **Property Rights:** Provisional asset vesting without judicial review raises concerns under Article 300A, which protects property from arbitrary deprivation.
- **Natural Justice:** Asset takeover before judicial scrutiny may weaken the principles of fair hearing and due process.
- **Executive Concentration:** The Designated Authority is given wide powers over supervision, management, and disposal of NGO assets.
- **Federal Concerns:** Requiring prior Central approval for investigations reduces the role of State agencies and raises concerns regarding federal balance.
- **Subjective Standards:** Terms such as "public interest" remain undefined and may allow broad interpretation.
- **Impact on Minorities:** Minority-run schools, hospitals, and charitable institutions may face greater regulatory pressure.
- **Grassroots Disruption:** Funding uncertainty may affect long-term work in education, healthcare, child welfare, and skill development.

Judicial Position

- In **Noel Harper (2022)**, the Supreme Court upheld FCRA as a valid restriction to protect sovereignty and public order.
- In **Indian Social Action Forum (INSAF) v. Union of India (2020)**, the Court recognised the legitimacy of regulation but stressed that genuine voluntary organisations should not be unnecessarily restricted.
- In **Rev. Stainislaus (1977)**, the Court clarified that propagation does not include conversion.

Safeguards

- **Fixed Timelines:** Registration and renewal should have mandatory timelines to avoid unnecessary disruption.
- **Judicial Oversight:** Asset vesting should require prior approval of an independent judicial authority.
- **Clear Definitions:** Terms like **public interest** must be legally defined to reduce arbitrariness.
- **Domestic Asset Protection:** Assets created from domestic funds should be explicitly excluded from takeover provisions.
- **Stakeholder Consultation:** Wider consultation through a **Joint Parliamentary Committee (JPC)** can improve legitimacy and institutional balance.

Conclusion

- The **FCRA Amendment Rules, 2026** represents a major structural shift from simple regulation of foreign contributions to broader **institutional governance of civil society**.
- While stronger oversight may improve **transparency**, **security**, and **accountability**, excessive procedural control and centralisation may weaken civil society's ability to function effectively.
- The real challenge is to maintain a balance where **national security** is protected without undermining **constitutional freedoms**, **institutional autonomy**, and the developmental role of genuine civil society organisations.

MISSIONARIES OF CHARITY & THE TIGHTENING FCRA REGIME

- In December 2021, the Ministry of Home Affairs (MHA) declined to renew the Foreign Contribution (Regulation) Act (FCRA) licence of Mother Teresa's Missionaries of Charity (MoC), citing adverse inputs and audit-related irregularities.

Connection with the 2020 FCRA Amendments

The episode illustrates the operational impact of the stricter compliance framework introduced through the Foreign Contribution (Regulation) Amendment Act, 2020:

- **Centralised Receipt of Funds:** All foreign contributions must be received through a single State Bank of India (SBI), New Delhi Main Branch account. Consequently, restrictions on this account can affect the functioning of the entire organisation.
- **Restriction on Sub-Granting:** Registered organisations are prohibited from transferring foreign contributions to other FCRA-registered entities. This poses compliance and operational challenges for organisations functioning through multiple affiliated institutions or decentralised units.
- **Lower Administrative Expenditure Limit:** The permissible ceiling on administrative expenses was reduced from 50% to 20% of foreign contributions, requiring tighter financial management and increasing the importance of accurate accounting.

Significance

- The Missionaries of Charity case demonstrates the growing emphasis on strict regulatory compliance under the FCRA framework.
- It highlights that all organisations, irrespective of their size or public profile, must maintain robust financial records and adhere closely to statutory requirements.

INCLUSIVE TRANSFORMATION

Government estimates show that multidimensional poverty declined from 29.17% (2013–14) to 11.28% (2022–23), helping nearly 25 crore people move out of poverty.

Concept

- **Inclusive transformation** means a development process where the benefits of economic growth and welfare policies reach all sections of society, especially the poor, marginalised, and vulnerable.
- It goes beyond income support by improving access to **healthcare**, **education**, **nutrition**, **housing**, **water**, **livelihoods**, and **financial systems**.
- This approach aligns with the constitutional vision under:
  - **Article 38** (social justice and welfare),
  - **Article 39** (equitable distribution of resources),
  - **Article 41** (right to work and public assistance),
  - **Article 46** (protection of weaker sections),
  - **Article 47** (nutrition and public health).

Basic Services

- **Water Access:** Under **Jal Jeevan Mission (JJM)**, rural tap water coverage increased from **3.23 crore households (2019)** to **15.84 crore households (May 2026)**, covering **81.87%** of rural households.
  - More than **2.77 lakh villages** achieved full tap water coverage, improving health and reducing women's burden of water collection.
- **Sanitation Expansion:** Under **Swachh Bharat Mission (SBM)**, rural sanitation coverage increased from **39% (2014)** to **100% (2019)**. More than **12.11 crore toilets** were built, and by **March 2026**, over **5 lakh villages** achieved **ODF Plus** status, strengthening sanitation and waste management.
- **Clean Cooking Energy:** Through **Pradhan Mantri Ujjwala Yojana**, over **10.57 crore LPG connections** were provided. Total LPG connections rose from **14.52 crore (2014)** to **33.39 crore (2026)**, reducing indoor pollution and improving women's health.
- **Electrification:** Through **SAUBHAGYA** and related initiatives, universal household electrification was achieved. Average rural electricity supply increased from **12.5 hours/day (2014)** to **22.6 hours/day (2025)**.
- **Solar Inclusion:** Under **PM Surya Ghar Muft Bijli Yojana**, **36.8 lakh households** benefited through rooftop solar, reducing electricity expenditure and linking welfare with clean energy transition.
- **Housing Security:** Under **Pradhan Mantri Awas Yojana (PMAY)**, over **98.10 lakh urban houses** and **3.03 crore rural houses** were completed. Around **96% urban** and **75% rural houses** were registered in women's names, strengthening asset ownership.

Deepening Human Capital

- **Healthcare Security:** Under **Ayushman Bharat–PMJAY**, over **43.93 crore Ayushman Cards** were issued, providing insurance coverage of **₹5 lakh per family**. Hospital admissions rose from **29.96 lakh (2019)** to **12.03 crore (May 2026)**.
- **Primary Healthcare:** More than **1.85 lakh Ayushman Arogya Mandirs** facilitated over **540 crore patient visits**, improving healthcare access at the grassroots.
- **Digital Health Records:** Under the **Ayushman Bharat Digital Mission (ABDM)**, **88.33 crore ABHA accounts** were created, enabling integrated and digital healthcare records.
- **Maternal Health:** Through **Pradhan Mantri Surakshit Matritva Abhiyan**, over **7 crore antenatal check-ups** were conducted, contributing to a reduction in **Maternal Mortality Ratio (MMR)** from **130** to **88** per **1 lakh live births**.
- **Immunisation:** Under **Mission Indradhanush**, **5.46 crore children** and **1.32 crore pregnant women** were immunised.
- **Food Security:** Through **PMGKAY**, over **81 crore beneficiaries** continue receiving free foodgrains. Under **One Nation One Ration Card (ONORC)**, over **2.07 billion portability transactions** were completed.
- **Nutrition Challenge:** Despite food security expansion, India still faces **stunting**, **anaemia**, and **undernutrition**, showing that **nutritional security** remains weaker than cereal-based food security.
- **Education Access:** Under **Samagra Shiksha**, school infrastructure, inclusion, and quality improved significantly. More than **1.49 lakh ICT initiatives** and **25,000 skill schools** were introduced.
- **Girls' Education:** Female primary school dropout rates declined from **4.6% (2013–14)** to **0.3% (2024–25)**.
- **Girl Child Empowerment:** Under **Beti Bachao Beti Padhao**, the sex ratio improved from **943 (2011)** to **1,020 (2021)**, while girls' secondary enrolment rose to **80.2%**.

Livelihoods and Economic Security

- **Women-led Development:** Under **DAY-NRLM**, women linked to **Self-Help Groups (SHGs)** increased from **2.37 crore** to **10 crore**, strengthening collective entrepreneurship.
- **Skill Development:** Under **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)**, over **1.64 crore youth** were trained, while **DDU-GKY** trained **17.71 lakh candidates** by 2025–26.
- **Employment Security:** Wage employment under **MGNREGA** expanded significantly, with women's participation rising from **48%** to **58%**, improving rural livelihood resilience.
- **Informal Labour Inclusion:** The **eShram portal** registered **31.64 crore unorganised workers**, expanding labour visibility and social security.

- **Street Vendor Support:** Through **PM SVANidhi**, street vendors received working capital loans, improving livelihood continuity.
- **Traditional Skills Protection:** Under **PM Vishwakarma**, artisans received skill support, toolkits, and formal recognition.
- These interventions reflect a policy shift from **welfare dependence** to **productive empowerment**.

Digital and Financial Inclusion

- **Financial Inclusion:** Under **PM Jan Dhan Yojana (PMJDY)**, beneficiaries increased from **17.9 crore** to **58.16 crore**. Total deposits exceeded **₹3 lakh crore**, strengthening the **Direct Benefit Transfer (DBT)** ecosystem.
- **Entrepreneurship Credit:** Under **PM MUDRA Yojana**, more than **57 cr loans** have been sanctioned, with **66%** going to women.
- **Digital Payments: UPI** now processes over **2,100 crore monthly transactions**, improving financial accessibility and reducing transaction costs.
- **Connectivity: BharatNet** has connected more than **2.19 lakh Gram Panchayats**, expanding digital inclusion and improving access to welfare services.
- These systems have created structural multipliers by reducing leakages and improving service efficiency.

Targeted Inclusion of Vulnerable Communities

- **PVTG Development:** Under **PM-JANMAN**, covering **75 Particularly Vulnerable Tribal Groups (PVTGs)**, **2.66 lakh houses**, **1,949 km roads**, and **750 Mobile Medical Units** were delivered.
- **Convergent Tribal Saturation:** Under **PM-JUGA (Dharti Aaba Janjatiya Gram Utkarsh Abhiyan)**, 12.89 lakh houses, 2,411 km roads, and improved water and electrification services were sanctioned, reflecting a convergence-based tribal development model.
- **Forest Livelihoods:** Under **PM-JVM**, **1,146 Van Dhan Vikas Kendras** were sanctioned to strengthen tribal forest-based livelihoods.
- **Education Inclusion: Eklavya Model Residential Schools (EMRS)** increased from **129** to **499**, serving **1.54 lakh tribal students**.

Persistent Structural Challenges

- **Regional disparity** remains high across States and tribal regions. **Service quality gaps** continue in healthcare, education, and sanitation.
- **Nutritional insecurity** remains serious despite foodgrain access. **Informal employment vulnerability** continues to dominate labour markets.
- **Digital divide** persists in remote and tribal areas. **Social exclusion** still affects migrants, elderly persons, homeless populations, and persons with disabilities.
- **Fiscal sustainability** remains a challenge as welfare commitments expand.

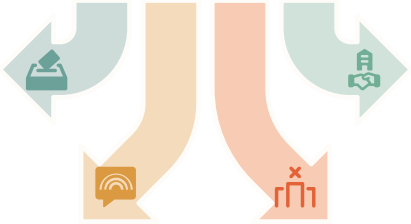
Way Forward

- **Strengthen Last-Mile Delivery:** Improve beneficiary identification, grievance redressal, and service quality.
- **Outcome-Based Governance:** Shift focus from infrastructure creation to measurable welfare outcomes.
- **Human Capital Investment:** Increase spending on healthcare, education, nutrition, and skilling.
- **Nutrition-Centric Policy:** Move from calorie security to diversified nutritional security.
- **Digital Expansion:** Improve digital literacy and connectivity in underserved regions.
- **Cooperative Federalism:** Strengthen Centre-State coordination for more effective implementation.

Conclusion

- India's inclusive transformation reflects a structural transition from **welfare distribution** to **human development-led empowerment**. The expansion of **basic capabilities**, **human capital**, **livelihood security**, **financial inclusion**, and **tribal development** has reduced multidimensional poverty and widened access to opportunities.
- The real significance lies in making inclusive transformation the bridge between **economic growth** and **social justice**, ensuring that development is not only faster but also fairer, more dignified, and more sustainable.

How to Address Exclusion?



Political Exclusion
Implement policies to ensure equal voting rights and representation in leadership.

Economic Exclusion
Promote fair wages and opportunities to reduce economic disparities.

Social Exclusion
Improve access to housing and neighborhoods for marginalized groups.

Cultural Exclusion
Foster inclusivity in religious practices and community engagement.

INDIA–NEPAL

Nepal's Prime Minister recently made a historic admission, acknowledging that territorial disputes are not one-sided and that Nepal may have encroached upon some Indian lands.

Historical and Structural Foundations

- India and Nepal share one of the most unique bilateral relationships in South Asia, built on **geography**, **civilizational continuity**, and deep **people-to-people connections**.
- The two countries share a **1,751 km-long open border**, spread across **Sikkim, West Bengal, Bihar, Uttar Pradesh, and Uttarakhand**, allowing citizens of both countries to move freely without visas or passports.
- Nepal's **landlocked geography** makes India its primary transit route for trade and access to the sea.
- The **Treaty of Peace and Friendship, 1950** forms the institutional basis of bilateral ties and grants reciprocal privileges to citizens of both countries in residence, movement, property, and employment.
- Both countries are active partners in regional platforms like **SAARC**, **BIMSTEC**, **BBIN**, and the **International Solar Alliance (ISA)**.

Nature of the Boundary Disputes

- **Kalapani–Lipulekh–Limpiyadhura Dispute:** The dispute originates from the **Treaty of Sugauli (1816)**, which declared the **Kali (Mahakali) River** as Nepal's western boundary but did not clearly define its source.
- **Nepal's Position:** Nepal claims the river originates at **Limpiyadhura**, which would place **Kalapani**, **Lipulekh**, and **Limpiyadhura** within Nepalese territory.
- **India's Position:** India maintains that the river originates near **Kalapani**, thereby placing the disputed territory within **Pithoragarh district, Uttarakhand**.
- **Strategic Importance:** The region lies close to China, while **Lipulekh Pass** remains an important trade route and pilgrimage route for the **Kailash Mansarovar Yatra**.
- **Political Escalation:** Nepal's **2020 revised political map** and subsequent **NPR 100 banknote** featuring disputed territories institutionalized its territorial claim.
- **Susta Dispute:** Nepal also claims nearly **14,860 hectares** of land in **Susta**, currently administered by India as part of **West Champaran district, Bihar**.
- **Core Causes:** The disputes arise from differing treaty interpretations, shifting river courses, incomplete demarcation, and strategic competition.

Defence and Security Cooperation

- **Military Trust:** Defence ties remain one of the strongest pillars of bilateral engagement.
- **Gorkha Recruitment:** Around **32,000 Nepali Gorkha soldiers** serve in the Indian Army, symbolizing deep military integration.
- **Joint Exercise:** The annual **SURYA KIRAN** military exercise strengthens operational interoperability.
- **Honorary Tradition:** Since 1950, both countries continue the practice of awarding the honorary rank of **General** to each other's Army Chiefs.
- **Security Cooperation:** The **India–Nepal Mutual Legal Assistance Agreement (MLAA) in Criminal Matters** has strengthened institutional cooperation against cross-border crime.
- **Recruitment Issue:** Nepal's suspension of Gorkha recruitment under India's **Agnipath Scheme** has emerged as a new defence concern.

Trade and Economic Relations

- **Trade Dependence:** India is Nepal's largest trading partner, largest export destination, and largest investor.
- **Trade Basket:** Nepal exports **edible oil, tea, coffee, and jute**, while importing **petroleum products, iron and steel, cereals, vehicles, and machinery** from India.
- **Investment Presence:** Indian companies account for **33.5% of Nepal's total FDI stock**.
- **Export Linkage:** Nepal has become India's **14th largest export destination** in 2024–25, rising from 28th in 2014.

Connectivity and Development Partnership

- **Integrated Check Posts (ICPs):** Important trade and transit infrastructure exists at **Birgunj, Biratnagar, Nepalgunj, and Bhairahawa**.
- **Rail Connectivity:** Major rail projects include **Jayanagar–Bijalpura–Bardibas**, **Jogbani–Biratnagar**, and the proposed **Raxaul–Kathmandu corridor**.
- **Petroleum Connectivity:** The **Motihari–Amlekhgunj pipeline** remains South Asia's first cross-border petroleum pipeline.
- **Development Assistance:** India remains Nepal's largest developmental partner in health, education, and connectivity.
- **Post-Earthquake Reconstruction:** India has handed over **72 health facilities** and **12 cultural heritage projects** under Nepal's post-2015 earthquake reconstruction programme.

Power and Digital Integration

- **Hydropower Trade:** Under the **Power Trade Agreement (2024)**, Nepal will export **10,000 MW** of electricity to India over the next ten years.
- **Cross-Border Payments:** Nepal has integrated with India's **UPI system** through **FonePay QR**, enabling smoother digital payments.
- **P2P Linkage:** The recent integration of **UPI** with Nepal's **National Payments Interface (NPI)** has strengthened remittance systems.
- **Language Technology:** A recent **MoU between Digital India Bhashini and Kathmandu University** aims to develop voice-first language translation platforms.

Water and Disaster Cooperation

- **River Agreements:** Cooperation continues through the **Kosi (1954)**, **Gandak (1959)**, and **Mahakali (1996)** agreements.
- **Flood Management:** Shared rivers remain central for irrigation, flood control, and hydropower.
- **Disaster Relief:** India was Nepal's first responder during the **2015 earthquake** through **Operation Maitri** and during the **Covid-19 pandemic**.

Cultural and Civilizational Ties

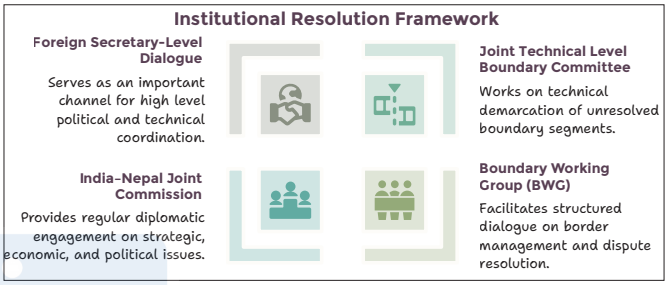
- **Roti-Beti Relationship:** Cross-border marriages and social bonds remain central to bilateral trust.
- **Religious Linkages:** The **Buddhist Circuit** and **Ramayana Circuit** connect important spiritual centers such as **Lumbini** and **Janakpur**.

Nepal's Significance for India

- **Buffer State:** Nepal acts as an important strategic buffer between India and China.
- **Siliguri Corridor Security:** Stability in Nepal is critical for protecting India's vulnerable **Chicken's Neck corridor**.
- **Open Border as Integration Architecture:** The open border supports not only cultural ties but also labour mobility, trade, and economic integration.
- **Water Security:** Nepal's rivers are vital for flood management and water security in northern India.
- **Energy Security:** Nepal's hydropower potential supports India's clean energy transition.
- **Neighbourhood First:** Nepal remains central to India's Himalayan and neighbourhood security architecture.

Challenges

- **Political Volatility:** Nepal's domestic politics remain unstable due to coalition fragility, factionalism, and corruption, affecting policy continuity.
- **China Factor:** Nepal's deepening engagement with China through the **BRI**, Chinese-funded infrastructure, and trans-Himalayan connectivity has added strategic complexity.
- **Trust Deficit:** Delays in major projects such as **Pancheshwar**, **Arun III**, and **Upper Karnali** have weakened confidence.
- **Open Border Security:** The porous border remains vulnerable to **smuggling**, **fake Indian currency circulation**, **illegal migration**, and organized crime.
- **Customs and Trade Issues:** Nepal's recent customs duties on goods above **NRS 100** brought from India have created fresh trade tensions.
- **Water Disputes:** Issues of flood control, embankment maintenance, and benefit-sharing continue to generate friction.
- **Nationalist Politics:** Media-driven nationalism and political rhetoric in both countries periodically intensify bilateral tensions.



Changing Nature of Nepal's Approach

- **From Ideology to Pragmatism:** Nepal's new leadership, especially the rise of **Gen-Z political actors** like **Balendra Shah**, reflects a move from ideological confrontation toward economic pragmatism.
- **From Special Relationship to Sovereign Equality:** Nepal increasingly seeks a more balanced relationship based on state-to-state equality.
- **From Nationalism to Technical Dialogue:** Border disputes are increasingly seen as issues to be resolved through facts, diplomacy, and historical evidence rather than political mobilization.

Way Forward

- **Boundary Resolution:** Existing bilateral mechanisms should be strengthened for peaceful and technical settlement of disputes.
- **Treaty Review:** The **1950 Treaty** may be revisited to address concerns over sovereign equality.
- **Project Delivery:** India must improve implementation speed in infrastructure and energy projects.
- **Hydropower Expansion:** The **10,000 MW power trade framework** should be operationalized effectively.
- **Water Cooperation:** Shared rivers should be treated as common development assets.
- **Digital Cooperation:** Payment and technology integration should be expanded.
- **People-to-People Engagement:** Educational, tourism, and youth exchanges should be strengthened.
- **Respect for Sovereignty:** India's diplomacy must continue emphasizing **mutual respect**, **non-interference**, and **equal partnership**.

INDIA–OMAN CEPA

Signed in December 2025, the India–Oman Comprehensive Economic Partnership Agreement (CEPA) came into force on 1 June 2026.

About CEPA

- A **CEPA** is a deeper form of trade agreement than a traditional **Free Trade Agreement (FTA)**.
- While an FTA mainly reduces tariffs on goods, CEPA covers wider areas such as:
  - Trade in goods and services
  - Investment, Intellectual Property Rights (IPR)
  - Competition policy
  - Government procurement, Regulatory cooperation
  - Labour mobility
- Thus, CEPA creates long-term structural economic integration rather than limited market access.

Strategic Geography of Oman

- **Oman**, with its capital at **Muscat**, is a member of the **Gulf Cooperation Council** and the oldest independent Arab state.
- It shares land borders with **Yemen**, the **United Arab Emirates (UAE)**, and **Saudi Arabia**, while its maritime boundaries lie along the **Arabian Sea** and the **Gulf of Oman**.
- Its geography includes the **Rub al-Khali (Empty Quarter) desert**, the **Hajar Mountains**, and the **Dhofar mountain range**.
- Oman possesses major natural resources such as **petroleum**, **natural gas**, **copper**, and **limestone**.
- Its ports at **Salalah**, **Duqm**, and **Sohar** lie outside the **Strait of Hormuz**, making it strategically valuable for uninterrupted trade.

Key Features of India–Oman CEPA

- This agreement expands India's trade architecture beyond tariff reduction and strengthens its strategic economic footprint in **West Asia**, especially at a time of maritime instability in the Gulf.
- **Near-Universal Duty-Free Access:** Oman has granted **zero-duty access on 98.08% tariff lines**, covering **99.38% of India's exports by value**, compared to just **15.33% under the earlier MFN regime**.
- **Protection of Sensitive Sectors:** India has liberalised **77.79% tariff lines**, covering **94.81% of imports from Oman**, while protecting sensitive sectors like **dairy**, **cereals**, **fruits**, **vegetables**, **edible oils**, **oilseeds**, **rubber**, **leather**, and **spices** through exclusion lists and **Tariff Rate Quotas (TRQs)**.
- **Services Liberalisation:** Oman has opened **127 service sub-sectors**, making this the most comprehensive services commitment offered by any GCC country to India.
- **100% FDI Access:** Indian firms can establish **100% foreign-owned commercial entities** in major Omani service sectors.
- **Professional Mobility:** Indian professionals including **doctors**, **engineers**, **teachers**, and **IT specialists** gain improved access.
- **Mode 4 Commitments:** Under **General Agreement on Trade in Services (GATS)**, Oman has significantly widened temporary mobility commitments.
- **ICT Expansion:** The ceiling for **Intra-Corporate Transferees (ICTs)** has increased from **20% to 50%**, with stay extended up to **4 years**.
- **Contractual Service Suppliers:** Stay duration has expanded from **90 days to 2 years**, with possible extension.
- **Business Visitors:** Business stay is allowed up to **90 days**, while independent professionals can stay up to **180 days**.
- **Traditional Medicine:** CEPA includes the world's first full trade commitment on **Traditional Medicine**, creating new opportunities for India's **AYUSH sector**.
- **Pharmaceutical Fast-Tracking:** Medicines approved by **USFDA**, **EMA**, **UK MHRA**, and **TGA** will receive Omani market authorization within **90 days**.
- **Regulatory Recognition:** Oman recognizes **Good Manufacturing Practices (GMP)** inspection records, **Export Inspection Council (EIC)** certificates, **National Programme for Organic Production (NPOP)** certifications, and Indian **Halal certification systems**.

Current Trade Structure

- **Total Bilateral Trade:** India–Oman trade reached **USD 11.18 billion in FY 2025–26**, up from **USD 10.61 billion in FY 2024–25**.
- **India's Exports:** India exported **USD 3.64 billion**, mainly consisting of Petroleum products, Machinery, Iron and steel, Calcined alumina and Basmati rice.
- **India's Imports:** India imported **USD 7.2 billion**, mainly consisting of Crude oil, LNG, Fertilisers, Methanol and Ammonia.
- **Trade Rankings:** In FY 2024–25, Oman was India's **29th largest export market**, **25th largest import source**, and **28th largest overall trading partner**.
- **Oman's Trade Importance:** India is Oman's **4th largest source of non-oil imports** and **3rd largest market for non-oil exports**.

- **Strategic Gulf Exception:** During wider Gulf instability, while India's exports to the Gulf declined from **USD 4.4 billion to USD 2.7 billion**, imports from Oman surged by **246.4%**, showing Oman's growing strategic importance.

India–Oman Bilateral Relations

- **Strategic Partnership:** India and Oman upgraded ties into a **Strategic Partnership in 2008**, making Oman India's oldest strategic partner in the Gulf.
- **Defence Cooperation:** Oman is the first Gulf country to conduct **tri-service military exercises** with India, Al Najah (Army), Eastern Bridge (Air Force) and Naseem Al Bahr (Navy).
- **Political Importance:** Oman remains an important interlocutor for India in the **Gulf Cooperation Council (GCC)**, **Arab League**, and **Indian Ocean Rim Association (IORA)**.
- **Indian Diaspora:** A **6.7 lakh-strong Indian diaspora** strengthens people-to-people and economic ties.

Significance

- **Alternative Maritime Access:** Oman's ports offer a strategic trade route beyond the volatile **Strait of Hormuz**, ensuring greater continuity during geopolitical disruptions.
- **Gateway to Multiple Regions:** Oman acts as a gateway to the **GCC**, **East Africa**, **Central Asia**, and **Eastern Europe**, increasing India's regional economic reach.
- **Energy Security:** The agreement deepens ties with a major Gulf energy supplier and diversifies India's import channels.
- **Manufacturing Boost:** Labour-intensive sectors like **textiles**, **leather**, **gems and jewellery**, **engineering**, and **automobiles** gain stronger competitiveness.
- **Services Expansion:** India can deepen its presence in **IT**, **healthcare**, **education**, **R&D**, and professional services.
- **Blue Economy Potential:** Oman's strategic maritime location creates opportunities in **fisheries**, **marine logistics**, **desalination**, **deep-sea resources**, and coastal infrastructure.
- **Strategic Trust:** India becoming only the **second country after the US** to secure such a pact reflects Oman's strategic trust and positions India as an early mover in GCC trade architecture.
- **MSME Growth:** CEPA supports MSMEs, artisans, and women-led enterprises through expanded export access.
- **Supply Chain Resilience:** It strengthens India's strategy for diversified and resilient supply chains.

Structural Constraints

- **Limited Consumer Market:** Oman's relatively small population of **55 lakh** and GDP of **USD 110 billion** limit large-scale export expansion.
- **Trade Deficit:** The bilateral trade basket remains energy-heavy, sustaining India's trade deficit.
- **Low Services Penetration:** Although Oman imports **USD 12.52 billion in services globally**, India's share remains just **5.31%**.
- **Premium Export Gap:** India's historical share in high-value sectors like gems and jewellery remains low.
- **Global Competition:** Indian engineering and electronics face competition from **China**, **Italy**, and **Turkey**.
- **No Social Security Agreement (SSA):** The absence of an SSA creates dual financial burdens on Indian workers and employers.
- **Omanisation Policy:** Workforce nationalisation policies may periodically affect Indian labour opportunities.
- **Regional Geopolitical Risks:** Instability in West Asia continues to threaten energy security, trade continuity, and diaspora welfare.

India's Export Promotion Measures

- **RoDTEP Scheme:** Refunds embedded taxes to improve export competitiveness.
- **Export Promotion Mission:** Provides trade finance, certification support, and market access assistance.
- **Districts as Export Hubs:** Promotes district-level manufacturing and export ecosystems.
- **Foreign Trade Policy (FTP), 2023:** Targets **USD 2 trillion** in merchandise and services exports by 2030.

Way Forward

- **Deepen Services Utilisation:** India should aggressively use CEPA commitments to increase penetration in Oman's services market.
- **Diversify Trade Basket:** Bilateral trade must expand beyond energy into manufacturing, healthcare, and agri-value chains.
- **Conclude SSA:** A **Social Security Agreement** is essential to maximise labour mobility gains.
- **Industrial Partnerships:** Indian firms should use Oman as a manufacturing and logistics base for Gulf and African markets.
- **Maritime Cooperation:** Blue economy cooperation should be expanded through joint marine research, fisheries, and desalination initiatives.
- **Green Partnerships:** Future cooperation in **green hydrogen**, renewables, and climate-resilient coastal infrastructure should be prioritised.

Conclusion

- The **India–Oman CEPA** marks a structural shift from traditional **energy interdependence** to broader **strategic economic interdependence**.
- It combines **trade liberalisation**, **services mobility**, **investment expansion**, and **maritime security**, making Oman an important pillar of India's wider **West Asia strategy**.
- In the larger vision of **Viksit Bharat @2047**, CEPA strengthens India's economic resilience, regional strategic reach, and long-term global trade integration.

PAPER LEAKS

Repeated paper leaks across major national examinations have severely compromised India's competitive testing ecosystem. This threatens millions of student's futures and demands comprehensive legislative overhaul.

What is Exam Leak?

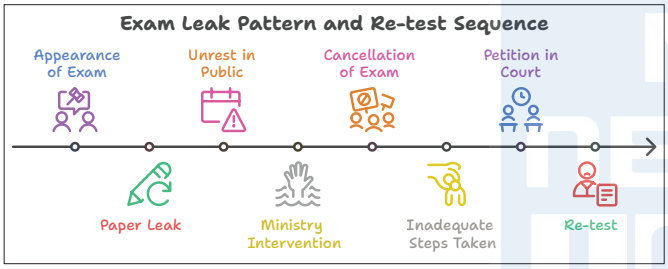
- Exam leak or paper leak is when the distribution or disclosure of question paper to the exam schedule with a purpose of some monetary benefit leads to unfair competition among candidates.

High Culture of Competitive Exam in India

- Too many aspirants, too few seats- Paper leaks are not just exam failures but systemic failures where demand and supply are highly mismatched.

Trends of Paper Leak in Last Few Years

- There are reports of paper leaks not only in NEET but also in several other examinations such as SSC-CGL, many State PSC exams, and Patwari exams.



Causes of Paper Leaks

Structural Causes:

- **High-stakes competition:** Millions chase limited seats/jobs (NEET, JEE, CUET, SSC, Railways, State PSCs); demand–supply mismatch, high reward with low success probability, and exams as social-status gateways fuel organised cheating.
- **Educational gaps:** Costly, poor-quality Tier-5/6 colleges persist, while few IITs/AIIMS/IIMs cannot absorb all aspirants.
- **Flawed exam design:** Over-centralisation lets one breach hit nationwide admissions/recruitment; too many conducting bodies cause uncoordinated management.

Institutional Causes:

- **Weak capacity:** Poor planning, staffing, expertise, and inter-agency coordination.
- **Insider collusion:** Printing staff, officials, invigilators, IT/transport personnel enable early access.
- **Cyber gaps:** Weak encryption invites hacking, server breaches, data theft, malware.
- **Poor infrastructure:** Centres lack CCTV, biometrics, secure internet, standard procedures.
- **Weak oversight:** No independent audits, real-time monitoring, surprise inspections, or paper tracking.

Criminal–Commercial Causes:

- **Organised syndicates:** Coaching centres, middlemen, cyber experts, corrupt officials sell papers for huge sums.
- **Coaching culture:** Commercial pressure allegedly links networks to leak rackets.
- **Weak deterrence:** Slow investigation and prosecution keep convictions low.

Supreme Court Observations

- **2025:** The Supreme Court said that the NEET leak was location-specific and more precautions were required.
- **2026:** The Supreme Court observed that the "NEET paper leak traumatized entire families."
- This reflects that lessons have not been learned.
- Time alone will not heal past mistakes in cases of exam leaks

Government Intervention

- Addressing symptoms rather than treating the real cause of the disease i.e. Banning Telegram, transporting papers with high security, etc., are only temporary solutions.
- Silence of concerned ministers over exam leaks increases public distrust in examination systems.
- Multiple agencies often result in responsibility being shared by everyone and accountability resting with no one.

Thinkers' Views on Educational Exam Process

- **Niklas Luhmann – Institutional Trust:** When trust breaks, even correct results become suspect.
- **Peter Senge – Feedback Loop:** Controlling one route to check a problem often it to a new route. Controlling digital apps may lead to VPN-based access to the same apps e.g. recent Telegram Ban for few day due to NEET EXAM.
- **Gary Becker – Economics of Crime:** A single exam determines higher education, government jobs, and economic status. This creates high incentives for corruption and unethical practices.
- **Mancur Olson – Political Economy of Fraud:** Mafia networks and corrupt aspirants using unethical means gain high rewards with minimum hard work while the Honest and hardworking aspirants suffer.

Institutions and Agencies Involved

1. **Higher Education & Fellowship Entrance Exams:** These assessments are operated by centralized testing bodies and governing universities.
   - **National Testing Agency (NTA):** Conducts major national exams including JEE Main, NEET-UG, CUET (UG/PG), and UGC-NET.

- **Indian Institutes of Technology (IITs):** The responsibility for conducting the JEE (Advanced) rotates among the various IITs each year.
- **Indian Institutes of Management (IIMs):** Conducts the Common Admission Test (CAT) on a rotating basis for management admissions.

2. **Civil Services & Government Jobs:** Personnel recruitment for All India Services and Central Services is governed by constitutional and specialized bodies.
   - **Union Public Service Commission (UPSC):** Conducts the Civil Services Examination (CSE), NDA, CDS, and other specialized central recruitment tests.
   - **State Public Service Commissions:** Responsible for state-level civil service and administrative recruitments (e.g., UPPSC, BPSC).
   - **Staff Selection Commission (SSC):** Conducts recruitment for various Group B and Group C posts in various Ministries and Departments of the Government of India.

International Scenario of Competitive Examinations

1. **Finland Model:** Eliminates single high-stakes examinations. Focuses on continuous assessment of students at multiple levels. Rewards student potential and everyday performance rather than one-day examination results.
2. **Singapore Model:** Strong institutional capability with technological tools and accountability at every level. Builds public confidence in examination systems.
   - **Example:** UPSC enjoys high public trust because of its credibility in conducting examinations without major controversies.
3. **China Model:** China's competitive examination system is anchored by Gaokao (National College Entrance Examination). It operates almost like a military or national-security operation to ensure fairness and prevent leaks.
   - **State-Secret Classification:** Question papers are legally classified as "state secrets." They are printed in heavily fortified, 24/7 monitored facilities where staff are completely isolated from the outside world for months.
   - **Military-Grade Transport:** Papers are transported in tracked vehicles under armed police escorts, monitored in real-time.
   - **Advanced Biometric Screening:** Students undergo rigorous identity verification before entering test centers, including facial recognition, fingerprinting, and iris scans to prevent impersonations.
   - **High-Tech Anti-Cheating Networks:** Centers use metal detectors, AI-powered cameras that monitor suspicious movements (like excessive head-turning), drones, and signal jammers to block wireless transmissions.
   - **Severe Legal Repercussions:** Cheating on these exams is a criminal offense.
   - **National Shutdowns:** To ensure zero distractions and prevent disruptions on exam days, cities drastically alter their operations.
     - Construction work is halted near centers, traffic is rerouted, and even police escorts are deployed to rush delayed students to the halls.

High Alert due to Exam Crisis

- Political debates and blame games do not provide solutions; instead, they fuel unrest in society.
  - **Examples:** Protests by student organizations and incidents of student suicides.
- Public trust takes decades to build but can be lost in a very short period.
  - **Example:** Just as trusted brands can lose credibility quickly, examination agencies may also face a collapse of confidence if issues are not addressed promptly.
- People are already suffering from COVID-19 impacts, unemployment, global conflicts, fuel-price rises, heatwaves, terrorist attacks, and other crises. At such a time, exam leaks can become a trigger for large-scale protests and unrest.

Way Ahead

- The government already has mechanisms to securely print, circulate, and protect highly confidential documents such as the Union Budget. Similar mechanisms can be used for examination papers.
- **Digital Locker System:** Use algorithms to select questions- Generate the final paper only a few hours before the examination.
- Improve infrastructure in private colleges so that they can absorb more students and reduce excessive dependence on a few government institutions.
- Admission criteria should include examination results along with Class 9–12 academic performance to enable better seat allocation.
- Increase integration and coordination among institutions to improve accountability and responsibility.
- Treat examinations as a national mission with the highest level of security and strict penalties for corruption to provide an additional layer of protection

Conclusion

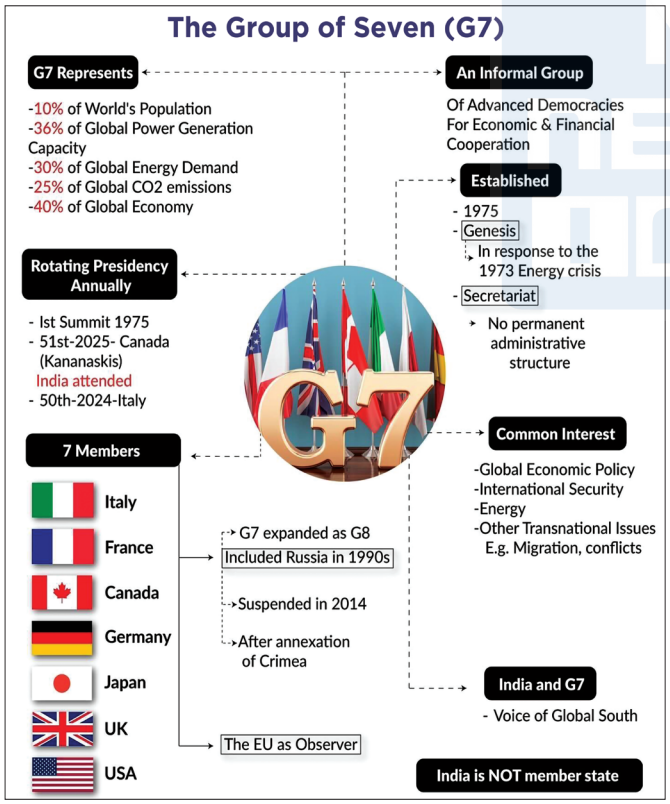
- Accountable and responsible behavior from government side would Restoring the trust of the students over examination and treating the disease not only the symptoms by creating integrated structural framework responsible for conducting examinations.
- It also using digital technological tool with strict penalties and in long run try to carry step to improve infrastructure and learning environment at private colleges to diversify the demand supply mismatch.

G7 SUMMIT 2026

Prime Minister Narendra Modi addressed the 52nd G7 Summit Outreach Session at Évian-les-Bains, France, under the theme "Forging New Partnerships and Rebuilding International Solidarity."

About G7

- The **Group of Seven (G7)** is an informal grouping of advanced industrial democracies comprising **Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States**, while the **European Union (EU)** participates as a non-formal member.
- It originated as the **G6 in 1975** after the global oil crisis and became G7 in **1976** with Canada's inclusion.
- Russia joined in **1998**, making it G8, but was suspended in **2014** after the annexation of Crimea. It has **no treaty, no permanent secretariat, and no legislative authority**, making it a politically influential but non-binding forum.
- The G7 accounts for around **30–43% of global GDP**, despite representing only around **10% of the world's population**, highlighting its disproportionate economic weight.
- The presidency rotates annually among member states.



India's Message

- India used the Outreach Session to underline that **trust** is the most important strategic asset in global politics.
- Prime Minister Modi argued that the current global crisis is not only a shortage of resources but also a **deficit of trust** between nations.
- India called for a shift from the traditional **donor–recipient model** to a partnership-based model grounded in equality, mutual respect, and shared responsibility.
- India reinforced its support for a **multipolar world order**, arguing that global institutions must reflect **21st-century realities** rather than the post-1945 power structure.
- It reiterated the demand for more representative global governance, including reforms in the **United Nations Security Council (UNSC)**, **International Monetary Fund (IMF)**, and **World Bank**.

Development Diplomacy

Lines of Credit

- India highlighted its long-standing cooperation with Africa through over **USD 12 billion** in **Lines of Credit** extended to **42 African countries**.
- Through the **India–Africa Forum Summits**, India has built a 60-year model of **South-South cooperation** based on capacity building and development partnership.

Digital

- India showcased its **Digital Public Infrastructure (DPI)** ecosystem including **Aadhaar**, **Unified Payments Interface (UPI)**, and **DigiLocker**.
- These were offered through the **Global DPI Repository** as affordable and scalable alternatives for developing countries.

Health

- Under **Vaccine Maitri**, India delivered around **250 million vaccine doses** to nearly **100 countries**, demonstrating its ability to act as a large-scale provider of global public goods.

Energy

- Through the **International Solar Alliance (ISA)**, co-founded by India and France, India positioned itself as a co-architect of the clean energy transition.
- Around **120 countries** are associated with the ISA.

Outreach

- **France:** Prime Minister Modi held bilateral talks with President **Emmanuel Macron**, focusing on strategic autonomy, technology, and innovation.
- **Canada:** India and Canada agreed to expedite negotiations on the **Comprehensive Economic Partnership Agreement (CEPA)** to conclude by the end of 2026.
  - Both sides launched negotiations on the **General Security of Information Agreement (GSOIA)** to deepen defence and intelligence cooperation.

- India supported Canada's bid for Dialogue Partnership in the **Indian Ocean Rim Association (IORA)**.
- A **CAD 2.6 billion uranium agreement** between **Cameco** and India's **Department of Atomic Energy** was advanced for long-term energy security.

- **United Kingdom:** India and the United Kingdom reviewed progress under **Vision 2035**. Both reaffirmed commitment to early implementation of the **Comprehensive Economic and Trade Agreement (CETA)**.
- **United Arab Emirates:** India and the UAE discussed disruptions in maritime trade, particularly through the **Strait of Hormuz**. India invited the UAE President to the **18th BRICS Summit**.
- **Japan, Kenya and Egypt:** Prime Minister Modi also held bilateral meetings with the leaders of **Japan, Kenya, and Egypt**, focusing on trade, investment, strategic cooperation, and people-to-people ties.

India–France

Strategic

- The **India–France Strategic Partnership**, launched in **1998**, was elevated to a **Special Global Strategic Partnership** in **2026**.
- The **Horizon 2047 Roadmap**, adopted in **2023**, provides long-term direction for cooperation in defence, maritime security, space, and advanced technologies.
- The new **Innovation Roadmap 2030** further strengthens bilateral technology cooperation.
- A **Joint India–France AI Working Group** was established to deepen cooperation in artificial intelligence.
- Both countries jointly launched **Bharat Innovates 2026** to connect India's deep-tech ecosystem with global stakeholders.

Defence

- India procured **36 Rafale fighter jets** and concluded an agreement for **26 Rafale-M fighter jets** for the Navy.
- Under **Project P-75**, six **Scorpene submarines** are being built in India with **Naval Group**, with **INS Vagsheer** being the latest.
- **HAL** and **Safran** are co-developing engines under the **Indian Multi-Role Helicopter (IMRH)** programme. Joint military exercises include **Shakti**, **Varuna**, and **FRINJEX-23**.

Space

- India and France share over **60 years of cooperation** between **ISRO** and **CNES**.
- Joint projects include **TRISHNA**, maritime domain awareness systems, and launch cooperation.

Energy

- Both sides are working on **Small Modular Reactors (SMRs)** and **Advanced Modular Reactors (AMRs)** under a dedicated nuclear task force.

Significance

For G7

- India is among the fastest-growing major economies and a crucial pillar of global supply chains due to its market size and demographic advantage.
- India acts as a major voice of the **Global South**, especially on issues such as **climate finance**, **food security**, and **debt sustainability**.
- India's strategic geography makes it indispensable for **Indo-Pacific stability**.
- As the world's largest democracy, India offers political stability and a rules-based approach to international relations.

For India

- The G7 provides India an important platform to shape debates on global governance, security, and economic restructuring.
- It strengthens India's case for institutional reforms and greater representation in global bodies.
- It also expands India's bilateral engagement with major advanced economies.

Challenges

- India remains outside formal G7 membership and decision-making.
- Global governance reforms such as **UNSC reform**, **IMF quota restructuring**, and **World Bank reform** remain stalled.
- Geopolitical fractures including **Russia–Ukraine**, **US–Iran tensions**, and Indo-Pacific rivalry continue to weaken international solidarity.
- Differences remain within G7 countries over sanctions, climate commitments, and industrial subsidies.
- In the India–France relationship, concerns remain over the depth of technology transfer, slow progress in **Jaitapur nuclear cooperation**, and trade remaining below full potential.
- France's economic engagement with China sometimes limits complete Indo-Pacific convergence with India.

Conclusion

- India's repeated participation in the G7 reflects its transformation from a regional actor into a major global stakeholder.
- At the 2026 Summit, India projected itself as a bridge between developed and developing worlds by linking **trust**, **development cooperation**, and **institutional reform**.
- The parallel deepening of bilateral ties, especially with **France**, shows that India's diplomacy is moving beyond transactional engagement toward long-term strategic partnerships.
- Together, India's G7 outreach and India–France strategic cooperation reinforce its role in shaping a **multipolar world order** built on **strategic autonomy**, **inclusive multilateralism**, and **Global South leadership**.

ECOLOGICALLY SENSITIVE AREAS

After a 12-year delay, the Centre is set to notify ESA in the Western Ghats, beginning with Gujarat, Goa, and Maharashtra. The proposed ESA covers about 56,825 sq km based on the Kasturirangan Committee recommendations.

About ESA

- An **Ecologically Sensitive Areas (ESA)** means that region declared under **Environment (Protection) Act, 1986** for the conservation of ecologically sensitive ecosystems.
- Such areas are **notified by MoEFCC** considering their biodiversity, environmental sensitivity and ecological significance, and the need for regulating developmental activities.
- Those activities which have adverse impacts on the environment such as **mining, quarrying, pollution intensive industries and construction activities** are either banned or regulated.
- **Objective** - to ensure a balance between **environmental conservation and sustainable development** while safeguarding ecosystem services and local livelihoods.

Western Ghats

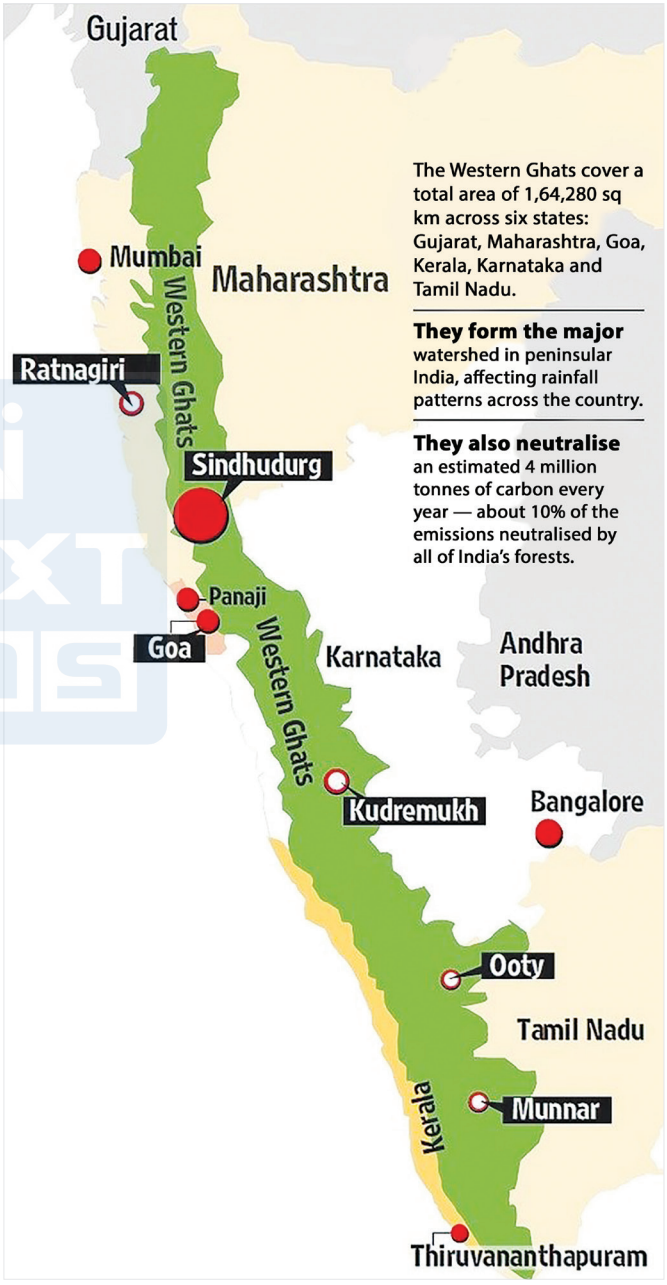
- The Western Ghats, stretching **over 1,500 km** along India's western coast across six states i.e. Gujarat, Maharashtra, Goa, Karnataka, Kerala, and Tamil Nadu.
- They constitute one of the **world's eight 'hottest hotspots' of biological diversity**, spread over approximately **1,64,280 sq km**.
- It holds vital importance for the **regulation of Indian Monsoon**, climatic regulation, soil conservation and providing water security to millions of people.
- This area is considered as a **UNESCO World Heritage Site** due to its unique biological diversity and endemism.
- **Major Peaks in the Western Ghats:** Anamudi is the highest peak in the Western Ghats, located in Kerala.
- Doddabetta is the highest point in Tamil Nadu.

Other Regions in India Designated ESAs

- Kumbhalgarh Wildlife Sanctuary in Rajasthan (Aravalli Range)
- Kaziranga-Karbi Anglong landscape, Assam
- Gir National Park, Gujarat
- Ranthambore Tiger Reserve, Rajasthan
- Sundarbans, West Bengal
- Great Indian Bustard habitats in Rajasthan and Gujarat
- Bhagirathi Eco-Sensitive Zone, Uttarakhand
- Chilika Lake, Odisha, and Deepor Beel, Assam

Ecological Significance

- **Biodiversity Hotspot:** The region is home to **nearly 30% of India's flora and fauna** and exhibits **high endemism.** Several endangered species including **Lion-tailed macaque, Nilgiri tahr, Malabar civet, Great Indian hornbill** inhabit the Western Ghats.



- **Water Security and Climate Regulation:** Western ghat **acts as a water-divide** and serves as a wind barrier, affecting rainfall patterns over peninsular India.
  - Major rivers like **Godavari, Krishna, Cauvery, Tungabhadra, Periyar** originate from the Western Ghats.

- Dense forests help in groundwater recharge, carbon sink, and disaster management.

➲ **Socio-Economic Significance:**
- The Western Ghats sustain millions by agriculture and plantations unlike Himalayas.
- The region is known for export crops like **pepper, cardamom, coffee, tea, cinnamon, rubber, and spices.**
- The ecosystem supports **tourism, hydroelectricity generation**, and livelihood.

Evolution of ESA Delineation

Gadgil Committee vs Kasturirangan Committee

➲ **Gadgil Committee (Western Ghats Ecology Expert Panel, 2011):**
- It defined the Western Ghats region as 1,29,037 sq km and proposed declaration of the whole Western Ghats as ESA.
- It suggested a graded regulation regime with strict norms on mining, pollution industries, and mega infrastructure projects and promoted participatory bottom-up approach involving local bodies.

➲ **Kasturirangan Committee (High-Level Working Group, 2013):**
- It adopted a more balanced approach.
- It defined the total Western Ghats landscape as 1,64,280 sq km and recommended designation of approximately 60,000 sq km as ESA.
- It differentiated between **Cultural Landscape (60%) and Natural Landscape (40%)**.
- It suggested ban on mining and quarrying, prohibition on red category polluting industries, restriction on thermal power plants, and regulation of large scale constructions and township projects

Concern

➲ **State Government Opposition:** State governments feel ESA notification might hinder industrialization and infrastructure development, impede plantation agriculture and livelihoods, and limit revenue generation from mining and quarrying activities.

➲ **Disputes over Boundaries:**
- The Centre's draft notification had proposed 56,825 sq km as ESA.
- States were making demands for exclusions through ground level survey findings.
- Kerala, Karnataka and Maharashtra are demanding huge reductions in the area.

➲ **Challenges in Data Reconciliation:** Difference in satellite imageries, village wise data, revenue records, land uses have made consensus difficult.

Recent Developments

➲ **Expert Committee (2022):**
- MoEF&CC has formed an expert committee headed by former Director General of Forests for reevaluation of objections raised by states.
- Some major tasks are reconciliation of village wise data, field verification, and review of proposals for monetary incentives to states.

➲ **Draft Notification (July 2024):**
- It has introduced an important provision like:
- ESA boundaries can now be finalized either state-wise or through combined notification.
- It intends to avoid delays in states where a consensus is possible.

Western Ghats Protection: A Crucial Imperative

➲ **Increasing Ecological Threats:**
- The Ghats are being threatened by deforestation, quarrying and mining, expanding infrastructure, unregulated tourism and climate induced extreme rainfall events.
- Recent landslides in Kerala and Karnataka have underscored the vulnerability of the ecosystem.

➲ **Ecosystem Services:**
- Western Ghats offer valuable ecosystem services including water provisioning, floods moderation, carbon sink, pollination and soil conservation.
- These services not only serve six states but also the whole nation.

➲ **Imperative of Sustainable Development:**
- Protection of the region does not mean exclusion of people.
- Instead, it means promotion of sustainable agriculture, eco-tourism, community involvement, compensation mechanisms and payment for ecosystem services.

Way Forward

➲ There needs to be a balanced approach to integrate protection and development.

➲ **Key measures include:**
- Boundary delineation of ESA through scientific and participatory consultations.
- Offering financial incentive and compensations to states and communities.
- Devising decentralized environmental governance through Panchayati Raj Institutions.
- Promoting sustainable livelihood and climate resilient agriculture.
- Stringent regulation of mining and polluting industries in ecologically sensitive regions.

CHANGING WEATHER PATTERNS

India is witnessing increasing weather extremes such as unseasonal rainfall, heatwaves, and humidity due to climate phenomena like Western Disturbances, El Niño, and La Niña.

Heat Waves

- A heat wave is a period of **unusually high temperatures** departing from the normal, and varies from region to region depending on the historical temperatures observed in the region.
- The basic criteria for IMD to declare a heatwave are when a place's temperature exceeds **40°C** in the plains, **37°C** in coastal areas, and **30°C** in the hills.

Feels Like Temperature, Heat Index and Wind Chill Index

- **'Feels like' temperature** or apparent temperature accounts for wind and humidity conditions to determine what the outdoor air temperature will feel like in relation to your body temperature.
- **Heat index**, a type of apparent temperature, measures how hot a human body feels when combining relative humidity with the actual temperature.
- **Wind chill index**, another type of apparent temperature which combines temperature and wind speed. It measures how cold it actually 'feels' on exposed skin as wind takes away the thin layer of warm air your body naturally produces to insulate itself.

Wet Bulb Temperature and Dry Bulb Temperature

- **Wet Bulb Temperature** measures the lowest temperature achievable through evaporation. It reflects the combined effect of heat and humidity.
  - **Importance:** Human bodies cool through sweating and evaporation. High humidity reduces evaporation efficiency, making it difficult for the body to cool itself.
- **Dry Bulb Temperature** refers to the actual air temperature measured using a standard thermometer. It does not account for atmospheric moisture.

Western Disturbance

- It is an **extra-tropical weather system** that originates outside India and moves from west to east, bringing rain, snowfall, and storms to northern parts of the Indian subcontinent, especially during winter and early spring.
- **Origin and Formation:** Originate over the **Mediterranean region, Black Sea, or Caspian Sea**, and form when **cold polar air interacts with warmer, moist air,** creating **low-pressure systems.**
  - These systems are **carried eastward by westerly winds** in the upper atmosphere, particularly the subtropical westerly jet stream.
- **Regions Affected in India:** Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Delhi, Rajasthan and Western Uttar Pradesh.
- **Significance of Western Disturbances:** About 30% of annual **precipitation over the North West Indian region** (J&K, Ladakh, Himachal Pradesh &Uttarakhand) is received during winter.
  - It **influences Himalayan climate, glaciers,** snow-water storage, flora, fauna, agricultural crops and human inhabitants etc.
  - Vital for rabi crops, especially **wheat, Mustard, Barley.** Adequate rainfall **improves soil moisture, crop yield, and food security.**

ENSO (El Niño–Southern Oscillation)

- **ENSO is a periodic fluctuation** in sea surface temperatures and atmospheric pressure in the equatorial Pacific Ocean. It has **two opposite phases: El Niño and La Niña.**
- **ENSO influences** Indian Monsoon, cyclone patterns, droughts and floods and global temperature variability.

El Nino

- El Niño is the **warming of seawater** in the central-east Equatorial Pacific that occurs every few years.
- During El Niño, surface temperatures in the **equatorial Pacific rise,** and trade winds, east-west winds that blow near the Equator, weaken.

La Nina

- La Niña is the opposite of El Niño. La Niña witnesses **cooler than average sea surface temperature (SST)** in the equatorial Pacific region. Trade winds are stronger than usual, pushing warmer water towards Asia.
- **Impact:** This leads to **drier conditions in the Southern U.S.,** and heavy rainfall in Canada. It has also been associated with heavy floods in Australia.

How does it affect the Indian Monsoon?

- **In El Niño years**, India faces **warmer temperatures and less rainfall**, causing droughts in some regions.
  - This affects agriculture, water resources, and ecosystems.
  - The El Nino phenomenon led to **1.4% decrease** in food grain production for the 2023-24 (July-June) crop year.
- **La Niña** brings cooler sea surface temperatures, leading to increased rainfall in certain parts of India.

Way Forward

- India needs to strengthen **climate forecasting and early warning systems.**
- **Climate-resilient agriculture and water conservation** measures should be promoted. **Urban planning** should include green infrastructure and heat mitigation strategies.
- **Public awareness** regarding heat stress and disaster preparedness must be enhanced.

MICROFINANCE vs MESO-FINANCE

Recently economists have argued that while microfinance has expanded financial inclusion in India, sustaining future growth will require a shift towards meso-finance and stronger financial services for growing enterprises.

What is Microfinance?

- Microfinance refers to the **provision of small-scale financial services,** particularly credit, to low-income households and micro-enterprises that lack access to formal banking institutions.
- The concept gained global prominence through the **Grameen Bank** established by **Muhammad Yunus in Bangladesh in 1976,** which popularized group-based lending to poor households without collateral.

Success of the Traditional Microfinance Model

- India's microfinance sector is largely **based on the Joint Liability Group (JLG)** model. It has **expanded access to formal credit** for millions of low-income households, particularly **women** in rural areas.
- The **SHG-Bank Linkage Programme** implemented by **National Bank for Agriculture and Rural Development** has empowered over **17 crore** households through more than **144 lakh Self-Help Groups.**
- Nearly **46%** of microfinance loans are extended to households with monthly incomes below **₹20,000,** supporting income-generating activities and asset creation.

Government Initiatives related to Microfinance

- **RBI Mandates:** Imposed a uniform 2022 regulatory framework for borrower protection and mandated credit bureau reporting to evaluate histories.
- **Financial Linkages:** Scaled the SHG-Bank Linkage Programme for livelihoods and provided NABARD refinance support to MFIs.
- **MUDRA Yojana:** Supplies collateral-free loans up to ₹20 lakh to small enterprises.

Limitations of the Microfinance Model

- The traditional microfinance model is primarily suited for **small-scale livelihood activities** and working capital needs.
- **High interest rates** make it unsuitable for enterprises requiring large investments and longer repayment periods.
- **Standardized loan products** most of the times fail to meet the diverse financial needs of borrowers.
- **Excessive reliance on credit** without adequate savings and insurance increases financial vulnerability.
- **Multiple borrowing** from different microfinance institutions has increased the risk of **debt traps**, with around 8–10% of the sector's assets under management linked to borrowers having more than four lenders.

What is Meso-Finance?

- Meso-finance refers to financial services that **bridge the gap between microfinance and traditional bank lending.**
- It provides financing that is **larger and more flexible than microfinance loans** but smaller and less formal than conventional commercial bank loans.
- It supports business expansion, **asset creation, employment generation**, and rural economic development.

Challenges in Transitioning to Meso-Finance

- **Higher Credit Risk:** Larger loan sizes increase the risk of defaults and financial losses for lending institutions.
- **Weak Credit Assessment Systems:** Financial institutions require more robust borrower evaluation and cash-flow assessment mechanisms.
- **Need for Business Support Services:** Growing enterprises need continuous monitoring, mentoring, and market linkages in addition to finance.
- **Regulatory Constraints:** Existing regulatory frameworks and financial institutions are primarily designed for either microfinance or conventional banking.

Successful Models of Meso-Finance

- **Bank for Agriculture and Agricultural Cooperatives (Thailand) and Bangladesh Rural Advancement Committee (Bangladesh):** Provide medium-sized and Small Enterprise Loans to farmer groups and businesses outgrowing microcredit.
- **KfW Bank:** Funds global SME-financing programs to bridge the microcredit-banking gap.
- **Indian Models:** *Mann Deshi Bank* and *Small Finance Banks* offer larger enterprise loans to scaling microfinance clients.

Difference between Microfinance and Meso-Finance

Aspect	Microfinance	Meso-Finance
Loan Size	**Small loans**	**Medium-sized loans**
Purpose	Working capital and livelihood activities	Business expansion and asset creation
Repayment Period	Short-term	Medium to long-term
Target Group	Low-income households and micro-enterprises	Growing micro and small enterprises
Examples	Buying a sewing machine or milch animal	Dairy farm, food-processing unit, or rural enterprise

WORLD'S TOP SHIP RECYCLING NATION

As per the latest report by the United Nations Conference on Trade and Development (UNCTAD), India's share of global ship recycling increased to 35.4 per cent in 2025 from 30.1 per cent in 2024.

About

- Ship Recycling is the process of **dismantling a vessel's structure** for scrapping or disposal whether conducted at a beach, pier, dry dock or dismantling slip.
- It includes a wide range of activities, from removing all gear and equipment to cutting down and recycling the ship's infrastructure.

India's Ship Recycling Landscape

- Ship recycling in the country rose significantly to **2.99 million gross tonnes** in 2025, up nearly 60 percent from 1.86 million gross tonnes in 2024.
- With this achievement, the target set under **Maritime India Vision 2030** to become the world's leading ship recycling nation has been **achieved five years ahead of schedule.**
- **The Alang-Sosiya ship recycling cluster in Gujarat** forms the backbone of the country's recycling capacity and is the largest ship recycling hub in the world. The cluster accounts for approximately **97%** of India's ship recycling activity.

Regulatory Framework

- **Ship Recycling Act, 2019:**
  - Provides the overarching legal foundation for regulating ship recycling in India.
  - It gives domestic effect to international standards, designates the **Directorate General of Shipping as the National Authority** and mandates authorisation, certification, inspection and enforcement mechanisms.
- **Ship Recycling Rules, 2021:** Operationalise the Act by prescribing procedural and technical requirements including facility authorisation, Ship Recycling Plans, hazardous material management, worker safety, training and reporting obligations.
- **Ship Recycling Regulations, 2026:** Strengthen implementation through detailed operational, safety and environmental standards, ensuring uniform compliance and effective monitoring.

Key Government Initiatives

- The Government of India **enacted the Recycling of Ships Act, 2019**, to develop a ship recycling ecosystem aligned with the **Hong Kong International Convention** for the Safe and Environmentally Sound Recycling of Ships (HKC), which India **ratified in 2019.**
- **Ship-breaking Credit Note Scheme:** MoPSW launched the Ship-breaking Credit Note Scheme. Under this scheme, ship owners receive a credit note equivalent to 40% of the scrap value of a recycled ship.
  - The credit note can be utilised toward payment of up to **5% of the value of a new vessel** built at an Indian shipyard, thereby promoting both ship recycling and domestic shipbuilding.

Hong Kong International Convention (HKC)

- The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships is the principal international instrument governing ship recycling.
- It establishes **legally binding requirements** for ships and recycling facilities. The Convention **entered into force on 26 June 2025,** making compliance mandatory for Parties.
- **Ship Recycling Industries Association:** It is an organisation established for the welfare of ship recycling activity in **India.** It safeguards the rights of its membership recyclers and ensures safe and eco-friendly recycling activity.

Economic and Environmental Significance

- **Circular Economy:** Ship breaking supports the circular economy by recovering high-quality scrap steel, reducing the need for virgin iron ore mining, and preventing marine pollution.
- **Employment & Revenue:** The industry generates thousands of direct and indirect jobs and provides a steady, affordable stream of steel to India's secondary steel sector.

Challenges in Ship Recycling

- **Hazardous Waste Management:** Ships contain toxic materials such as asbestos, oil residues, heavy metals, and hazardous chemicals that require safe handling and disposal.
- **Infrastructure Constraints:** The recycling facilities require modernization and advanced waste-treatment systems to achieve environmentally sound recycling.
- **Worker Safety Concerns**: Ship dismantling is a high-risk activity involving accidents, fires, explosions, and exposure to harmful substances.
- **Global Competition:** India faces strong competition from countries such as Bangladesh and Pakistan, which are operating at lower costs.

Conclusion

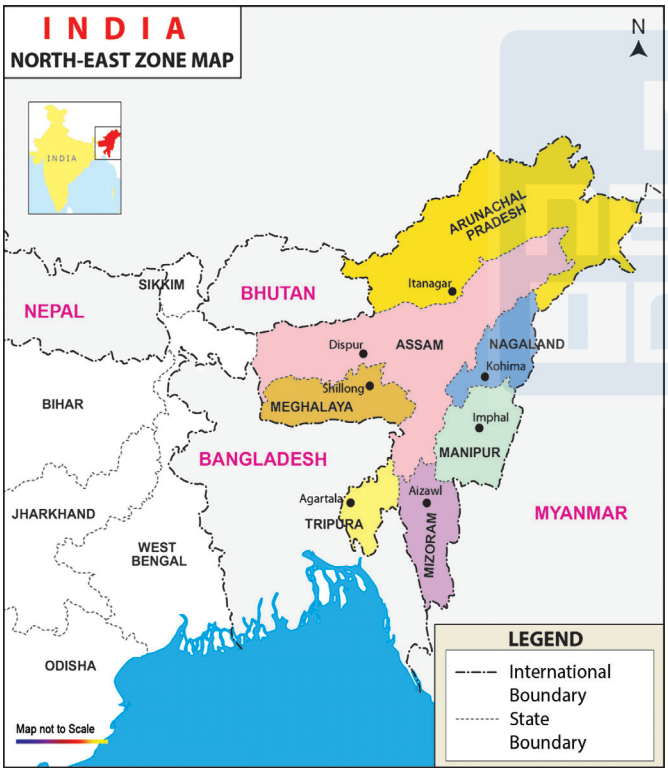
- With strong future demand, increasing compliance with international standards and continued government support.
- India is well-positioned to strengthen its leadership in ship recycling while advancing the objectives of the **circular economy** and sustainable maritime development.

ASHTALAKSHMI

Recently, PM Modi described the Northeast as India's "Ashtalakshmi" and said the Centre has moved beyond the "Act East" policy to an "Act Fast" approach to accelerate development in the region.

North Eastern Region (NER)

- **The NER comprises eight States viz.** Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.
- **This region is culturally and ethnically diverse** having **more than 200 ethnic groups** which have distinct languages, dialects and socio-cultural identities.
- The Region covers **7.97% of the country's geographical area** and **3.78%** of its population.
- **It has 5,484 km of international border** viz. Bangladesh (4,096.7 km), China (3,488 km), Pakistan (3,323 km), Nepal (1,751 km), Myanmar (1,643 km), Bhutan (699 km), Afghanistan (106 km).



Significance of the North East Region

- **Geostrategic Significance:**
  - **International Borders:** The NER shares borders with five countries i.e China, Bhutan, Myanmar, Bangladesh, and Nepal which make it strategically important.
  - **Gateway to ASEAN:** It is a critical link in India's Act East Policy, serving as a bridge to Southeast Asia.
    - **Current India–ASEAN trade:** ~$125 billion, projected to exceed $200 billion.

Economic and Trade Potential:

- **Act East & Cross-Border Trade:**
  - The NER serves as the land bridge to ASEAN, offering access to a massive market.
  - Border **'haats'** (markets) and multimodal projects, like the India-Myanmar-Thailand Trilateral Highway and the Kaladan Multi-Modal Transit Transport Project, are boosting regional supply chains.
- **Bio-Economy & Horticulture:** Ideal climatic conditions make the region a hub for organic farming, bamboo-based industries, and high-value exports *(e.g., Muga Silk, Lakadong Turmeric, Nagaland Coffee).*
- **Clean Energy:** The region accounts for over 40% of India's exploitable hydropower potential (approx. 60 GW), making it crucial for the country's net-zero goals.
- **Tourism:** Its unique cultural diversity, rich biodiversity, and proximity to international wildlife circuits offer vast potential for sustainable eco-tourism.

Challenges Faced by the Region

- **Geographic and Environmental Constraints:** Hilly and forested terrain makes development of infrastructure and industries difficult and costly.
- **Connectivity Deficits:** Despite infrastructure growth, the mountainous terrain and the narrow Siliguri Corridor ("Chicken's Neck") continue to pose logistical and supply chain hurdles.
- **Limited digital infrastructure:** Though improving, internet and telecom connectivity are weaker compared to other parts of India.
- **Industrial Gap:** The region lacks a robust secondary and tertiary sector, struggling with low FDI and export shares compared to the national average
- **Insurgency and Internal Security Issues:**
  - Presence of militant groups and separatist movements in some areas.
  - Cross-border infiltration and arms smuggling due to porous borders with Myanmar and Bangladesh.
  - **Narco-Terrorism:** Illicit drugs are trafficked into India's Northeast The "Golden Triangle" typically refers to the famous Southeast Asian region where the borders of **Thailand, Laos, and Myanmar**
  - Although security has improved, periodic unrest still affects peace and progress.

- **Ethnic Tensions and Migration Issues:**
  - Inter-community tensions and demands for autonomy or separate states lead to uncertainty in the region.
  - Illegal immigration from neighboring countries has altered demographics in some areas, creating social unrest.

Government Initiatives

- **UNNATI Scheme:** The Uttar Poorva Transformative Industrialization Scheme provides capital investment incentives and interest subventions to attract industries and generate employment.
- **PM-DevINE:** The Prime Minister's Development Initiative for North East Region directly funds infrastructure and social development projects tailored to the region's specific needs.
- **Connectivity:**
  - **Bogibeel Bridge (2018):** It is a combined road and rail bridge across the Brahmaputra River.
  - **Dhola–Sadiya Bridge (2017):** It provides the first permanent road connection between northern Assam and eastern Arunachal Pradesh. It spans the Lohit River, a major tributary of the Brahmaputra.
  - **Noney Bridge:** The Noney Bridge in Manipur, part of the 111-km Jiribam–Imphal railway project. Constructed across the Aling River, it is the world's tallest railway pier bridge.
  - **Sela Tunnel:** It ensures all-weather connectivity in a strategically important border region.
- **GI Tags:** As of March 2026, the NER accounted for 89 Geographical Indication (GI)-registered products. The region is known for several GI-tagged fruits and spices, including Queen Pineapple, Lakadong Turmeric, King Chilli, and Large Cardamom.
- **Waterways:** National Waterways in the Northeast increased from 1 to 20. There has been the development of Brahmaputra and Barak river transport systems.
- **Energy and Green Growth:** Dibang Multipurpose Hydropower Project (2,880 MW), Subansiri Lower Hydroelectric Project (2,000 MW).

Way Forward

- **Upgrade Cross-Border Infrastructure:** Fast-track critical connectivity links like the India-Myanmar-Thailand Trilateral Highway and the Kaladan Multi-Modal Project.
- **Enhance Local Logistics:** Expand digital networks and widen transport routes through the Siliguri Corridor to secure the gateway to ASEAN markets.
- **Harness Clean Energy:** Accelerate major projects like the Dibang and Subansiri dams to tap into the region's 60 GW hydropower potential.
- **Boost Bio-Exports:** Expand organic farming and build efficient supply chains for GI-tagged items like Lakadong Turmeric and Queen Pineapple.
- **Secure Porous Borders:** Install smart fencing along the Myanmar and Bangladesh borders to counter cross-border infiltration and arms smuggling.
- **Combat Narco-Terrorism:** Coordinate regional security agencies to disrupt illicit drug networks flowing from the neighboring Golden Triangle.
- **Resolve Ethnic Tensions:** Foster long-term peace by using community-led, inclusive dialogues within autonomous administrative regions.
- **Drive Local Investment:** Use the UNNATI scheme to offer capital incentives and attract eco-friendly industries to the region.
- **Promote Eco-Tourism:** Build sustainable tourism circuits that leverage the unique cultural diversity and rich biodiversity of the Northeast.

Recent Instances of Bias Against People from Northeast India

- **Racial abuse of Arunachal Pradesh women in Delhi (2026):** Three women from Arunachal Pradesh were subjected to racial slurs in Delhi's Malviya Nagar area, including derogatory remarks targeting their ethnic identity. The accused were later arrested by Delhi Police.
- **Railway station abuse of Arunachal cultural troupe (2026):** Members of a cultural troupe from Arunachal Pradesh reportedly faced racist comments and harassment at a railway station, triggering public outrage.
- **Death of Tripura student Anjel Chakma in Dehradun (2025):** The MBA student was allegedly attacked after being subjected to racist remarks such as "Chinki" and "Momo". The incident reignited demands for a dedicated anti-racism law in India.

Conclusion

- The North Eastern Region (NER) is a vital geopolitical asset, making up nearly 8% of India's landmass and sharing over 5,400 km of strategic international borders.
- Its location acts as an essential land bridge for India's Act East Policy, connecting domestic markets to the USD 125 billion ASEAN trade network.
- While the region faces heavy challenges like difficult hilly terrain, infrastructure deficits, and cross-border security issues, dedicated government interventions are actively driving development.
- Strategic initiatives like **PM-DevINE**, the **UNNATI** scheme, and major projects like the Sela Tunnel and Noney Bridge show a strong commitment to connecting the region to the mainstream.
- By balancing strict border security with green economic growth, India can transform the Northeast into a safe, self-reliant, and prosperous economic hub.

INDIA-SLOVAKIA

Indian Prime Minister Narendra Modi paid a **historic State Visit to Slovakia,** marking the **first visit by an Indian Prime Minister** to the country since its independence in **1993.**

Key Outcomes of the Visit

- Both nations elevated their bilateral relationship to a **Comprehensive Partnership**.
- A total of **11 agreements and MoUs** were signed covering defence, cybersecurity, skilled mobility, education, and technology.
- The Slovak President conferred Slovakia's **highest state honour**, the **Order of the White Double Cross (1st Class)**, on PM Modi.
  - This was the **33rd global honour** bestowed upon PM Modi by a foreign nation, awarded in recognition of his contributions to strengthening bilateral relations.
- A **Letter of Intent (LoI)** was signed to boost **joint development, production, and industrial collaboration** in defence technologies.
- An **MoU on Labour Migration** was signed to facilitate **orderly, safe, and legal mobility** of skilled professionals between the two countries. Both sides are working toward an early conclusion of a **Social Security Agreement (SSA)**.
- Agreements were signed to strengthen cooperation in **cybersecurity, post-quantum cryptography, and protection of critical information infrastructure**.
- Cooperation in **higher education** was deepened, with focus on student and academic mobility in **STEM and humanities**.
- A **Joint Working Group on Counterterrorism** was established, along with a **Consular Dialogue Mechanism**.
- Slovakia reaffirmed its support for **India's permanent membership** in a reformed **United Nations Security Council (UNSC)**.
- Slovakia also reiterated its **constructive approach** toward India's membership in the **Nuclear Suppliers Group (NSG)**.
- Both leaders agreed to support mutually beneficial infrastructure projects through **Visegrad 4 (V4)** and the **Three Seas Initiative**.
- Both sides committed to working toward the earliest implementation of the **India-EU Free Trade Agreement**.

Historical Background

- India and Slovakia established a **Joint Economic Committee (JEC) in 1995** to enhance commercial ties.
- An **MoU on Defence Cooperation** has been in place since **1995**.
- The two nations share a longstanding tradition of **friendly diplomatic engagement** built on mutual respect and common democratic values.

Geopolitical Cooperation

- Slovakia is a strategically located **Central European nation** and a full member of the **European Union, Eurozone, Schengen Area, and NATO**.
- Slovakia is part of the **Visegrad Group (V4)**, comprising the Czech Republic, Hungary, Poland, and Slovakia, a significant **cultural and political alliance** in Central Europe.
- It is also part of the **Slavkov Format (S3)** involving Austria, Slovakia, and the Czech Republic, and the **Three Seas Initiative (3SI)**, a geopolitical forum of EU countries located between the **Baltic, Black, and Adriatic Seas**, focused on infrastructure and connectivity.
- Slovakia's support for India's **UNSC permanent membership and NSG entry** reflects growing geopolitical convergence.
- A **Joint Working Group on Counterterrorism** strengthens both nations' commitment to combating cross-border terrorism and extremism.

Defence Cooperation

- Slovakia possesses **highly competitive defence manufacturing capabilities**, offering substantial potential for **joint ventures** with Indian defence corridors.
- The newly signed **Letter of Intent** opens pathways for **co-development, co-production, and technology transfer** in the defence sector. However, **delays in converting signed MoUs into actual defence projects** remain a persistent challenge.
- **Security uncertainties** arising from Slovakia's **proximity to the Russia-Ukraine conflict** also pose risks to defence collaboration.

Geo-economic Cooperation

- Bilateral trade reached **1.28 billion Euros in 2024**, crossing the **one-billion-euro mark**.
- India exports **mobile phones, footwear, garments, motor vehicle parts, medicaments, and electrical apparatus** to Slovakia.
- India imports **motor vehicles, machinery, pumps, transmission shafts, measuring instruments, and bearings** from Slovakia.
- Slovakia's **strategic location in Central Europe** provides India with enhanced access to the broader **EU and Central European markets**.
- The **India-EU Free Trade Agreement**, once concluded, is expected to significantly boost bilateral market access and eliminate tariff barriers.
- Despite progress, **bilateral trade volumes remain low** compared to India's trade with major Western European economies.

Space, Nuclear, and Technology Cooperation

- India launched **Slovakia's first-ever satellite, SKcube**, using the **PSLV-XL launch vehicle** from Sriharikota in **June 2017**.
- Both nations have signed an **MoU on Nuclear Energy** focused on exchanging technical information on the **regulation and safe use of nuclear energy** for peaceful purposes.

- Agreements on **post-quantum cryptography and cybersecurity** mark a forward-looking step in technology cooperation.
- **Limited funding and commercialisation mechanisms** for joint innovation projects remain a challenge to be addressed.

People-to-People and Cultural Relations

- The **Indian community in Slovakia** is estimated at approximately **7,700 people**, including students, serving as a vital bridge for people-to-people ties.
- An **MoU on Labour Migration** creates a structured pathway for the movement of Indian professionals in **STEM, healthcare, engineering, and IT**.
- Cooperation in **higher education and academic mobility** has been prioritised, particularly in STEM and humanities disciplines. The absence of a **Social Security Agreement (SSA)** currently increases costs for Indian professionals working in Slovakia.
- **Language barriers and limited business awareness** also constrain deeper people-to-people engagement.

Challenges

- Bilateral trade volumes remain **disproportionately low** relative to the size and potential of both economies.
- **Delays in defence project implementation** continue to limit the practical impact of signed agreements.
- The **absence of a Social Security Agreement** increases financial burdens on Indian skilled workers in Slovakia.
- **Limited funding mechanisms** for joint innovation and technology initiatives constrain emerging technology cooperation.
- Slovakia's geographic proximity to the **Russia-Ukraine conflict zone** introduces an element of **regional security uncertainty**.

Way Forward

- Both sides should prioritise the **early conclusion of the Social Security Agreement** to ease mobility for Indian professionals.
- Faster **implementation of signed defence MoUs** into concrete production and R&D projects is essential.
- Building on the **SKcube success**, both nations can expand collaboration in **satellite research and space technology**.
- The **India-EU FTA**, once finalised, should be leveraged to significantly scale up bilateral trade.
- The **Migration and Mobility Partnership Agreement** framework should be actively used to facilitate the movement of skilled Indian professionals across priority sectors.

Conclusion

- With **11 agreements** across defence, technology, education, and mobility, the partnership now rests on a wider and more structured foundation.
- Bratislava's unique status as the **only national capital bordering two sovereign states** reflects Slovakia's distinctive geopolitical position, which India can leverage for deeper **European connectivity**.
- Sustained follow-through on signed agreements will be critical to translating the momentum of this historic visit into **durable and substantive bilateral outcomes.**

SIPRI YEARBOOK, 2026

The SIPRI Yearbook 2026 flagged India's growing nuclear arsenal, rising defence expenditure, continued arms import dependence.

Notable Findings of the Report

Nuclear Stockpile

- **Estimated global inventory (January 2026): 12,187 nuclear warheads**; around **9,745** are in active military stockpiles, ready for potential use. The **USA and Russia** together possess around **83%** of all stockpiled warheads.
- All nine nuclear-armed states USA, Russia, UK, France, China, India, Pakistan, North Korea, and Israel continued modernisation programmes and deployed new nuclear-capable systems in 2025.

SIPRI

- **SIPRI** (Stockholm International Peace Research Institute) is an independent international research institute based in **Stockholm, Sweden**, established in **1966** on the basis of a decision by the Swedish Parliament.
- It is substantially funded by the Swedish Government, supplemented by other organisations.
- It researches global security, armaments, arms control, disarmament, and conflict and produces evidence-based analysis for policymakers, researchers, and the media.
- Its annual **SIPRI Yearbook** and global databases on military spending, arms trade, and nuclear forces are among the most credible and widely used sources in international security affairs.

Reversal of Disarmament Trends

- Since the end of the Cold War, **dismantlement of retired warheads generally exceeded deployment** of new ones but SIPRI warns this trend is likely to **reverse** as dismantlement slows and modernisation accelerates.
- Nuclear-armed states are placing **greater emphasis on nuclear deterrence**, a reversal of decades-long efforts to reduce the role of nuclear weapons.
- Strategic dialogue among major nuclear powers is **declining**, weakening the arms control regime.

Rising Escalation Risks

- Advances in missile technology, artificial intelligence, cyber capabilities, and space-based systems are complicating deterrence calculations.
- SIPRI warns that heightened geopolitical tensions increase the possibility of **miscalculation leading to nuclear escalation**.

India's Nuclear Arsenal

- **Size and Expansion:** India's stockpile is estimated at 190 warheads (early 2026), up from 180 the previous year, a modest but steady expansion.
- **Modernisation:** Focus is shifting towards longer-range missiles, primarily to strengthen deterrence against China, while maintaining strategic balance with Pakistan.
  - India is developing MIRV (Multiple Independently targetable Re-entry Vehicle) technology which will enable a single missile to carry multiple warheads aimed at different targets.
  - Sea-based nuclear capabilities, particularly submarine-launched ballistic missiles, are being strengthened to ensure a credible second-strike capability.
  - India maintains a nuclear triad, i.e. land-based, air-based, and sea-based delivery systems.
- **Strategic Drivers:** India's strategic planning is increasingly shaped by China's growing military capabilities, alongside the continuing India–Pakistan nuclear rivalry.
  - Some strategic analysts argue that the quiet shift towards longer-range and more survivable systems suggests an evolving doctrine, even if India's official nuclear policy remains unchanged.

India's Nuclear Doctrine	
Pillar	**India's Position**
No First Use (NFU)	Defence Minister Rajnath Singh stated that while India adheres to its "No First Use" nuclear policy today, future alignment remains flexible and depends entirely on prevailing geopolitical circumstances
Credible Minimum Deterrence	India maintains only as many weapons as are necessary to deter adversaries.
Massive Retaliation	Any nuclear attack on India will invite a devastating retaliatory response.
Non-Use Against NNWS	India will not use nuclear weapons against non-nuclear weapon states.
Multilateral Framework	India is prepared to convert these commitments into binding multilateral legal arrangements.
NPT Non-Signatory	India views the NPT as discriminatory and has not signed it.

Operation Sindoor (2025)

- SIPRI describes the May 2025 India–Pakistan confrontation as an "unusually severe military crisis" between two nuclear-armed states.
- India reportedly struck Pakistani air and missile bases, some of which may have had nuclear-related roles.

- Despite escalation, both sides reportedly took steps to prevent full-scale war, demonstrating that nuclear deterrence continued to act as a stabilising factor.
- The crisis underscores the fragile nature of peace in South Asia and the persistent risk of escalation between nuclear neighbours.

New Dimension: Cyber Operations

- The 2025 conflict marked the first known integration of cyber operations into active military conflict between India and Pakistan.
- This reflects the growing use of hybrid warfare, where cyber tools are combined with conventional military actions, extending conflict beyond traditional battlefields into digital domains.

India's Defence Expenditure and Arms Imports

Military Expenditure

- **India's military expenditure in 2025: $92.1 billion** — an increase of **8.9%** over the previous year.
- India is the **world's fifth-largest military spender**, after the United States, China, Russia, and Germany.
- Rising expenditure reflects continued focus on modernisation, procurement of advanced weapons, and strengthening overall defence capabilities.

Key Milestones

- **Smiling Buddha (1974):** India's first nuclear test; marked the beginning of its nuclear weapons programme and the development of a nuclear triad.
- **Operation Shakti (1998):** Series of nuclear tests at Pokhran. Marked India's formal entry into the nuclear weapons club and led to the articulation of its nuclear doctrine.

Arms Imports

- India is the **world's second-largest importer of major arms** during 2021–25, accounting for **8.2%** of global arms imports.
- This highlights continued dependence on foreign defence technology.
- Major global arms importers during this period: Ukraine, India, Saudi Arabia, Qatar, and Pakistan.

Nuclear Disarmament

- **Nuclear disarmament** refers to the act of eliminating or reducing weapons, particularly offensive arms, either **unilaterally or reciprocally**.
- It may mean reducing numbers or eliminating entire categories of weapons.

Key Treaties	
Treaty	**Key Features and India's Status**
Non-Proliferation Treaty (NPT) (1968 / in force 1970)	Prevents spread of nuclear weapons; promotes disarmament. Divides states into Nuclear Weapon States (NWS) and Non-Nuclear Weapon States (NNWS). Requires NWS to pursue disarmament in good faith. India, Israel, North Korea, and Pakistan have NOT signed.
Treaty on the Prohibition of Nuclear Weapons (TPNW) (Adopted 2017 / Opened 2018)	Prohibits development, testing, production, stockpiling, transfer, use, and threat of use of nuclear weapons. Significant step toward disarmament. Not signed by any nuclear-armed state.
Comprehensive Nuclear Test Ban Treaty (CTBT) (Opened 1996)	Bans all nuclear explosions for civilian and military purposes. Signed by 185 states, ratified by 170. Not yet in force — requires ratification by all nuclear-armed states. India has not ratified.
Outer Space Treaty (1967)	Bans siting of weapons of mass destruction in space. All nine nuclear-armed states are parties to this treaty.

Conclusion

- For India, the report captures a nation at an inflection point i.e. 190 warheads, $92.1 billion in defence spending, second-largest arms importer, and a party to a nuclear-tinged military crisis. This all points to a security environment of increasing complexity.
- India's doctrine of No First Use and Credible Minimum Deterrence continues to guide its posture, but the quiet evolution towards longer-range and survivable systems signals adaptation to new regional realities.
- Strengthening multilateral arms control frameworks and maintaining strategic stability in South Asia remain urgent imperatives for India and the global community.

DIGITAL SOVEREIGNTY

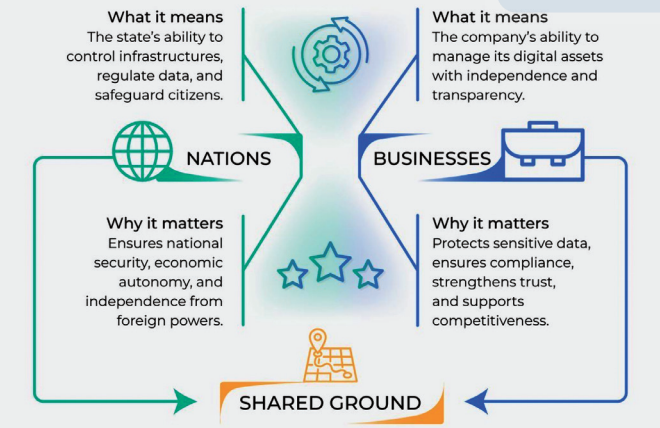
Recent cyber incidents have renewed concerns over India's dependence on foreign digital systems.

About Digital Sovereignty

- **Digital sovereignty** means a nation's ability to exercise effective control over its **data**, **digital infrastructure**, **critical technologies**, and **decision-making systems** without external interference.
- It operates through three major layers:
  - **Data sovereignty** ensures that citizen and institutional data remain under domestic legal and technological control.
  - **Computational sovereignty** means controlling cloud systems, AI models, and digital platforms.
  - **Technological sovereignty** means building domestic capabilities in semiconductors, telecom hardware, and software systems.
- In modern governance, sovereignty is no longer limited to land, sea, and air; it increasingly extends to **code, chips, cables, and clouds**.

Background

- In **April 2026**, Indian **CCTV networks** linked to defence installations were compromised through the Chinese software **EseeCloud**, while in **July 2025**, **Nayara Energy** lost access to email systems, cloud storage, and collaboration tools after **Microsoft** enforced external sanctions.
- These incidents exposed how dependence on foreign-controlled digital ecosystems can directly affect India's strategic autonomy.



Digital sovereignty, whether at national or business level, strengthens independence, reduces exposure to external control, and reinforces trust in how data and infrastructures are managed. It builds resilience, supports innovation, and secures long-term competitiveness in a global digital economy.

Associated Issues

- **Security:**
  - Modern warfare is increasingly software-defined, where fighter jets, drones, radars, and communication systems depend on embedded foreign code.
  - This creates risks of hidden kill-switches, surveillance, or remote disruption. India's Kargil War experience (1999), when GPS access was denied, remains a reminder of technological vulnerability.
- **Data:** Physical localisation alone does not guarantee control. Under laws such as the **US CLOUD Act**, foreign companies can be compelled to share data even if stored in India. This creates a **jurisdictional gap** where legal control remains external.
- **Economy:** India's digital economy increasingly depends on foreign cloud monopolies. The **Nayara Energy** incident showed how sanctions or platform-level restrictions can disrupt industrial operations and economic continuity.
- **AI and Algorithms:** Dependence on foreign Artificial Intelligence (AI) systems creates risks of **algorithmic hegemony,** where legal, cultural, and strategic biases embedded in external models influence Indian governance, judiciary, and policymaking. This amounts to outsourcing cognitive sovereignty.
- **Finance:** Systems such as **SWIFT** have shown how digital financial infrastructure can be weaponised. Dependence on such systems increases India's vulnerability to sanctions and coercive economic actions.
- **Digital Colonialism:** India's large digital population generates massive data, but much of this data is processed abroad and monetised externally. This creates a form of **digital colonialism,** where value extraction takes place outside national control.

Areas of Vulnerabilities

- **Hardware:**
  - India still depends on foreign **Extreme Ultraviolet (EUV) lithography**, advanced chip chemicals, routers, telecom systems, and surveillance equipment. Imported hardware may carry hidden vulnerabilities such as hardware trojans.
  - **Extreme Ultraviolet (EUV) lithography** is an advanced **semiconductor manufacturing technique** that uses short-wavelength ultraviolet light (13.5 nm) to etch incredibly microscopic and dense circuit patterns onto silicon wafers.
- **Software:**
  - Critical sectors such as aviation, power, and banking rely heavily on foreign software whose source code remains inaccessible.
  - This ***black-box dependence*** limits security audits and independent verification.
    - *Black-box dependence* refers to the operational and strategic risks that arise when businesses and institutions rely on opaque AI systems for critical

decisions, without understanding how those systems generate their outputs.

- **Defence Systems:** Many advanced weapons platforms procured from abroad operate on proprietary software. This dependence can compromise operational autonomy during conflict.
- **Cloud Infrastructure:** Sovereign cloud capacity remains limited. Dependence on foreign cloud platforms means that sanctions or legal interventions can disrupt critical digital services.
- **Subsea Cables:** More than 95% of India's international internet traffic flows through subsea cables. India lacks its own dedicated repair fleet, making digital connectivity vulnerable during sabotage or conflict.
- **AI Compute:** Under the IndiaAI Mission, India has deployed around 38,000 GPUs, but this remains far below the scale of global technology companies, creating a major compute gap.
- **Quantum Risks:** The rise of quantum computing creates the threat of "Harvest Now, Decrypt Later" attacks, where encrypted data collected today may be broken in the future.
- **Satellite Dependence:** Dependence on foreign Low Earth Orbit (LEO) satellite systems such as Starlink-type models can create strategic vulnerabilities in communication sovereignty.
- **Standards Dependence:** India has limited influence in global standard-setting institutions such as the **International Telecommunication Union (ITU)**, forcing it to adapt to foreign-designed protocols.

Government Responses

- **Semiconductors:** The **India Semiconductor Mission (ISM)** seeks to reduce dependence on imported chips and strengthen domestic manufacturing.
- **Critical Minerals:** The **National Critical Mineral Mission (NCMM)** aims to secure supplies of lithium, cobalt, and rare earths essential for digital technologies.
- **AI Systems:** The **IndiaAI Mission**, along with projects such as BharatGen and Bhashini, seeks to build sovereign AI systems rooted in Indian languages and contexts.
- **Digital Public Infrastructure:** Platforms such as **Aadhaar, UPI, and DigiLocker** provide India with open, interoperable systems independent of foreign platform monopolies.
- **Digital Commerce:** The **Open Network for Digital Commerce (ONDC)** reduces concentration of private digital marketplaces.
- **Cloud Sovereignty: MeghRaj (GI Cloud)** hosts critical government data within India and provides sovereign cloud support.
- **Cybersecurity: CERT-In and NCIIPC** strengthen incident reporting and protection of critical digital infrastructure.
- **Legal Framework:** The **Digital Personal Data Protection (DPDP) Act, 2023** provides the legal architecture for regulating data governance.
- **Quantum Mission:** The **National Quantum Mission (NQM) and the PQC Roadmap (2026)** aim to secure India's encryption future.

Response from Global Communities

- **Europe:** Countries such as France, Germany, Denmark, and the Netherlands are moving toward sovereign alternatives to foreign digital platforms, especially in cloud and public administration.
  - **European Union:** The EU is building independent cloud systems and digital standards to reduce dependence on American technology giants.
- **Strategic Partnerships:** New frameworks like **Pax Silica** reflect emerging global cooperation around semiconductors and technological resilience, showing that digital sovereignty is becoming a central geopolitical priority.

Needed Reforms

- **Cloud:** India must expand MeghRaj into a full-scale sovereign enterprise cloud capable of supporting strategic sectors.
- **Geopatriation**: India should adopt **geopatriation**, meaning strategic relocation of critical digital assets, data, and compute systems back under domestic control.
- **Platforms:** Critical ministries and strategic sectors should gradually migrate to domestically developed or independently audited software systems.
- **Defence:** The Atmanirbhar Bharat defence framework must integrate software sovereignty into all future military procurements.
- **Subsea Security:** India should establish Cable Protection Zones within its Exclusive Economic Zone (EEZ) and build a domestic cable-repair fleet.
- **AI Expansion:** India must rapidly scale sovereign foundation models, GPU capacity, and AI research infrastructure.
- **Financial Sovereignty:** Expansion of the Digital Rupee and alternative digital settlement systems can reduce dependence on vulnerable global financial channels.
- **Standards Leadership:** India must strengthen participation in global digital standard-setting bodies to reduce protocol dependence.

Conclusion

- Digital sovereignty is no longer only a technological concern; it is now central to **national security**, **economic resilience**, and **strategic autonomy**.
- India's dependence on foreign-controlled hardware, software, cloud systems, AI models, and communication networks creates structural vulnerabilities that can affect governance, defence, finance, and public life.
- Through **DPI**, **semiconductor missions**, **AI infrastructure**, **quantum initiatives**, and **data laws**, India has begun building the foundations of sovereignty, but important gaps remain.
- In the emerging global order, technological autonomy will increasingly define strategic power. For India, securing sovereignty over **code, chips, cables, clouds, and cognition** will be essential for sustaining both **national resilience** and **multipolar strategic independence**.

NATIONAL FOOD SECURITY (AMENDMENT) BILL, 2026

The Union Food and Public Distribution Department has released the draft National Food Security (Amendment) Bill, 2026, proposing changes to the National Food Security Act (NFSA), 2013.

About

- The amendment seeks to change the structure of **Antyodaya Anna Yojana (AAY)** foodgrain allocation by moving from a **household-based entitlement** to a **person-based entitlement**, while retaining the overall household ceiling.

Framework

- **Rights-Based Structure:** The **National Food Security Act (NFSA), 2013**, also known as the **Right to Food Act**, provides a legal framework to ensure **food and nutritional security** by guaranteeing access to subsidised foodgrains.
  - It transformed food welfare from a discretionary scheme into a **statutory entitlement**, making the State legally accountable.
- **Coverage and Beneficiaries:**
  - The Act covers **75% of the rural population** and **50% of the urban population**, based on **Census 2011**, covering around **81.35 crore beneficiaries**.
  - It operates under two categories:
    - **Antyodaya Anna Yojana (AAY)** for the **poorest of the poor**, such as widows, elderly persons without support, disabled persons, primitive tribal households, and landless labourers.
    - **Priority Households (PHH)** identified by States.
- **Entitlements:** Under the existing framework
  - **AAY households** receive **35 kg of foodgrains per month**, irrespective of family size.
  - **PHH beneficiaries** receive **5 kg of foodgrains per person per month**.
- **Institutional Evolution:**
  - During the **Covid-19 pandemic**, the government launched **Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY)** to provide additional free foodgrains.
  - In **January 2023**, PMGKAY was merged with NFSA, making regular NFSA entitlements **free of cost**, and this arrangement was extended for **five years (2024–2028)**.

Amendment

- **Revised AAY Allocation:**
  - The draft amendment proposes that every individual in an **AAY household** will receive **7 kg of foodgrains per month**, subject to a maximum of **35 kg per household**.
  - Earlier, all AAY households received a flat **35 kg**, irrespective of the number of family members.
- **Continuity of Free Supply:** The amendment retains the provision of **free foodgrain distribution** for AAY beneficiaries.
- **Structural Shift:** This marks a shift from a purely **household-centric entitlement model** to a **person-linked entitlement model**, aiming to make distribution more proportional.

Rationale

- **Correcting Per-Capita Distortion:** Under the old system, smaller households effectively received more foodgrains per person, while larger households received less. The amendment seeks to reduce this imbalance.
- **Improving Distributional Equity:** Linking allocation to the number of individuals improves fairness and better reflects household consumption needs.
- **Maintaining Fiscal Stability:** The household ceiling of 35 kg ensures that the reform improves equity without sharply increasing subsidy expenditure.

Noteworthy Gaps

- **Calorie Security vs Nutritional Security:** The amendment mainly changes the **quantity of cereals**, but does not expand the nutritional basket.
  - This reflects a larger policy gap between **calorie security** and **nutritional security**.
  - While cereals address hunger, they do not adequately meet requirements of **proteins**, **micronutrients**, and **dietary diversity**.
  - The present framework still lacks sufficient integration of **pulses**, **edible oils**, and other nutrition-rich foods.
- **Changing Nature of Malnutrition:** India's food challenge is increasingly shifting from mere food availability to **hidden hunger**, where calorie intake may be adequate but nutritional deficiencies persist.

Challenges

- **Structural Limits:** Although the amendment introduces person-based allocation, the **35 kg ceiling** remains unchanged. Large families may still receive lower per-capita food than intended.
- **Exclusion Errors:** NFSA coverage continues to be based on **Census 2011**, despite significant population growth and changing poverty patterns. This creates **targeting exclusion errors**, where many deserving households remain outside the system.
- **Delivery Barriers:** Problems such as **biometric authentication failures**, **e-KYC exclusions**, and weak internet connectivity continue to affect access. Migrant workers, elderly persons, and persons with disabilities remain particularly vulnerable.
- **Leakages:** Foodgrain diversion, corruption, weak monitoring, and quality concerns continue to weaken the **Public Distribution System (PDS)**.

- **Demand for Higher Entitlement:** Right to Food activists have demanded **14 kg per person** for AAY households, arguing that 7 kg remains inadequate for vulnerable groups.
- **Regional Variation:** Different household sizes across States may create uneven effects of the reform.

Significance

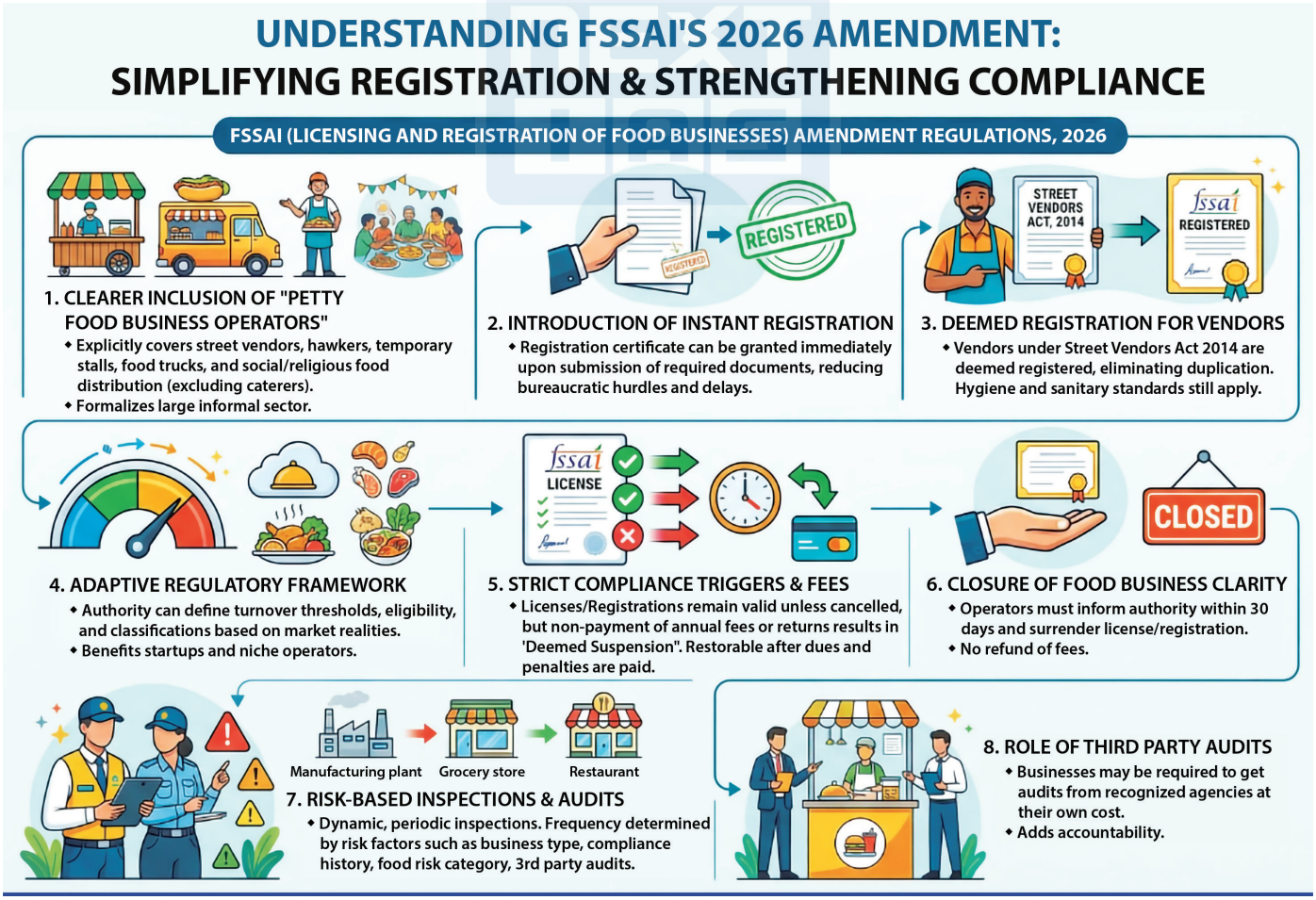
- **Article 21** supports the **Right to Life with dignity**, which includes access to food.
- **Article 39(b)** promotes equitable distribution of material resources.
- **Article 47** directs the State to improve nutrition and public health.
- **Social Justice:** NFSA strengthens welfare support for vulnerable populations and protects against hunger.
- **Women-Centric Welfare:** The recognition of the eldest woman as the head of the ration card improves women's role in household welfare.
- **Crisis Buffer:** NFSA acts as an important social safety net during economic distress, disasters, and unemployment.

Way Ahead

- **Coverage Revision:** Beneficiary lists must be updated using the latest population data to reduce exclusion errors.
- **Nutrition Diversification:** The food basket should gradually include millets, pulses, edible oils, and protein-rich foods to strengthen nutritional outcomes.
- **Technology Strengthening:** Digital systems such as e-POS, Aadhaar authentication, and portability mechanisms should be improved while reducing exclusion risks.
- **PDS Reform:** Stronger social audits, community monitoring, and transparent grievance redressal are needed to reduce leakages.
- **Storage Modernisation:** Better warehousing, cold chains, and transport systems are needed to reduce food losses.
- **Federal Coordination:** Greater consultation with States is essential to strengthen cooperative implementation.

Conclusion

- The **National Food Security (Amendment) Bill, 2026** seeks to improve distributive fairness by making **AAY foodgrain allocation more person-sensitive**. However, food security today cannot remain limited to cereal-based entitlement alone.
- The larger policy transition must be from **foodgrain security** to a broader **nutrition-sensitive welfare architecture**, where access, inclusion, and dietary quality are equally prioritised.
- The long-term success of India's food security system will depend not only on reducing hunger, but on ensuring **equitable, inclusive, and nutritionally adequate welfare delivery**.



UNSC's PERMANENT MEMBERSHIP

The membership has not changed in 80 years despite the UN growing from 51 to 193 member states. This makes India's case for a permanent seat one of the most compelling.

UNSC	
Parameter	**Detail**
Established	1945; first session — 17 January 1946, Westminster, London.
Headquarters	New York City.
Total Members (15)	5 Permanent (P5) + 10 Non-Permanent. ➲ **P5 (Veto Powers):** China, France, Russia, United Kingdom, United States. ➲ **Non-Permanent Members:** 10 seats; elected by UNGA for two-year terms. No veto power.
NP Regional Distribution	5 – Africa and Asia; 1 – Eastern Europe; 2 – Latin America and Caribbean; 2 – Western Europe and Others.
Election Threshold	Two-thirds of UNGA members present and voting; secret ballot.
Reform Threshold	Two-thirds of all UNGA members + ratification by all P5. *Last expansion: 1965.*
Six Main UN Organs	General Assembly, Security Council, Secretariat, International Court of Justice, Economic & Social Council (ECOSOC), Trusteeship Council (inactive since 1994).
India's NP Membership	Elected 8 times; most recent term: 2021–22. Served as UNSC President in August 2021 and December 2022.
Notable Gap	More than 50 UN member states have never been members of the Security Council.

Need of Reforms in the UNSC

Shrinking Representativeness

- In 1945, the Council had **11 members out of 51** UN states i.e. roughly 22%. Today, it has **15 members out of 193** which is fewer than **8%**. More than 50 member states have never served on the Council.
- The P5 composition reflects the **victors of World War II**, not 21st-century realities. Africa has no permanent seat. South America has none. South Asia, home to nearly **2 billion people**, has none.
- Europe with **5% of the world's population** controls **33% of permanent seats** in any given year, if Russia is not counted.

Veto Paralysis

- Only the P5 hold **veto power**. Any single P5 member can block any substantive resolution regardless of the other 14 members' positions.
- The veto has been used to stall collective action on Ukraine, Gaza, and other critical conflicts paralysing the Council's core peace and security mandate.

Legitimacy Deficit

- The disproportionate power held by the P5, particularly through the veto, creates a perception of unfairness and erodes the Council's authority.
- Former UN Secretary-General Kofi Annan warned that the Council must either "reform or risk becoming increasingly irrelevant."
- The Council has failed to prevent many conflicts. Worse still, its permanent members have been directly involved in several of these conflicts.

The G4 Reform Proposal

- At the **Intergovernmental Negotiations (IGN) on 15 April 2025**, India's Permanent Representative reaffirmed the G4's core model i.e. expanding the Council from **15 to 25–26 members**, with **11 permanent and 14–15 non-permanent seats**.
- **Six new permanent seats proposed:** two for Africa, two for Asia-Pacific, one for Latin America and the Caribbean, one for Western Europe and Others.
- In 2017, G4 nations indicated willingness to **temporarily forgo veto power** if granted permanent seats, a pragmatic concession designed to ease reform.

G4

- The G4 comprises India, Brazil, Germany, and Japan, four nations that mutually support each other's bids for permanent UNSC seats.
- Their combined population exceeds 2 billion, and they collectively represent a substantial share of global GDP, UN budget contributions, and peacekeeping deployments.

Factors Strengthening India's Bid

- **Demographic and Democratic Weight:**
  - India is the world's most populous country (surpassing China in 2023) with 1.4 billion people, one-sixth of humanity.
  - Excluding it from permanent decision-making directly undermines the Council's democratic legitimacy.
  - India is also the world's largest democracy, offering an additional dimension of representational legitimacy that no current P5 member can claim.
- **Economic Strength:** India is the 5th largest economy by nominal GDP and 3rd largest by PPP, with a 2026 GDP-PPP estimated at

~$20 trillion. It significantly influences global trade, technology supply chains, energy markets, and developmental finance.

- **Military Capability:**
  - India's armed forces are among the world's largest. Its 2026 defence budget reached a record $86 billion, placing it among the top five global military spenders.
  - India possesses a credible nuclear triad i.e. land-based, sea-based, and air-based nuclear delivery systems, a capability held by very few nations globally.
- **Unmatched UN Peacekeeping Record:**
  - India has contributed over 2,90,000 peacekeepers to more than 50 UN missions since 1948. This is one of the largest cumulative records in UN history.
  - As of January 2025, India ranks 4th among all troop-contributing countries with 5,375 uniformed personnel deployed across 9 active missions. This contribution is higher than all five current P5 members combined.
  - Nearly 180 Indian peacekeepers have laid down their lives which is among the highest fatalities of any contributor.
  - This reflects genuine commitment to the UN mandate, not merely symbolic participation.
  - India deployed the world's first all-female Formed Police Unit to Liberia in 2007, pioneering gender-inclusive peacekeeping.
  - India's Centre for United Nations Peacekeeping (CUNPK) trains over 12,000 troops annually and is recognised as a UN Centre of Excellence.
- **Voice of the Global South:**
  - India demonstrated multilateral leadership through the International Solar Alliance, Global Biofuels Alliance, G20 Presidency (2023), and the AI Impact Summit.
  - India's development cooperation, such as, over USD 12 billion in Lines of Credit to 42 African nations, reinforces its credentials as a responsible global actor, not merely a regional power.
  - On maritime security, India's active role in the Indian Ocean reflects commitment to freedom of navigation and UNCLOS-based institutions.

International Support for India's Bid

- **Four of five P5 members**, i.e. France, Russia, the UK, and the USA, have backed India's permanent seat bid.
- The **African Union** and the **L69 Group** (a broad coalition of developing nations from Africa, Latin America, the Caribbean, the Pacific, and Asia) also support India's candidacy.
- China officially expressed support for an 'increased Indian role at the UN' in 2011 but has **not explicitly endorsed a permanent seat**, and has signalled that any support is conditional on India dropping its backing for Japan's candidacy.

Challenges to Reform and India's Bid

- **Structural Barrier:**
  - Any UNSC reform requires approval by two-thirds of the UNGA and ratification by all five P5 members.
  - Since the Council last expanded in 1965, this threshold has made reform structurally resistant.
- **Chinese Ambiguity:**
  - China remains the critical swing vote. It has not formally opposed India but has carefully avoided explicit endorsement, making its position a calculated strategic constraint.
  - China's insistence that India drop support for Japan creates a direct tension within the G4's mutual support framework, as India–Japan ties are now a strategic pillar in their own right.
- **Uniting for Consensus:**
  - The Uniting for Consensus (UfC) group, or 'Coffee Club', formed in the 1990s to oppose any expansion of permanent seats.
  - Led by Italy (to block Germany) and actively supported by Pakistan (to block India), the UfC instead advocates semi-permanent or expanded temporary seats, arguing that new permanent members would entrench rather than correct power imbalances.
- **India-Specific Constraints:**
  - India has not signed the NPT or ratified the CTBT.
  - This is a point critics always raise, given that all current P5 members are official nuclear weapon states under the NPT framework.

Conclusion

- A UNSC that excludes the world's most populous nation, one of its largest economies, and one of its most committed peacekeeping contributors is a Council that has drifted far from its founding purpose of universal legitimacy.
- As PM Modi stated during India's G20 Presidency, **"a mid-20th century approach cannot serve the world in the 21st century, international institutions need to recognise changing realities."**
- A permanent seat for India would strengthen regional stability, align the Council with contemporary geopolitical realities, and restore the legitimacy of its decisions.
- The path requires navigating Chinese ambiguity, the organised opposition of the Coffee Club, and a reform process structurally designed to resist change.
- India's strategy must combine persistent engagement within the IGN framework with coalition-building among the African Group, L69, G4, and reform-minded states.
- This makes the political cost of continued inaction higher than the cost of reform.

INDIA–IRAN

Following the assassination of Supreme Leader Ayatollah Ali Khamenei on 28 February 2026 in joint US–Israeli strikes, Iran formally invited PM Modi to attend the funeral — placing India's tightrope diplomacy in West Asia in sharp relief.

Khamenei

- Ali Khamenei (1939–2026) served as Iran's Supreme Leader from 1989 until his assassination.
- He was the longest-serving head of state in West Asia at the time of his death. His son Mojtaba Khamenei was elected as successor by the Assembly of Experts on 8 March 2026.

Civilisational Roots

Ancient Foundations

- The **Indus Valley and Mesopotamian** civilisations traded across the Persian Gulf nearly 4,000 years ago.
- The **Rig Veda and the Avesta (Zoroastrian scripture)** share striking linguistic and theological parallels: Sanskrit asura ↔ Persian ahura; soma ↔ haoma; yajna ↔ yasna.
- Under **Achaemenid Emperor Darius (550–330 BCE)**, Gandhara and Sind were incorporated into the Persian Empire. Indian regiments served in Persian armies and overland trade routes connected the subcontinent deep into Eurasia.
- Mauryan imperial architecture such as polished stone edict pillars and monumental public forms, absorbed direct structural inspiration from Achaemenid traditions.

Medieval Integration

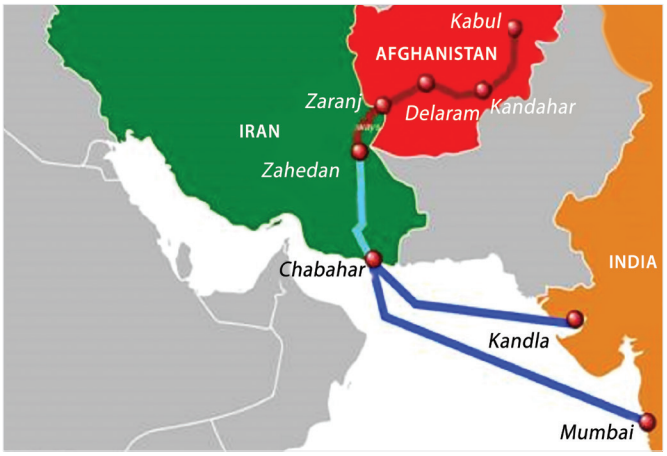
- With the rise of the Delhi Sultanate and the Mughal Empire, Persian became the language of diplomacy, law, and intellectual life across India, It was used by both Hindu and Muslim administrative elites.
- Indian builders fused indigenous styles with Persian architectural forms: the arch, dome, aiwan (vaulted hall), pishtaq (formal entryway), and charbagh (quadrilateral garden layout).
- From the 16th century onward, thousands of Iranian scholars, administrators, poets, physicians, and painters migrated to India for royal court patronage — enriching early modern Indian scholarship and establishing the famous Mughal painting atelier.

Modern Diplomatic Foundation

- Around 15% of India's Muslim population is Shia with direct theological and cultural ties to Iran.
- Formal diplomatic relations were established in 1950. The relationship was institutionalised through the Friendship Treaty (1950), Tehran Declaration (2001), New Delhi Declaration (2003), and subsequent agreements.
- During the Cold War, India and Iran maintained stable, functional diplomatic relations despite being aligned with opposing global treaty blocs — a testament to the relationship's resilience.

Contemporary Strategic and Economic Ties

- **Energy Partnership:**
  - Between 1990 and 2018, Iran was consistently India's second or third largest crude oil supplier, offering freight discounts, favourable payment terms, and settlement in rupees rather than dollars.
  - India ended crude oil imports from Iran in May 2019 after the US withdrew waivers under its 'maximum pressure' policy.
- **Trade Relations:** Bilateral trade peaked at approximately $17 billion annually when oil was included. Even without oil, non-oil trade stood at $2.33 billion in 2022–23, with India maintaining a trade surplus.
  - A Joint Commission on Bilateral Trade (established 1983) met annually or biannually. A Double Taxation Avoidance Agreement was also in force.
- **Strategic Support (1994 OIC Episode):** In 1994, Iran refused to back a Pakistan-driven OIC resolution on Kashmir at the UN Human Rights Commission. This act of shielding India from a pan-Islamic diplomatic offensive demonstrated the relationship's genuine strategic depth.
- **Chabahar Port:** Located on Iran's southeastern coast along the Gulf of Oman, Chabahar lies approximately 170 km from Pakistan's Gwadar Port, which is developed under China's CPEC.



- On 13 May 2024, India and Iran signed a 10-year agreement for Indian Ports Global Limited (IPGL) to operate and equip the **Shahid Beheshti** terminal, with India investing $120 million in terminal infrastructure and extending a $250 million Line of Credit.

International North-South Transport Corridor (INSTC)

- It is a 7,200-km multi-modal network connecting **Mumbai with Moscow via Tehran and Baku**, combining sea, rail, and road. It was conceived in 2000 and signed by India, Iran, and Russia.
- Once, fully operationalised, it would cut India–Russia cargo transit time from 40 days to about 20 and reduce costs by 30%. Chabahar is the INSTC's southern anchor terminal.

Significance of Iran for India

- **Gateway to Central Asia**: Iran is the **only country** that gives India a land route to Afghanistan, Central Asia, Russia, and Europe without passing through Pakistani territory. Iran, positioned between Pakistan and the Central Asian landmass, is the key to India's continental reach.
- **Energy Security**: Iran holds the **world's second-largest natural gas reserves** and is among the largest crude oil reserves which vital for India's energy diversification.
- **Counter to Gwadar and CPEC**: Chabahar gives India a strategic alternative to China's **$62 billion Gwadar port investment**. It also preserves India's economic stake in Afghanistan's future without requiring a physical presence there.
- **Maritime Security:** Iran is pivotal to stability in West Asia, the Persian Gulf, and the **Strait of Hormuz.**
- **Strategic Autonomy:** Engagement with Iran enables India to maintain balanced relations with all major West Asian powers *(Israel, Iran, and the Gulf states)* without joining any regional security bloc.

Challenges and Concerns

- **US Sanctions:** In April 2024, the US sanctioned three Indian companies for Iran-related connections. After the 10-year Chabahar deal, the US State Department warned that 'anyone considering business deals with Iran needs to be aware of the potential risk of sanctions.'
- **Active Regional Conflict:** The 2026 US–Israeli military campaign against Iran has destabilised West Asian maritime chokepoints, raised trade insurance premiums, and threatens the safety of millions of Indian expatriates in the Gulf.
- **Connectivity Delays:** Despite the 2024 Chabahar deal, the Chabahar–Zahedan railway remains incomplete due to financial and geopolitical constraints.
- **Competing Partnerships:** India's membership in **I2U2 (India–Israel–UAE–USA)** and its deepening strategic ties with the US and Israel complicate simultaneous engagement with Iran.
- **China's Growing Footprint:** Iran and China signed a 25-year, $400 billion comprehensive cooperation agreement in 2021. China's economic presence in Iran challenges India's positioning as the preferred infrastructure partner.
- **FATF and Banking Barriers:** Iran's blacklisting by FATF and exclusion from SWIFT make trade settlement and investment clearing difficult for Indian companies, keeping bilateral trade well below potential.

Way Forward

- **Calibrated Diplomacy**: Maintain high-level engagement with Iran's new leadership through appropriate diplomatic representation, while carefully managing sensitivities from the ongoing regional conflict and great-power rivalries.
- **Insulate Chabahar from Sanctions**: Utilise local currency payment frameworks and seek designated humanitarian trade exemptions to protect India's **$370 million combined investment** (terminal + LoC) from shifting US sanctions regimes.
- **Fast-Track INSTC**: Prioritise completion of the Chabahar–Zahedan railway to operationalise India's land route to Central Asia and cut India–Russia transit time from 40 to 20 days.
- **Civilisational Diplomacy**: Use the deep historical and linguistic ties of the Indo-Persian heritage as alternative channels for quiet diplomacy during periods of acute regional conflict.
- **Diaspora Protection**: Coordinate with Iranian and Gulf authorities to build emergency communication corridors safeguarding Indian expatriates against sudden shifts in the regional security environment.

Conclusion

- Iran is not merely an energy supplier. It is a civilisational partner, a continental gateway, and a strategic hedge against India's Pakistan-constrained geography.
- As West Asia enters structural volatility under a new leadership, India must maintain its policy of strategic autonomy.
- Engaging Iran, Israel, and the Gulf simultaneously, protecting Chabahar and INSTC from the turbulence of great-power competition, and keeping the Indo-Persian civilisational bond as a quiet anchor through the storm.

INDIA–SEYCHELLES

Prime Minister Narendra Modi visited Seychelles as the Guest of Honour during its 50th National Day celebrations. The visit also commemorated 50 years of India–Seychelles diplomatic relations.

Key Outcomes of the Recent Visit

- **Development Finance:** India extended an **umbrella Line of Credit worth ₹1,250 crore** for infrastructure and development projects.
- **UPI Rollout:** An agreement between **NPCI International Payments Ltd (NIPL)** and the **Central Bank of Seychelles** will deploy **Unified Payments Interface (UPI)** in Seychelles, deepening financial and tourism connectivity.
- **Health Cooperation:** An agreement between **HLL Lifecare Limited** and Seychelles' Health Ministry will operationalise India's **Janaushadhi model**, allowing access to affordable generic medicines.
- **National Hospital:** A framework MoU was signed for establishing a modern **New Seychelles National Hospital**.
- **Extradition Treaty:** Both countries signed an **Extradition Treaty** to improve cooperation against financial crimes, drug trafficking, and organized crime.
- **Maritime Employment:** Mutual recognition of training and certification will allow Indian seafarers to work on Seychelles-flagged vessels.
- **Diplomatic Capacity Building:** Cooperation between India's **Sushma Swaraj Institute of Foreign Service (SSIFS)** and Seychelles' Foreign Ministry will strengthen diplomatic training.
- **Space Cooperation:** Both sides signed an MoU for peaceful uses of outer space, focusing on **satellite applications**, **remote sensing**, and **disaster response**.
- **Agricultural Cooperation:** A **2026–2031 agricultural work plan** was signed between **ICAR** and Seychelles' Agriculture Department.
- **Defence Support:** India handed over a **Fast Patrol Vessel (PS LESPWAR)**, **10 utility vehicles**, **5 Laser Radial boats**, and ambulances.
- **Highest Civilian Honour:** Seychelles conferred the **'Guardian of the Blue Horizon'** award on the Indian Prime Minister.

Historical Foundations

- India and Seychelles established diplomatic relations in **1976**, immediately after Seychelles gained independence.
- India's naval ship **INS Nilgiri** participated in Seychelles' Independence Day celebrations on **29 June 1976**, laying the foundation of strategic trust.
- Over the decades, bilateral ties have evolved from traditional developmental cooperation into a broader strategic partnership.
- India has consistently supported Seychelles through **Lines of Credit**, **grant assistance**, and **High Impact Community Development Projects (HICDPs)**.
- In **2026**, India announced a **USD 175 million Special Economic Package** to support Seychelles' developmental priorities.

Geo-Strategic Significance

- Seychelles is an archipelago of **115 islands** located in the **Western Indian Ocean**, northeast of Madagascar and close to the East African coast.
- Despite its small land area, it controls a vast **Exclusive Economic Zone (EEZ)** of nearly **1.3–1.4 million sq km**, making it strategically important for maritime governance.
- Its location places it near major **Sea Lines of Communication (SLOCs)** connecting Asia, Africa, and Europe.
- It lies close to critical maritime chokepoints such as the **Mozambique Channel**, **Bab-el-Mandeb**, and routes toward the **Cape of Good Hope**.
- This makes Seychelles an important node in India's wider Indo-Pacific and Indian Ocean strategy.

SAGAR, MAHASAGAR and SESEL Vision

- **SAGAR (Security and Growth for All in the Region)** is India's maritime vision launched in 2015, focusing on collective security, maritime cooperation, and regional stability.
- **MAHASAGAR (Mutual and Holistic Advancement for Security and Growth Across Regions)** is the expanded strategic framework, integrating **development**, **digital cooperation**, **climate resilience**, and **Blue Economy**.
- The recent visit strengthened this transition from SAGAR to MAHASAGAR.
- The bilateral **SESEL Vision (Sustainability, Economic Growth and Security through Enhanced Linkages)** now serves as the long-term roadmap for India–Seychelles cooperation.

Geopolitical and Indo-Pacific Cooperation

- **Countering Chinese Presence:** Seychelles helps India balance China's growing strategic footprint under the **String of Pearls strategy**.
- **Coastal Surveillance Network:** India has installed **6 Coastal Surveillance Radar Systems (CSRS)** in Seychelles, improving maritime domain awareness.
- **IFC-IOR Integration:** These radar stations are connected to India's **Information Fusion Centre–Indian Ocean Region (IFC-IOR)** for real-time intelligence sharing.
- **Maritime Security Cooperation:** Both countries cooperate against piracy, maritime terrorism, drug trafficking, arms smuggling and Illegal, Unreported and Unregulated (IUU) fishing.
- **Regional Platforms:** Cooperation extends through **IORA**, **IOC**, **ISA**, and **CDRI**.

Defence Cooperation

- **Fast Patrol Vessel Support:** The handover of **PS LESPWAR** strengthens coastal surveillance and EEZ security.
- **Exercise LAMITYE:** India and Seychelles conduct the biennial joint military exercise **LAMITYE**, improving military interoperability.
- **MILAN Participation:** Seychelles regularly participates in India-led **MILAN naval exercises**.
- **Capacity Building:** India continues to provide maritime training, surveillance systems, and logistics support.

Geo-economic Cooperation

- **Trade Volume:** Bilateral trade between April 2024 and February 2025 stood at **USD 72.92 million**.
- **India's Exports:** India exported **USD 68.64 million**, mainly including **rice**, **pharmaceuticals**, **medical instruments**, and **vehicles**.
- **India's Imports:** India imported **USD 4.28 million**.
- **Trade Structure:** The trade relationship remains heavily in India's favour.
- **Digital Economy:** The UPI rollout marks a new phase of digital economic integration.
- **Health Diplomacy:** Through **Janaushadhi** and the new hospital project, India is exporting not just medicines but also **public welfare governance models**.

Space, Climate and Ocean Cooperation

- **Blue Economy Partnership:** Seychelles' vast EEZ makes cooperation important in **fisheries**, **marine genomics**, **bio-prospecting**, **marine logistics**, and sustainable ocean governance.
- **Ocean Science:** Space cooperation will improve ocean mapping, weather forecasting, and marine resource planning.
- **Climate Monitoring:** Satellite cooperation strengthens climate resilience through better disaster forecasting.
- **International Solar Alliance (ISA):** Seychelles became a founding ISA member in **2017**.
- **Solar Infrastructure:** In **2024**, a solar-powered cold storage facility was commissioned on **Praslin Island** with ISA support.
- **Blue Carbon:** India can support Seychelles in building **Blue Carbon Credit systems** for climate finance.
- **OTEC Mapping:** ISRO cooperation can help identify **Ocean Thermal Energy Conversion (OTEC)** potential for renewable energy.

People-to-People and Cultural Relations

- Around **5,000 Persons of Indian Origin (PIOs)** and **7,000 Non-Resident Indians (NRIs)** live in Seychelles.
- More than **1% of Seychelles' population** consists of alumni of India's **Indian Technical and Economic Cooperation (ITEC)** programme.
- The Indian diaspora remains an important bridge in trade, culture, and bilateral goodwill.

Significance of 'Guardian of the Blue Horizon'

- This honour reflects India's growing leadership among **Small Island Developing States (SIDS)**.
- It acknowledges India's role in **climate action**, **Blue Economy cooperation**, and sustainable ocean governance.
- It also aligns with India's global initiatives like **Mission LiFE (Lifestyle for Environment)** and broader climate diplomacy.

Major Constraints

- **Chinese Competition:** China's expanding economic and strategic presence continues to challenge India's space.
- **Assumption Island Issue:** The stalled Assumption Island military project remains a sensitive issue.
- **Small Market Size:** Seychelles' limited domestic market constrains trade expansion.
- **Project Delays:** Delays in Indian-funded projects may affect credibility.
- **Administrative Capacity Limits:** Seychelles' small institutional capacity can slow project implementation.
- **Climate Vulnerability:** Rising sea levels, coral bleaching, and extreme weather remain major threats.
- **Supply Chain Dependence:** External dependence makes Seychelles vulnerable to global disruptions.

Way Forward

- **Expand Maritime Surveillance:** Intelligence sharing and radar integration should be deepened.
- **Deepen Blue Economy Cooperation:** Joint projects in fisheries, marine biotechnology, and ocean science should be expanded.
- **Climate Finance Innovation:** India should help Seychelles create **Sovereign Blue Carbon Credit frameworks**.
- **Scientific Diplomacy:** Link India's **Deep Ocean Mission** and **CSIR-NIO** with Seychelles' marine institutions.
- **Improve Trade Connectivity:** Direct shipping and logistics links should be developed.
- **Strengthen Digital Cooperation:** UPI and digital public infrastructure cooperation should expand further.
- **Enhance Renewable Energy Cooperation:** Greater collaboration in solar, OTEC, and coastal sustainability should be prioritised.

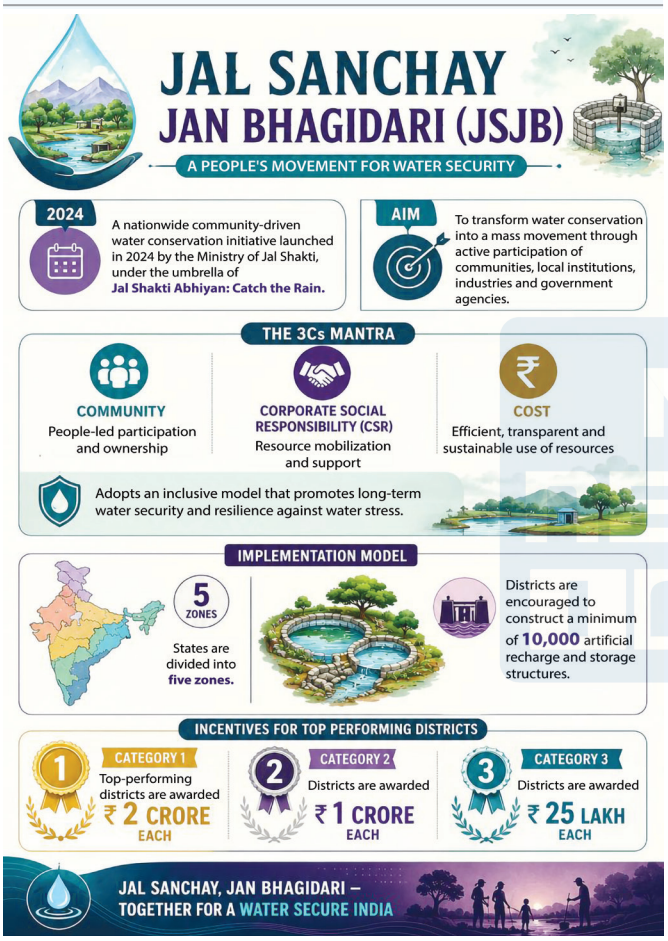
Conclusion

- India–Seychelles relations have evolved from a traditional **aid-based developmental partnership** into a **strategic, technology-driven maritime partnership**.
- The relationship today is built on **security cooperation**, **Blue Economy**, **climate resilience**, **digital integration**, and **capacity building**.
- As India strengthens its **MAHASAGAR vision** in the Indian Ocean, Seychelles will remain a vital partner for ensuring regional stability, sustainable development, and strategic balance in the Indo-Pacific.

1 POLITY & GOVERNANCE

JAL SANCHAY JAN BHAGIDARI INITIATIVE

Union Jal Shakti Minister said that the creation of over 1.5 crore artificial groundwater recharge and storage works have been reported across the country under the Centre's Jal Sanchay Jan Bhagidari (JSJB) initiative.



MISSION SENEHJORI

The Union Minister for Development of North Eastern Region (MDoNER) launched Mission Senehjori (Assam Muga Silk USP). The Mission aims to transform Assam's Muga silk sector into a globally competitive luxury textile ecosystem.

About the Mission

- Mission **Senehjori** is a **cluster-based initiative** implemented with the **Government of Assam**, **Central Silk Board**, **Ministry of Textiles**, and other central agencies.
- It will be implemented across major Muga-producing districts such as **Jorhat**, **Sivasagar**, **Lakhimpur**, **Dhemaji**, **Dibrugarh**, **Tinsukia**, **Majuli**, and **Sualkuchi**.
- The mission aims to build a **premium**, **traceable**, **export-oriented**, and globally competitive Muga silk value chain.
- It focuses on **host-plant cultivation**, **silkworm seed production**, **reeling**, **weaving**, **branding**, **quality assurance**, **export promotion**, **digital traceability**, and **silk tourism**.
- It promotes **Farmer Producer Organisations (FPOs)**, **Common Facility Centres (CFCs)**, and **Farmer Interest Groups (FIGs)** under the unified **Senehjori brand**.
- The total investment is estimated at **₹396–411 crore** over three years, including **₹136–151 crore** from MDoNER.

Mission Targets by 2028

- Establish **five modernised Muga reeling units** and one **Muga Spun Mill**.
- Create **30 FPOs** and over **1,180 Farmer Interest Groups**.
- Regenerate **5,000 hectares** of **Som** and **Soalu** host plants.
- Ensure **Geographical Indication (GI)** authentication of over **80%** of traded Muga silk through digital traceability.
- Develop a **Muga Silk Trail**, **Silk Tourism Park**, and annual **Muga Utsav** festivals.

Muga Silk and Sericulture

- **Muga silk** is the world's only naturally **golden silk**, produced by **Antheraea assamensis**, which feeds on **Som** and **Soalu** plants.
- It is valued for its **natural golden colour**, **durability**, and suitability for **luxury textile markets**.
- It is India's first **GI-tagged silk** and is deeply linked to Assam's cultural heritage.
- **Sericulture** means rearing silkworms such as **Bombyx mori** for mulberry silk, which feed on plants like **mulberry**, **oak**, **castor**, and **arjun** to produce cocoons.

Central Silk Board

- It is a statutory body under the Ministry of Textiles, established under the Central Silk Board Act, 1948.
- It formulates policies and implements programmes for the development of sericulture and the silk industry.
- Its headquarters is in Bengaluru, Karnataka

- India is the only country producing all four major natural silks: **Mulberry** (70% output), **Tasar**, **Eri (Ahimsa Silk)**, and **Muga**.
- Assam produces around **90% of the world's Muga silk**.
- India is the **second-largest silk producer** after **China**, contributing nearly **25%** of global silk output.
- The sector supports nearly **2.6 lakh rearer and weaver families**, helping improve incomes and monetize the silk economy.

RIGHT TO BE FORGOTTEN

The Delhi High Court held that the Right to be Forgotten is an important part of the Right to Privacy under Article 21 of the Constitution.

Position in India

- India does not have a specific law on the **Right to be Forgotten**.
  - However, the **Personal Data Protection Bill, 2019**, judicial decisions, and the **Digital Personal Data Protection Act, 2023** recognise related privacy principles.
- The **Justice K.S. Puttaswamy v. Union of India (2017)** judgment recognised **informational privacy** as part of the fundamental right to privacy. Later, the **Delhi High Court** and **Orissa High Court** expanded this principle.

Meaning

- It gives an individual the right to request removal or hiding of old, irrelevant, or harmful personal information from **search engine results**.
- It does not erase history, but prevents indefinite public exposure of legally irrelevant past records.

Delhi High Court Ruling

- The Court decided **38 petitions**, including cases of acquittal, private disputes, and incidental mention in judicial records.
- It held that unlimited digital access to such records can cause **disproportionate harm** to a person's dignity and reputation.
- The Court recognised **informational self-determination**, meaning individuals should control outdated personal information.

Directions Issued

- **Google**, other search engines, and **Indian Kanoon** were directed to **de-index** name-based search results in cases of **acquittal**, **discharge**, **quashing**, **settlement**, or private disputes.
- **De-indexing** means removing the person's name from search results, not deleting the judgment itself.
- **Indian Kanoon** must restrict name-based search but keep judgments accessible by **case number**, **citation**, **court**, and **date**. Petitioners may also seek **masking of names** from the original court.

FRA–PESA TASK FORCE CONTROVERSY

The constitution of task forces in Chhattisgarh to fast-track implementation of the Forest Rights Act (FRA), 2006 and the Panchayats (Extension to Scheduled Areas) Act (PESA), 1996 has triggered opposition from tribal groups.

The Core Issue

- The task force was formed to identify areas for **Community Forest Resource (CFR) rights**, review pending claims under FRA, design strategies for PESA implementation, and assist district authorities.
- **Community Forest Resource (CFR)** refers to the customary forest land and resources traditionally protected, conserved, and used collectively by forest-dependent communities.
- Tribal and forest rights groups in **Chhattisgarh** and **Madhya Pradesh** have demanded dissolution of these task forces.
- They argue that such bodies shift decision-making power from the **Gram Sabha** to administrative and technical institutions.

Forest Rights Act (FRA), 2006	PESA Act, 1996
➲ FRA was enacted to correct the **historical injustice** faced by **Scheduled Tribes (STs)** and **Other Traditional Forest Dwellers (OTFDs)**.	➲ PESA Act, 1996 stands for the Provisions of the **Panchayats (Extension to Scheduled Areas) Act, 1996.**
➲ It recognises both **individual** and **community rights** over forest land and resources traditionally used by them.	➲ PESA extends **Part IX of the Constitution relating to Panchayats** to **Fifth Schedule Areas** with suitable modifications.
➲ These rights include **self-cultivation**, **habitation**, **grazing**, **fishing**, and access to **water bodies**.	➲ Under the **Fifth Schedule**, tribal-dominated regions are recognised as **Scheduled Areas** with constitutional safeguards.
➲ It also recognises **Habitat Rights** for **Particularly Vulnerable Tribal Groups (PVTGs)** and seasonal resource rights for **nomadic** and **pastoral communities**.	➲ It makes the **Gram Sabha** the central authority for local governance and decision-making.
➲ The Act protects access to **biodiversity**, **traditional knowledge**, and **community intellectual property**.	➲ It gives tribal communities control over natural resources like **land**, **water**, and **forests**.
➲ It allows **forest land allocation for essential developmental needs**.	➲ It also prevents tribal land alienation by making **Gram Sabha approval** compulsory for land transfers.
➲ It protects tribal communities from eviction without **proper rehabilitation** under the **Land Acquisition Act, 2013**.	
➲ The **Gram Sabha** is the central institution for recognising rights and ensuring forest conservation.	

Significance

- Both FRA and PESA are based on the principles of **tribal self-rule**, **community participation**, and **decentralised forest governance**.
- The controversy reflects the larger conflict between **administrative centralisation** and **constitutional decentralisation**

DRAFT REGULATIONS ON ARTIFICIAL INTELLIGENCE IN JUDICIARY

The Supreme Court AI Committee released draft regulations to regulate AI use in courts and prohibit AI-assisted judicial decisions without human oversight.

Objectives

- The draft aims to improve **access to justice**, reduce **judicial delays**, and enhance **administrative efficiency** in the justice system.
- It seeks to ensure that AI remains a supporting tool and does not replace human judicial reasoning.

Guiding Principles

- AI use must follow **human primacy**, **fairness**, **transparency**, **data privacy**, and constitutional values.
- **Judicial officers** will remain fully accountable for all decisions.
- Processing of personal data through AI will be governed by the **Digital Personal Data Protection Act, 2023**.

Permitted Uses

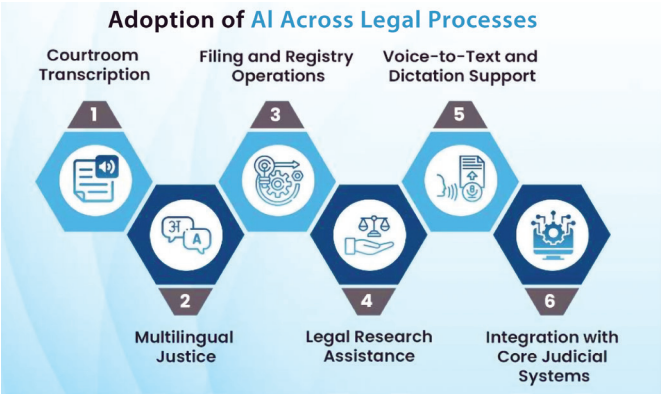
- AI can be used for **case management**, **cause list preparation**, **hearing scheduling**, **transcription**, **translation of judgments**, **legal research**, and **metadata extraction**.
- Under the **e-Courts Project**, technologies like **Machine Learning (ML)**, **Optical Character Recognition (OCR)**, and **Natural Language Processing (NLP)** are already being used.
- Existing tools include:
  - **SUVAAS (Supreme Court Vidhik Anuvaad Software)** for multilingual judgment translation.
  - **SUPACE (Supreme Court Portal for Assistance in Court Efficiency)** and **LegRAA (Legal Research Analysis Assistant)** for legal research.
  - **ASR-SHRUTI** and **Automatic Speech Recognition (ASR)** for real-time transcription.

Prohibited Uses

- AI cannot be used for **sentencing**, **verdicts**, **risk scoring**, **flight risk assessment**, **recidivism prediction**, **bail eligibility**, or **credibility evaluation**.
- AI-based surveillance of judges, lawyers, litigants, or stakeholders is prohibited unless legally authorised.
- AI systems must not create bias based on **race**, **religion**, **caste**, **sex**, **gender**, **disability**, **language**, or **economic status**.

Oversight

- A permanent national **Apex Body**, **CoRE-AI**, and High Court AI Committees will supervise AI adoption.
- AI tools will undergo **pre-deployment impact assessment** and annual internal audits.
- Lawyers and litigants must explicitly disclose AI use in court filings.



Significance

- AI can reduce **case backlog**, improve **prison complaint tracking**, strengthen **investigation quality**, improve **translation**, and widen **access to justice** while preserving human control.

NATIONAL AWARDS FOR E-GOVERNANCE (NAEG) 2026

The Government announced 17 winning initiatives under NAeG 2026 across 7 categories, including 10 Gold, 6 Silver, and 1 Jury Award.

About NAeG

- The **National Awards for e-Governance (NAeG)** are annual awards instituted by the **Department of Administrative Reforms and Public Grievances (DARPG)**.
- They aim to promote excellence in **e-governance** and improve **digital public service delivery**.
- These awards recognise innovative use of technology for better **governance**, **transparency**, **accountability**, and **citizen-centric services**.
- They cover initiatives by **Ministries**, **Departments**, **States**, **Union Territories**, **Districts**, **Urban Local Bodies**, and **Gram Panchayats**.
- **Award Categories:** The awards recognise work in Gram Panchayat digitisation, Government Process Re-engineering, **Artificial Intelligence** (AI) and new technologies, **Cyber Security** innovations and best practices, and **Data Analytics** in digital platforms.

Major Award-Winning Initiatives

- **Agri Stack** by the **Ministry of Agriculture and Farmers Welfare** builds a digital ecosystem using unique farmer identities and land-linked databases for subsidies, crop insurance, credit, advisories, and government schemes.
- **e-Jagriti** by the **Ministry of Consumer Affairs** enables online filing and tracking of consumer complaints.
- The **Mahakumbh 2025 Digital Governance Model** by the **Prayagraj Mela Authority** showcased large-scale technology use in managing one of the world's largest religious gatherings.

- The **Blood Bag Traceability and Citizen Interaction Portal** by **Kerala Development and Innovation Strategic Council (K-DISC)** enables **end-to-end tracking** of blood units from donation to transfusion.
- The **AI-enabled Clinical Decision Support System** in **e-Sanjeevani**, developed by the **Ministry of Health and Family Welfare**, strengthens telemedicine services.
- **TRINETRA**, developed by the **Mahakaleshwar Temple Trust**, uses AI-based video surveillance.
- The **Panchayat Advancement Index** by the **Ministry of Panchayati Raj** promotes data-driven local governance.

Jury Award

- The **Real-Time Precise Positioning Services through CORS Network** provides accurate geospatial positioning using **Continuously Operating Reference Stations (CORS)**.

Award Ceremony and Incentives

- The awards will be presented at the **29th National Conference on e-Governance** in **Jaipur, Rajasthan**.
- **Gold Awardees** will receive a **trophy**, **certificate**, and **₹10 lakh**.
- **Silver Awardees** will receive a **trophy**, **certificate**, and **₹5 lakh**.
- The incentives will be used for **project implementation** and to bridge **resource gaps in public welfare areas**.

FIRE SAFETY GOVERNANCE IN INDIA

Recent fire accidents in Delhi and Muzaffarpur have again exposed major weaknesses in India's fire safety compliance and enforcement system.

Major Fire Accidents

- The **Uphaar Cinema fire (1997)** exposed overcrowding, blocked exits, and weak emergency preparedness.
- The **Arpora nightclub fire (2025)** highlighted serious safety violations and unsafe occupancy.
- The **Delhi B&B fire (2026)** showed operation without mandatory fire clearance and excess room capacity.
- The **Muzaffarpur hospital fire (2026)** revealed the high vulnerability of patients, especially the elderly and critically ill.
- On **June 22, 2026**, a devastating fire broke out in a three-storey commercial building in **Lucknow's Aliganj area**, claiming at least 15 lives who were mostly young students.

Fire Safety Framework

- **Fire service** is a **State subject** and is included as a municipal function under **Article 243W** and the **Twelfth Schedule**.
- The **National Building Code (NBC), 2016** is the main technical document for fire and life safety.
- State-level **Fire Service Acts** regulate inspections, **No Objection Certificates (NOCs)**, and legal action against violations.
- The **Disaster Management Act, 2005** integrates fire accidents into disaster preparedness and response.
- Sector-specific laws like the **Factories Act, 1948**, **Explosives Act, 1884**, and **Petroleum Act, 1934** regulate hazardous sectors.
- High-rise buildings require **fire lifts**, **refuge areas**, and **pressurised staircases** for safe evacuation.

Fire Safety Certification

- A **Fire Safety Certificate/NOC** is mandatory for **high-rise buildings**, **hospitals**, **schools**, and other public establishments.
- The process includes building plan submission, fire inspection, safety verification, and certificate issuance.
- Periodic renewal is required for continued compliance.

Structural Causes

- Weak enforcement allows violations to continue for years.
- Unauthorized modifications and overcrowding make evacuation difficult.
- Businesses often misuse regulatory loopholes to avoid compliance.
- Cost-cutting leads to neglect of fire safety systems.
- Regulatory agencies rarely face punishment for failures.
- Fire safety is often treated as a formality.

Governance Issues

- Fire regulation remains fragmented because of state-level variations.
- The system focuses more on obtaining **NOCs** than maintaining continuous safety compliance.
- Many fire departments face shortages of **personnel**, **equipment**, and modern technology.
- Inspections are often reactive after accidents rather than preventive.

PMRC SCHEME, 2026

The Department of Higher Education has invited applications for the Prime Minister Research Chair (PMRC) Scheme, 2026 to attract Indian-origin researchers working abroad.

About the Scheme

- The **PMRC Scheme** is a flagship initiative of the **Ministry of Education** aimed at bringing back talented Indian-origin researchers from foreign universities, private laboratories, and technology industries.
- Its objective is to strengthen India's research ecosystem, reduce **brain drain**, and promote breakthroughs in critical technology sectors.
- The scheme is built on three pillars: **Lead Institutions**, **Host Institutions**, and **PMRC Fellows**.

Categories of Fellows

- **Young Research Fellows (YRF):** Less than **5 years** of post-PhD experience.

- **Senior Fellows (SF):** Between **5 and less than 10 years** of post-PhD experience.
- **Research Chairs (RC): 10 years or more** of post-PhD experience with proven leadership.

Priority Research Areas

- Research proposals must align with **13 strategic sectors**, including **Artificial Intelligence (AI)**, **Quantum Computing**, **Semiconductors**, **Cybersecurity**, **Manufacturing**, **Critical Minerals**, **Space and Defence**, **Atomic Energy**, **Energy**, **Climate Change**, **Biotechnology**, **Healthcare**, **Agri and Food Technologies**, and the **Blue Economy**.

Eligibility and Governance

- Eligible applicants include **Indian nationals abroad**, **Overseas Citizen of India (OCI)** cardholders, and **Persons of Indian Origin (PIOs)** with strong research achievements.
- Host institutions include government institutions ranked in the **top 100** of **National Institutional Ranking Framework (NIRF)** Overall/Engineering or **top 50** in Research category.
- National laboratories under **Department of Science and Technology (DST)**, **Department of Biotechnology (DBT)**, **Indian Council of Medical Research (ICMR)**, and **Council of Scientific and Industrial Research (CSIR)** are also eligible.
- Selection will be overseen by an **Empowered Committee** chaired by the **Principal Scientific Advisor (PSA)**.

Support and Lead Hubs

- Fellows will receive **fellowships**, **research grants**, **relocation support**, and access to advanced laboratories.
- Seven lead hubs include **Indian Institute of Technology (IIT) Delhi**, **Bombay**, **Madras**, **Kanpur**, **Hyderabad**, **IIT (ISM) Dhanbad**, and **Indian Institute of Science (IISc) Bengaluru**

INTERNATIONALISATION OF HIGHER EDUCATION IN INDIA

Under the University Grants Commission (UGC) Regulations, 2023, the Ministry of Education granted Letter of Approval (LoA) to the University of Liverpool to set up its Bengaluru campus as part of National Education Policy (NEP), 2020 reforms.

About Internationalisation

- **Internationalisation of Higher Education** means integrating global, international, and intercultural dimensions into **teaching**, **research**, **governance**, and academic collaboration.
- It includes **student and faculty mobility**, international research partnerships, foreign university campuses, joint degree programmes, and **cross-border educational services**.
- It improves **academic excellence** through globally benchmarked curriculum, teaching methods, and quality assurance standards.
- It creates a **future-ready workforce** by improving critical thinking, global exposure, and intercultural competence.
- It helps reduce talent outflow and foreign exchange burden, as over **1.3 million Indian students** study abroad.
- It strengthens **educational diplomacy**, bilateral ties, and India's global soft power.
- It supports India's ambition to become a major **global education hub**.

Challenges

- High costs may limit access for economically weaker sections.
- Foreign campuses may concentrate in metro cities like **Bengaluru**, increasing regional imbalance.
- Public universities may face stronger competition for talent, faculty, and funding.
- Excessive commercialisation may weaken the social purpose of higher education.

Measures Taken

- **National Education Policy (NEP), 2020** places internationalisation at the centre of higher education reforms.
- **UGC Regulations, 2023** provide the legal framework for foreign university campuses.
- **Study in India (SII)** promotes India as an education destination.
- **Scheme for Promotion of Academic and Research Collaboration (SPARC)** funds international research collaboration.
- **Global Initiative of Academic Networks (GIAN)** brings foreign faculty into Indian institutions.

Foreign Campuses

- **Deakin University** and **University of Wollongong** in **GIFT City, Gujarat** (2024).
- **University of Southampton** in **Gurugram** (2025).
- **University of Liverpool** received **Letter of Intent (LoI)** in **May 2025** and now **LoA** after fulfilling academic, infrastructure, and regulatory conditions.
- **Global Practices: Singapore's Global Schoolhouse Strategy**, **United Arab Emirates' (UAE) education zones**, and **China's joint universities** are major successful models.

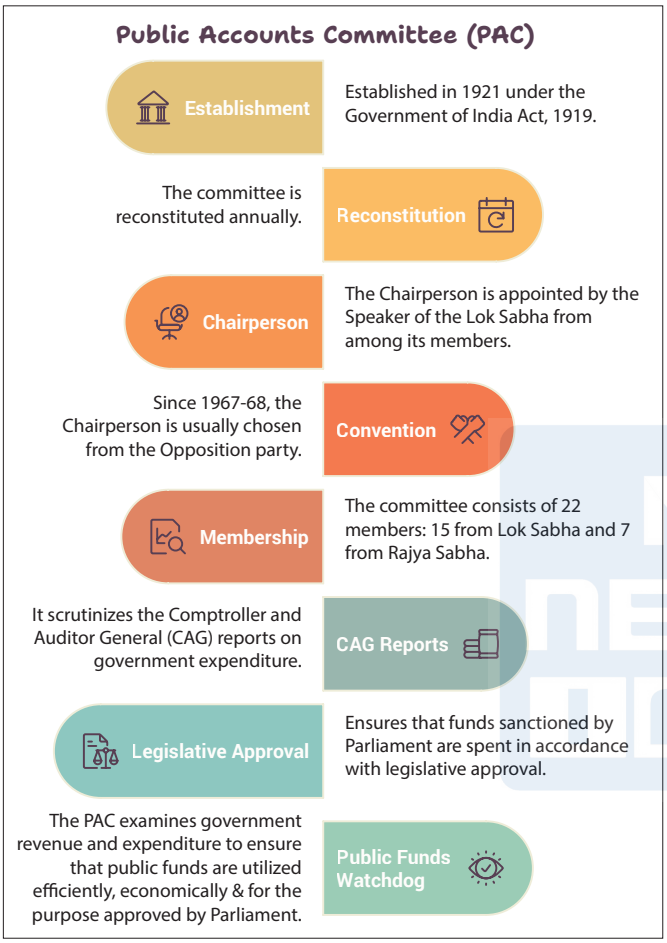
PAC FLAGS GAPS IN PMKVY

The Public Accounts Committee (PAC) of Parliament recently raised serious concerns about the implementation of the Pradhan Mantri Kaushal Vikas Yojana (PMKVY) as the scheme appears to have been training people for industries that aren't necessarily hiring.

Pradhan Mantri Kaushal Vikas Yojana (PMKVY)

- It was launched in **2015 under the Ministry of Skill Development and Entrepreneurship.**

- PMKVY was conceived as a national mission to equip India's large and young workforce with industry-aligned skills.
- The scheme operates through the **National Skill Development Corporation (NSDC)** and aims to bridge the gap between what Indian youth are capable of and what the job market actually demands.



VICTIM PROTECTION PLAN FOR HUMAN TRAFFICKING SURVIVORS

In the Prajwala vs Union of India case, the Supreme Court framed a victim protection plan for survivors of trafficking for Commercial Sexual Exploitation (CSE).

Constitutional Basis

- The Court held that **rehabilitation** is a part of **Article 21** *(Right to Life with Dignity)* and **Article 23** *(Right against Exploitation)*.
- Referring to **Bandhua Mukti Morcha** and **Neerja Chaudhary** cases, it stated that rescue alone is incomplete without proper rehabilitation.

Key Provisions

- The Court created a **uniform victim protection protocol** due to the absence of a comprehensive law on trafficking rehabilitation.
- It adopted a **consent-based approach**, clearly distinguishing between victims of forced trafficking and **consenting adult sex workers**.
- It ruled that consenting adults cannot be detained or rehabilitated against their will.
- The judgment integrates provisions of the **Juvenile Justice Act** and the **Protection of Children from Sexual Offences (POCSO) Act** into one coordinated framework.
- It aims to improve coordination among **Child Welfare Committees (CWCs)**, **Anti-Human Trafficking Units (AHTUs)**, and **District Legal Services Authorities (DLSAs)**.

Support Mechanism

- The Centre and States must establish **safehouses**, **legal aid**, **medical care**, **psychological counselling**, and **vocational training** for survivors.

Significance

- The Court described trafficking as a serious attack on **constitutional dignity**.
- It recognised trafficking as an organised economic crime often driven by false promises of **employment**, **marriage**, or a better life.
- The ruling fills a major legislative gap and strengthens survivor-centred justice.

ECONOMIC ADVISORY COUNCIL TO THE PRIME MINISTER (EAC-PM)

The Prime Minister recently chaired a meeting of the Economic Advisory Council to the Prime Minister (EAC-PM) to review measures for sustaining economic growth.

About

- The **Economic Advisory Council to the Prime Minister (EAC-PM)** is an **independent advisory body** that provides advice to the Prime Minister on economic and related issues.
- Its role is purely **advisory** and its recommendations are **not binding** on the Government.
- It also helps in improving public understanding and awareness of economic issues.

Composition

- The EAC-PM is currently chaired by **S. Mahendra Dev**.
- At present, it consists of **1 Chairperson**, **3 Full-Time Members**, and **11 Part-Time Members**.
- It is supported by officials and administrators for smooth functioning.
- For administrative, planning, budgeting, and logistical purposes, **NITI Aayog** acts as the nodal agency.

Functions

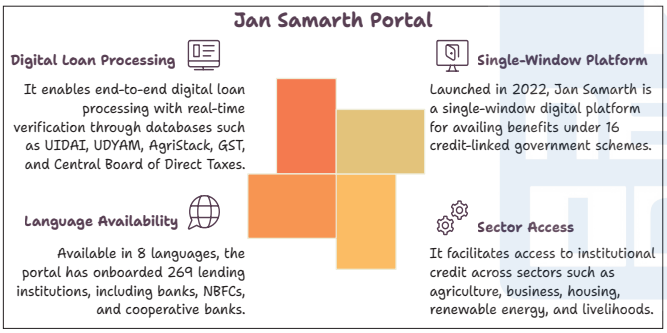
- It analyses economic and other issues referred by the Prime Minister and provides policy advice.
- It addresses **macroeconomic issues** and presents recommendations on growth, inflation, employment, and fiscal matters.
- It can examine issues **suo motu** (on its own) or on reference from the Prime Minister or other sources.
- It can undertake any additional task assigned by the Prime Minister from time to time.

Significance

- The EAC-PM acts as an important expert platform for guiding economic policy, especially during periods of **global uncertainty** and economic challenges.

JAN SAMARTH PORTAL

The Jan Samarth Portal has completed four years of promoting digital financial inclusion and seamless credit delivery.



PRADHAN MANTRI SURAKSHIT MATRITVA ABHIYAAN (PMSMA)

The 10th anniversary of the Pradhan Mantri Surakshit Matritva Abhiyaan (PMSMA) was recently observed, highlighting its role in improving maternal healthcare.

About PMSMA

- Launched on **9 June 2016** by the **Ministry of Health and Family Welfare (MoHFW)**, PMSMA provides **free**, **comprehensive**, and **quality antenatal care (ANC)** to pregnant women.
- It mainly covers women in their **second and third trimesters** at designated government health facilities on the **9th of every month**.
- It is based on the principle that at least one physician-led examination during pregnancy can reduce **maternal** and **neonatal deaths**.

Key Features

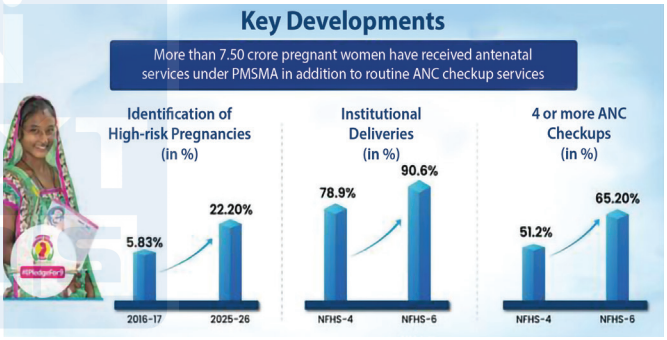
- Services include **clinical examination**, **risk assessment**, **blood and urine tests**, **ultrasonography**, and essential medicines like **Iron and Folic Acid (IFA)** and **calcium**.
- Counselling is provided on **nutrition**, **birth preparedness**, and safe pregnancy practices.
- Special focus is given to **unregistered women**, **ANC dropouts**, and **high-risk pregnancies**.
- High-risk cases are identified using **Red stickers**, while low-risk cases use **Green stickers**.
- Private specialists like **Obstetricians and Gynaecologists (OBGY)**, radiologists, and physicians can volunteer under the **Doctor Volunteer System**.

Extended PMSMA (e-PMSMA)

- Launched in **2022** to strengthen tracking of **High-Risk Pregnant (HRP)** women till safe delivery.
- It provides up to **4 additional PMSMA sessions** in a month.
- It ensures tracking till the **45th day after delivery** and sends **SMS alerts** to beneficiaries and **Accredited Social Health Activists (ASHAs)**.

Achievements

- Over **6 crore pregnant women** have been examined under PMSMA.



- India's **Maternal Mortality Ratio (MMR)** declined from **130** (2014–16) to **87** (2022–24).
- It supports the **Sustainable Development Goal (SDG)** target of reducing maternal mortality below **70 per 100,000 live births by 2030**.

Complementary Schemes

PMSMA works with:

- Janani Suraksha Yojana (JSY), Janani Shishu Suraksha Karyakram (JSSK), Surakshit Matritva Aashwasan (SUMAN),
- POSHAN Abhiyaan, Pradhan Mantri Matru Vandana Yojana (PMMVY), and LaQshya.

PREVENTIVE DETENTION

The Allahabad High Court recently expressed concern over the alleged misuse of preventive detention laws in India.

Meaning

- **Preventive detention** means keeping a person in custody **without trial** to stop them from committing acts that may harm public order or national security.

- It is based on **anticipation of future actions**, not on punishment for a past offence.
- **Preventive detention** is preventive in nature and is used before an offence is committed. **Punitive detention** is imposed as punishment after conviction by a court of law.

Grounds for Preventive Detention

A person can be detained if their activities are considered harmful to:

- Security of the State
- Defence of India
- Public order
- Foreign affairs
- Maintenance of essential supplies and services

Constitutional Basis

- **Article 22(3)** of the Constitution permits laws related to preventive detention.
- The power to make such laws is divided between the **Union** and the **States**.

Safeguards Against Misuse

- Under **Article 22(4)**, no person can be detained for more than **three months** without approval of an **Advisory Board**.
- The **44th Constitutional Amendment Act, 1978** reduced this period from **three months to two months**.
- However, this provision has not yet been implemented, so the **three-month rule** continues.

Significance

- Preventive detention helps protect **public order** and **national security**, but misuse can affect **personal liberty** and constitutional rights.

PRADHAN MANTRI UJJWALA YOJANA

The Ministry of Petroleum and Natural Gas has reduced subsidised Liquefied Petroleum Gas (LPG) cylinders under Pradhan Mantri Ujjwala Yojana (PMUY) from nine to four annually.

About PMUY

- Launched in **2016**, **Pradhan Mantri Ujjwala Yojana (PMUY)** aims to replace harmful cooking fuels like **coal** and **firewood** with clean **LPG**.
- The scheme seeks to protect the health of **women and children** by reducing **indoor air pollution** caused by smoke.

Eligibility

- Initially, the scheme targeted women from **Below Poverty Line (BPL)** households identified through the **Socio-Economic and Caste Census (SECC), 2011**.
- Under **PMUY 2.0 (2021)**, the coverage expanded to include **migrant families**, **Scheduled Castes (SCs)**, **Scheduled Tribes (STs)**, **Most Backward Classes (MBCs)**, **Pradhan Mantri Awas Yojana (PMAY)** beneficiaries, forest dwellers, and other poor households.

Key Features

- The scheme provides a **free LPG connection**, including the **first refill** and a **cooking stove**.
- At present, subsidy is limited to **₹300 per cylinder** for the first **four cylinders** annually, based on average household consumption.
- After the recent price increase of **₹29**, PMUY beneficiaries pay **₹642** for a **14.2 kg cylinder**, while general consumers in **Delhi** pay **₹942**.
- The supply cost of LPG has risen to over **₹1,600** per cylinder.

Achievements

- PMUY originally targeted **8 crore** LPG connections and achieved it in **2019**.
- Under **PMUY 2.0**, an additional **1.6 crore** connections were distributed by **2022**.
- Overall, more than **10 crore** LPG connections have been released.
- The scheme has significantly improved **LPG coverage**, moving India close to **universal household coverage**.
- It has improved health outcomes and reduced dependence on **biomass fuels**

STATE FINANCE COMMISSIONS (SFCS)

The Ministry of Panchayati Raj released a report on datasets for State Finance Commissions (SFCs) to strengthen evidence-based fiscal decentralisation.

About SFCs

- **SFCs** are constitutional bodies created under **Article 243-I** after the **73rd Constitutional Amendment Act, 1992**.
- Every State must constitute an SFC every **five years** to review the financial position of **Panchayats**.
- SFCs recommend principles for sharing financial resources between the **State Government** and **Panchayati Raj Institutions (PRIs)**.
- They recommend distribution of **taxes**, **duties**, **tolls**, and **fees**, along with **grants-in-aid** from the **Consolidated Fund of the State**.

Key Challenges

- **Lack of consolidated accounts** makes it difficult to assess the financial position of Panchayats.
- **Non-standard accounting methods** reduce comparability across states.
- **Capacity gaps** at the Gram Panchayat level due to shortage of trained accountants and staff weaken record-keeping.
- **Fragmented data systems** spread across departments delay data access and reduce the quality of SFC analysis.

- Lack of **Panchayat-level** and **sector-wise expenditure data** affects performance-based fiscal analysis.
- Delay in SFC constitution and report submission weakens decentralisation; the **Fifteenth Finance Commission** noted an average delay of **16 months**.

Key Recommendations

- Classify **Panchayat Advancement Index (PAI)** indicators into **needs**, **performance**, and **backwardness/equity** categories for objective devolution.
- Adopt a **standard reporting template** and uniform accounting heads for consistency.
- Publish a **supplementary budget document** showing all transfers to rural and urban local bodies, including Gram Panchayat-wise allocations.
- Establish **permanent SFC Cells** for regular updating of fiscal and governance data.
- The **Comptroller and Auditor General of India (CAG)** should conduct a performance audit of the **73rd Constitutional Amendment** implementation.
- Strengthen SFC capacity through training on **eGramSwaraj**, data systems, and analytical tools.
- Prepare a comprehensive **SFC Manual** for future guidance.
- The **National Institute of Rural Development and Panchayati Raj** should conduct training and compile best practices.

Significance

- The report aims to build a strong **data-driven fiscal decentralisation system** and improve grassroots governance

PRIME MINISTER OF INDIA

Narendra Modi has surpassed Jawaharlal Nehru to become India's longest-serving Prime Minister through consecutive electoral mandates.

Constitutional Position

- Under **Article 75**, the **Prime Minister** is appointed by the **President of India** and serves as the head of the Union government.
- The Prime Minister exercises the **real executive authority** in the parliamentary system.

Leader of Council of Ministers

- Under **Article 74**, the Prime Minister heads the **Council of Ministers**, which aids and advises the President.
- The Prime Minister allocates portfolios, coordinates ministries, and ensures collective responsibility.

Role and Functions

- The Prime Minister acts as the main link between the **President** and the **Council of Ministers**.
- The office communicates Cabinet decisions to the President and advises on important matters like **appointments**, **summoning Parliament**, and **dissolution of the Lok Sabha**.
- The Prime Minister is the chief policy-maker and political leader of the government.

Head of Key Institutions

- The Prime Minister presides over important bodies such as **NITI Aayog**, the **National Integration Council**, and the **Inter-State Council**.

Recent Milestone

- **Narendra Modi** completed over **4,399 days** in office through uninterrupted electoral victories in **2014**, **2019**, and **2024**.
- This surpassed **Jawaharlal Nehru's** uninterrupted elected tenure of **4,398 days**.
- However, **Nehru** remains India's overall longest-serving Prime Minister, holding office from **1947 to 1964**.

Global Recognition

- According to **Morning Consult**'s Global Leader Approval Rating Tracker, Prime Minister Modi recorded a **70% approval rating** in **April 2026**, the highest among surveyed world leaders.

RULES GOVERNING ELECTION SYMBOLS IN INDIA

The satirical Cockroach Janta Party (CJP) triggered debate on whether a cockroach can be allotted as an election symbol if registered as a political party.

Election Symbols in India

- Election symbols are regulated under the **Election Symbols (Reservation and Allotment) Order, 1968**, administered by the **Election Commission of India**.
- These symbols help voters identify political parties and candidates on the ballot.

Types of Symbols

- **Reserved Symbols** are exclusively allotted to recognised **national** and **state parties**.
  - Example: **Lotus** for the **Bharatiya Janata Party**, **Hand** for the **Indian National Congress**.
- **Free Symbols** are allotted to **registered unrecognised parties** and **independent candidates** from a notified list.

Available Free Symbols

- The latest **Election Commission** list (May 2025) contains **184 free symbols**.
- These include simple and common objects like **air-conditioner**, **dustbin**, **frying pan**, **grapes**, **toothbrush**, **TV remote**, and other household, farm, and sports items.
- Some symbols may not be available in certain states if already reserved.

Rules for New Symbols

A proposed symbol:

- Must **not resemble** an existing symbol.
- Must **not carry religious or communal meaning**.
- Must **not depict any bird or animal**.
- Even if a party requests a symbol, the **Election Commission** has the final authority to accept or reject it.
- If multiple parties seek the same symbol, allotment may be decided by **first-come-first-served** or **draw of lots**.

Why Cockroach is Unlikely

- Since the **1990s**, the **Election Commission** stopped allotting new **animal-based symbols** after animal welfare concerns.
- This followed incidents like the **1989 Tamil Nadu Assembly election**, where campaign use of roosters led to allegations of cruelty.
- As a **cockroach** is an insect and part of the animal kingdom, it falls under this restriction.

Exceptions

Some old parties still retain animal symbols allotted before the restriction:

- Bahujan Samaj Party – Elephant
- All India Forward Bloc – Lion

VIKSIT BHARAT–GUARANTEE FOR ROZGAR AND AJEEVIKA MISSION GRAMIN (VB-G RAM G)

The Union Government proposed ₹95,692 crore for VB-G RAM G, while workers' groups announced protests from July 1 demanding its repeal.

About the Scheme

- **VB-G RAM G** has replaced the **Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), 2005**.
- It marks a shift from a **demand-driven** employment model to a **supply-driven** framework.
- The scheme raises the employment guarantee from **100 days to 125 days** per rural household in a financial year for adults willing to do unskilled manual work.
- It will function as a **Centrally Sponsored Scheme**:
  - **90:10** for **North-Eastern** and **Himalayan States/Union Territories**
  - **60:40** for all other States.
- Planning will be based on **Viksit Gram Panchayat Plans (VGPPs)** prepared by Gram Panchayats and integrated with national spatial planning systems.
- If work is not provided within the fixed period, State Governments must pay **unemployment allowance**.
- States can notify up to **60 days** during peak sowing and harvesting when scheme work will remain suspended to ensure farm labour availability.
- Oversight will be carried out by **Central** and **State Gramin Rozgar Guarantee Councils**.

Major Concerns

- Activists argue that the promised **125 days** are not backed by adequate funds or administrative capacity.
- Government data suggests many States may fail to provide even half of the promised workdays.
- Rules remain silent on **wage rates** and do not guarantee **statutory minimum wages**.
- Continued use of **facial recognition** and **biometric authentication** may lead to wage loss because of technological failures.
- Unlike MGNREGA's **bottom-up demand estimation**, VB-G RAM G follows a **top-down normative allocation** fixed by the Centre.
- Under MGNREGA, the Centre bore **100% wage cost** and **75% material cost.**
  - VB-G RAM G shifts a larger burden to States under the **60:40 model**.
- This may increase regional disparities as weaker States may struggle to mobilise funds.

Significance

- The debate reflects larger concerns about **rural labour rights**, **fiscal federalism**, and the changing design of India's rural employment guarantee system

FREQUENT DISRUPTIONS IN LEGISLATIVE HOUSES

The Lok Sabha Speaker recently warned that frequent disruptions in Parliament and State Legislatures are becoming a serious challenge to democratic governance.

About Disruptions

- Legislative disruptions are intentional interruptions such as **frequent, forced, or abrupt adjournments**, **walkouts**, protests, and disorderly conduct used by political actors to stall proceedings for specific political objectives.
- Though disruptions existed earlier, they have sharply increased since the **1990s** with coalition politics and competitive obstruction.

Role of Legislatures

Legislatures are the foundation of democracy and perform four major functions:

- **Law-making** for governance and reforms.
- **Executive accountability** through **Question Hour**, debates, motions, and committees.
- **Representation** of people's concerns and aspirations.
- **Policy deliberation** on budgets and development priorities.

Declining Productivity

- The **17th Lok Sabha (2019–2024)** sat only for **274 days**, the lowest for a full-term Lok Sabha.

- In the **Monsoon Session 2025**, the **Lok Sabha** functioned only for **29%** and the **Rajya Sabha** for **34%** of scheduled time.
- Bills referred to **Parliamentary Standing Committees** declined from **71% (15th Lok Sabha)** to **16% (17th Lok Sabha)**.
- Around **58% of 179 Bills** were passed within two weeks of introduction, and **35%** with less than one hour of discussion.

Causes	Impact
➲ Growing **political polarisation** and ideological conflicts. ➲ Important national issues not receiving adequate discussion. ➲ Search for **media visibility** and political signalling. ➲ Contentious laws like **Farm Bills (2020)**, **Citizenship Amendment Act (2019)**, and **Goods and Services Tax (GST), 2017**. ➲ Weak parliamentary discipline and poor consensus-building.	➲ Weakens **Question Hour** and executive oversight. ➲ Delays legislative work and reduces Parliament's role as a forum for public concerns. ➲ Creates **fewer institutional checks**, increasing dependence on **ordinances** and judicial intervention. ➲ Weakens **deliberative democracy** through limited debate and scrutiny. ➲ Wastes public resources and reduces public trust.

AFSPA, 1958

Union Home Minister Amit Shah stated that AFSPA may be withdrawn from almost the entire Northeast by 2027, except one or two States.

About AFSPA

- The **Armed Forces (Special Powers) Act (AFSPA), 1958** gives special powers to armed forces to maintain **public order** and combat **insurgency** in areas declared as **disturbed areas**.
- It is applied where the security situation is serious enough that armed forces are required to assist civil administration.

Key Provisions

- Under **Section 3**, the **Governor**, **Union Territory Administrator**, or the **Central Government** can declare an area as disturbed.
- Under **Section 4**, armed forces can:
  - Use force, including causing death under specified conditions.
  - Arrest any person without warrant.
  - Enter and search premises without warrant.
  - Prohibit assembly of **five or more persons**.
  - Destroy **arms dumps, militant hideouts, fortified positions, and training camps**.
- Arrested persons must be handed over to the nearest police station with the **least possible delay**.
- Under **Section 6**, legal proceedings against armed personnel require prior sanction from the **Central Government**.

Present Coverage

- AFSPA currently remains in parts of **Nagaland**, **Assam**, **Manipur**, and **Arunachal Pradesh**.
- It also applies in **Jammu and Kashmir** under the **Armed Forces (Jammu and Kashmir) Special Powers Act, 1990**.
- It was withdrawn from **Tripura** (2015), **Meghalaya** (2018), and **Mizoram** in the 1980s.

Judicial Decisions

- **Naga People's Movement of Human Rights v. Union of India** upheld AFSPA but imposed safeguards.
- **Extra-Judicial Execution Victim Families Association v. Union of India** held that immunity under Section 6 is not absolute.
- **Sebastian M. Hongray v. Union of India** affirmed accountability of security forces.

Committee Recommendations

- **Justice B.P. Jeevan Reddy Committee (2005)** recommended repeal and merger of key provisions into the **Unlawful Activities (Prevention) Act (UAPA), 1967**.
- **Santosh Hegde Committee (2013)** exposed fake encounters in Manipur and sought greater accountability.
- **Second Administrative Reforms Commission (2007)** called AFSPA a symbol of alienation and advised repeal.
- **Justice J.S. Verma Committee (2013)** recommended that sexual offences by armed personnel should be tried under ordinary criminal law.

Significance

- AFSPA remains a major issue balancing **national security** and **human rights**.
- Its phased withdrawal from the Northeast reflects improving internal security and progress in peace-building efforts.

DRAFT TELECOMMUNICATIONS (TELEVISION, RADIO AND ASSOCIATED SERVICES) RULES, 2026

The Ministry of Information and Broadcasting (MIB) has released draft rules to bring television, radio, and associated broadcasting services under a single regulatory framework governed by the Telecommunications Act, 2023.

Background

- The **Telecommunications Act, 2023** replaced the colonial-era **Indian Telegraph Act, 1885**.
- It provides a modern telecom framework with:
  - **Right of Way (RoW)** for non-discriminatory infrastructure access.
  - Stronger **national security standards**.
  - Use of **Universal Service Obligation Fund (USOF)** for research and development.
  - **Regulatory Sandboxes** for testing new technologies.

- Measures against spam and formal grievance redressal.
- A **digital-first governance model**, including online dispute resolution.

➲ The **MIB** administers broadcasting-related provisions under this Act.

Key Features of Draft Rules

➲ **Unified Regulatory Framework:** The rules consolidate six separate policy guidelines into one harmonised framework:
- Guidelines for Uplinking and Downlinking of Satellite Television Channels in India, 2022
- Direct-to-Home (DTH) Broadcasting Guidelines, 2001
- Headend-in-the-Sky (HITS) Guidelines, 2009
- FM Radio Phase III Policy, 2011
- Community Radio Policy, 2024
- Internet Protocol Television (IPTV) Guidelines, 2008

➲ **Exempted Entities:** Parliament of India and Prasar Bharati.

➲ **Removal of Grant of Permission Agreement (GOPA):** Simplifies authorisation and reduces administrative burden.

➲ **Fixed Licence Duration:**
- **10 years** for TV channels, teleports, and community radio.
- **15 years** for private FM radio.
- **20 years** for TV distribution platforms like DTH and HITS.

➲ **Mandatory Public Interest Content:**
- Private TV channels must broadcast **30 minutes daily** on national and social themes.
- Private FM radio must broadcast **1 hour daily**, with at least **20% local content**.

➲ **Ownership Changes:** Prior government approval is mandatory for changes in **shareholding** or **Foreign Direct Investment**, along with continuous security clearance and **30-day prior notice**.

➲ **Renewal Condition:** Broadcasters with more than **five violations** may become ineligible for renewal.

➲ **Penalties:** Violations may lead to civil penalties, encashment of bank guarantees, suspension, or cancellation of authorisation.

➲ **Digital Implementation:** All approvals and compliance processes will be managed digitally.

Significance

➲ Replaces fragmented sector-specific regulation with **policy harmonisation**.

➲ Improves **ease of doing business** by simplifying compliance.

➲ Strengthens transparency, security, and regulatory clarity.

➲ Encourages investment, innovation, and growth in India's broadcasting ecosystem.

TELEGRAM BAN

The Ministry of Electronics and Information Technology (MeitY) temporarily blocked Telegram under Section 69A on the recommendation of the National Testing Agency (NTA) after misuse of its message-editing feature in the NEET-UG 2026 re-examination fraud.

What is Section 69A?

➲ **Section 69A** of the **Information Technology Act, 2000** empowers the **Central Government** or an authorised officer to block public access to information **generated, transmitted, received, stored, or hosted** in any computer resource.

➲ It can be used only on specific grounds:
- **Sovereignty and integrity of India**
- **Defence of India**
- **Security of the State**
- **Friendly relations with foreign States**
- **Public order**
- Preventing incitement to cognisable offences.

➲ Blocking orders normally pass through an **inter-ministerial committee** under the **Information Technology (Blocking Rules), 2009**.

➲ The government must **record reasons in writing**, and a review committee examines the order.

➲ Under **Rule 9**, emergency blocking can bypass pre-hearing safeguards.

➲ This is the same provision used to ban **59 Chinese apps in 2020**, including **TikTok**, **UC Browser**, and **ShareIt**.

➲ In **Shreya Singhal v. Union of India**, the Supreme Court upheld its constitutional validity.

Why Telegram Was Blocked

➲ The government described Telegram as a **"new dark web"** because of:
- **End-to-end encryption** and anonymity.
- **Retroactive message editing** used to alter old messages and create fake paper-leak claims.
- **Large file sharing (up to 2GB)** and automated bots.
- Use in cybercrime networks involving **mule accounts**, extortion, and illegal gambling.

Significance of IT Act, 2000

➲ Gives legal validity to **digital signatures**.

➲ Defines **cyber offences** like hacking, fraud, and identity theft.

➲ Under **Section 79**, grants **safe harbour** to intermediaries.

➲ Provides an appellate system for cyber disputes.

Concerns

➲ **Proportionality:** Over **150 million users** were affected for actions of a few.

➲ **Freedom of Speech:** May affect rights under **Article 19(1)(a)**.

➲ **Band-aid solution:** Critics argue exam fraud arises from systemic weaknesses, not only platform misuse.

➲ **Enforcement gaps:** Blocks can be bypassed through **Virtual Private Networks (VPNs)**.

➲ **Opacity:** Limited public disclosure reduces accountability.

Mule Accounts & Money Mules

- A "mule account" is a bank account used to hide or move stolen money. A "money mule" is the person who actually transfers this illegal cash for someone else.
- International cybercriminals take advantage of a bank's ability to make large, fast payouts.
- They route stolen money through the bank accounts of everyday individuals or fake businesses (shell companies).

AADHAAR MISUSE

The Supreme Court of India, led by Chief Justice Surya Kant, sought responses from the Centre and States on a plea by Ashwini Kumar Upadhyay alleging misuse of Aadhaar beyond its legal scope.

What is Aadhaar?

- **Aadhaar** is a **12-digit unique identification number** issued by the **Unique Identification Authority of India** since **2010** to Indian residents.
- It serves as proof of **identity** and **address** and is widely used for welfare delivery, financial inclusion, and digital authentication.

Legal Issue

- The petition argues that Aadhaar is being wrongly used as proof of **citizenship**, **domicile**, **residence**, and **date of birth** in several services.
- It relies on **Section 9 of the Aadhaar Act, 2016**, which clearly states that Aadhaar is **not proof of citizenship, domicile, residence, or date of birth**.
- It also cites the **UIDAI notification (August 2023)** clarifying that Aadhaar is only proof of identity.

Electoral Concerns

- The plea challenges the use of Aadhaar in **Form-6** (fresh voter registration) as proof of age and residence.
- It argues that this may allow **illegal migrants** to obtain voter registration and enter electoral rolls, affecting the integrity of elections.
- The petition has been tagged with similar pending cases.

Misuse Risks

- **Identity theft** and fake accounts.
- **Financial fraud** using Aadhaar-linked services.
- **Privacy breaches** due to leakage of Aadhaar numbers or biometric data.
- **Profiling and surveillance** due to excessive linkage across services.

Governance Framework

- **Aadhaar Act, 2016:** Governs Aadhaar issuance and authentication.
- **Information Technology Act, 2000:** Protects against cybercrime and data theft.
- **Digital Personal Data Protection Act, 2023:** Protects Aadhaar-linked personal data.
- **Justice K.S. Puttaswamy v. Union of India** recognised privacy as a fundamental right.
- The **Aadhaar judgment (2018)** upheld Aadhaar's validity but restricted mandatory use in many private services.

Suggested Reform

- The plea proposes a **high-powered monitoring committee** with a retired Supreme Court judge, cybersecurity experts, and forensic specialists to review verification systems.

STATE FINANCES REPORT 2024–25

The Comptroller and Auditor General of India released the State Finances Report 2024–25, highlighting rising subsidy burdens, widening fiscal deficits, and pressure on developmental spending.

About the Report

- It is an analytical report on the fiscal performance of **28 States**, examining **revenue balance**, **fiscal deficit**, **debt**, and **quality of expenditure**.
- It measures State performance against **budget targets**, **Finance Commission norms**, and fiscal consolidation goals.

Major Findings

- **Subsidy expenditure** rose sharply to **₹4.4 lakh crore** in **FY 2024–25**, nearly **three times** the level of **2015–16**.
- Subsidies as a share of **State Gross Domestic Product (GSDP)** increased from **7.7% to 10.2%**.
- **Karnataka** recorded the highest subsidy burden (**14.01%**), followed by **Madhya Pradesh, Tamil Nadu, Punjab, Chhattisgarh, and Rajasthan**.
- **Revenue expenditure** formed over **83%** of total State expenditure, reflecting a welfare-heavy spending pattern.
- **Social and economic services** together made up nearly **two-thirds** of total expenditure.
- **Committed expenditure** (salaries, pensions, interest) exceeded **43%** of revenue expenditure.
- Together, **committed expenditure, subsidies, and grants** formed over **61%** of revenue expenditure, reducing fiscal flexibility.

Fiscal Position

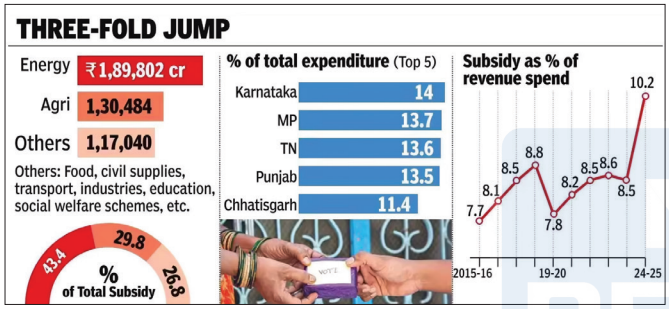
- Of **28 States**, **13 recorded revenue surplus** while **15 remained in revenue deficit**.
- Aggregate **revenue deficit** stood at **₹3.46 lakh crore**, while **net revenue deficit** was **₹2.19 lakh crore**.
- All **28 States** recorded fiscal deficits. **18 States** breached the **15th Finance Commission** ceiling of **3% of GSDP**.
- Combined State liabilities increased to **₹90.51 lakh crore** by **March 2025**.

Revenue and Sectoral Trends

- **States' Own Tax Revenue (SOTR)** stood at **₹40.52 lakh crore**.
- **State Goods and Services Tax (SGST)** contributed over **43%** of SOTR.
- **Energy subsidies** formed **43%** of total subsidies, while **agriculture subsidies** accounted for **30%**.
- **Education** remained the largest expenditure head.
- The **economic sector** accounted for **63%** of capital outlay, showing continued infrastructure focus.

Inter-State Variation

- Six States spent over **10%** of expenditure on subsidies, while six spent below **1%**.
- Lowest subsidy-spending States included **Arunachal Pradesh, Sikkim, Nagaland, Meghalaya, Tripura, and Assam**.



Concerns Raised by the CAG

- **Shrinking Fiscal Space:** A large share of revenue receipts is being absorbed by mandatory spending obligations, leaving **limited resources for new developmental initiatives.**
- **Crowding Out Capital Expenditure:** Increasing expenditure on subsidies constrain investment in infrastructure, irrigation, education, healthcare, and other productive assets.
- **Sustainability Risks:** Persistent expansion of subsidy programmes without corresponding growth in revenue leads to higher fiscal deficits and debt levels.

NIRBHAY CHETNA

The Central Government has rolled out Nirbhay Chetna to train and sensitise 17.5 lakh male elected representatives across the country.

About

- **Nirbhay Chetna** is a major intervention under the **Nirbhay Raho initiative**, launched in **2026**.
- It is the first national-level programme under the **Nirbhaya Fund** focused on gender sensitisation of men.
- The **Ministry of Panchayati Raj** is the nodal ministry for its implementation.
- The initiative aims to strengthen **gender-responsive governance** through **Panchayati Raj Institutions (PRIs)** by improving awareness, accountability, and leadership at the grassroots.

Key Features

- **Nirbhay Chetna** focuses on sensitising male elected representatives about **gender equality**, **women's rights**, and **women's safety**.
- Under this component, **28,500 Master Trainers** are being prepared at the **State, district, and block levels**. These trainers will reach more than **17.5 lakh male representatives** in Panchayats.
- **Nirbhay Netri** focuses on building capacity and legal awareness among elected women representatives.
- **Nirbhay Drishti** aims to install **CCTV cameras** at important rural locations to strengthen technology-based safety systems in Panchayats.

SHE-BOX 2.0 PORTAL UNDER MISSION SHAKTI

The Government highlighted SHe-Box 2.0 as an important tool under Mission Shakti to strengthen workplace safety and implementation of sexual harassment laws.

What is SHe-Box?

- **SHe-Box (Sexual Harassment electronic Box)** is a digital platform launched by the **Ministry of Women and Child Development** to implement the **Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013**.
- **SHe-Box 2.0**, launched in **2024**, provides a **secure, confidential, and user-friendly** system for reporting workplace sexual harassment.

Key Features

- Provides **single-window access** for women in **organised, unorganised, public, and private sectors** to file and track complaints.
- Functions as a **centralised repository** of **Internal Committees (ICs)** and **Local Committees (LCs)** across the country.
- Ensures **time-bound processing** and streamlined grievance redressal.
- Enables **real-time monitoring** through designated nodal officers.
- Strengthens coordination among stakeholders for effective implementation of the **SH Act, 2013**.
- Available in **22 languages**, including **Hindi** and **English**, ensuring wider accessibility.

Mission Shakti

- **Mission Shakti** is a mission-mode scheme for **women's safety, security, and empowerment**.
- It has two sub-schemes:
  - **Sambal** – focuses on women's safety and security.
  - **Samarthya** – focuses on women's empowerment.
- Under **Sambal**, schemes like **One Stop Centre (OSC)**, **Women Helpline (WHL)**, **Beti Bachao Beti Padhao (BBBP)**, and **Nari Adalat** are included.

ABHIGYAN APP

The Union Home Minister launched the Abhigyan App, developed by the National Crime Records Bureau, to strengthen real-time criminal identification and field-level policing.

About

- **Abhigyan** is a mobile-based biometric identification application linked to the **National Automated Fingerprint Identification System (NAFIS)**.
- It stores fingerprint records of **accused persons, convicts, prison inmates, and criminal suspects** on a centralized platform.
- The app can match fingerprints with the NAFIS database within **35 seconds**, enabling quick identification.

Key Features

- Enables **portable fingerprint scanning** during routine vehicle checks and investigations.
- Provides **instant alerts** to police if the scanned person has pending criminal records.
- Gives field officers secure access through **two-step authentication**.
- The NAFIS database contains around **1.3 crore records**, including **9.91 lakh narcotics offenders** and **3.65 lakh human trafficking cases**.

Legal Framework

- The **Criminal Procedure (Identification) Act, 2022** provides the legal basis for collecting fingerprints and other measurements.
- Under **Section 3**, mandatory recording applies only to:
  - Convicted persons
  - Arrested persons
  - Persons ordered to provide security for **good behaviour** or **maintaining peace** under the **Code of Criminal Procedure, 1973**.

Concerns

- The Act does **not provide for random biometric testing** of persons without evidence of an offence.
- This raises concerns of **statutory overreach**, **privacy risks**, and misuse of biometric data.

RSS AND LEGAL ENTITY

The legal status of the Rashtriya Swayamsevak Sangh (RSS) has come into debate after questions were raised over its functioning without formal legal registration.

What is a Legal Entity?

- A **legal entity** or **juridical person** is an organisation recognised by law as separate from its members.
- Such entities can **own property**, **enter contracts**, and **sue or be sued**.
- Legal entities include **companies**, **trusts**, **societies**, and statutory bodies.
- A **natural person** refers to an individual human being.

Legal Status of RSS

- RSS describes itself as a **voluntary socio-cultural organisation** and a **body of individuals**.
- It is not registered under the **Societies Registration Act, 1860**, **Indian Trusts Act, 1882**, or as a **Section 8 company** under the **Companies Act, 2013**.
- In law, it is treated as a **Body of Individuals (BOI)** under **Section 2(31) of the Income Tax Act, 1961**. A BOI is only a **tax classification** and does not provide a separate legal personality.

Legal Position

- Under **Article 19(1)(c)** of the Constitution, citizens have the right to form associations.
- Registration is not compulsory unless an organisation seeks legal privileges such as **government grants**, **limited liability**, or **foreign funding** under **FCRA**.
- Since RSS lacks juristic personality, legal cases involving it are handled through **representative suits** by office-bearers under the **Code of Civil Procedure (CPC)**.
- Its assets are usually managed by individuals or separate registered trusts.

About RSS

- RSS was founded in **1925** at **Nagpur** by **K. B. Hedgewar**.
- It promotes the idea of **Hindutva** and focuses on **social mobilisation**, **education**, and **community service**.

THREE-LANGUAGE FORMULA IN EDUCATION

The Central Board of Secondary Education (CBSE) has clarified that students of Classes 7, 8 and 9 can continue studying foreign languages under the Three-Language Formula till Class 10.

About

- The **Three-Language Formula** aims to promote **multilingualism**, **national integration**, and **linguistic diversity** in India.
- It was first recommended by the **Kothari Commission** and adopted under the **National Policy on Education (1968)**.
- It was later reaffirmed in **NPE 1986/1992** and re-emphasised in **National Education Policy 2020 (NEP 2020)**.

Key Provisions under NEP 2020

- Students must learn **three languages** with flexibility in selection.
- At least **two languages** should be **native Indian languages**.
- No language can be imposed on any State. States, regions, and students have the freedom to choose languages.
- A **foreign language** can be chosen only as the **third language** if the first two are Indian languages.

Objectives

- It improves **linguistic competence** and promotes learning beyond the mother tongue.
- It strengthens **national unity** through better inter-regional communication.
- It helps preserve **regional and classical languages** under **Articles 29, 350A and 351**.
- It improves **cognitive abilities** and **critical thinking** through multilingual learning.
- It enhances **educational and employment opportunities**.

Challenges

- Some States fear **language imposition**, especially regarding Hindi.
- States demand greater autonomy as education is in the **Concurrent List**.
- Many schools face shortage of trained **language teachers** and learning materials.
- Rural schools face infrastructure and timetable-related difficulties.
- Unequal language choices may widen the gap between government and private schools.
- Learning multiple languages may increase the academic burden on students.

Recent Measures

- **NEP 2020** provides flexibility and protects federal choice.
- The **National Curriculum Framework (NCF)** supports multilingual education with regional diversity.
- **DIKSHA**, **NIPUN Bharat**, **PM SHRI**, and **Samagra Shiksha** support multilingual learning.
- Greater focus is being placed on **mother tongue-based education**, teacher training, and digital learning resources.

PRE-CONCEPTION AND PRE-NATAL DIAGNOSTIC TECHNIQUES ACT, 1994

The rising use of portable ultrasound devices has revived the debate on strengthening the PCPNDT Act, 1994, while ensuring wider healthcare access. Recently, the Supreme Court stressed strict enforcement of the Act amid continuing sex-selective practices.

About the Act

- The **PCPNDT Act, 1994** was enacted to prevent **prenatal sex determination** and **female foeticide**, which contributed to the declining **child sex ratio**.
- It was amended in **2003** to prohibit **pre-conception sex selection** through modern reproductive technologies.
- It acts as the main legal framework against misuse of diagnostic technologies for sex selection.

Key Provisions

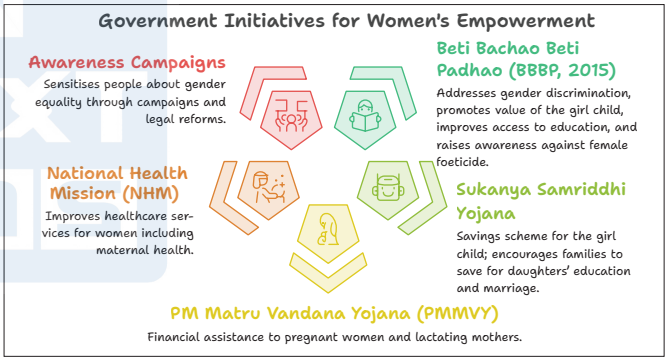
- **Sex selection** is prohibited both before and after conception.
- **Prenatal diagnostic techniques** are allowed only for detecting genetic, chromosomal, metabolic, haemoglobin-related, and sex-linked disorders.
- All **genetic counselling centres**, **laboratories**, **clinics**, and **ultrasound centres** must be compulsorily registered.
- **Advertisements** related to sex determination are banned.
- Proper **record maintenance** is mandatory; failure itself is treated as an offence.

Punishment

- **First offence:** Up to **3 years imprisonment** and **₹10,000 fine**.
- **Subsequent offences:** Up to **5 years imprisonment** with higher penalties.
- Medical practitioners may face **suspension or cancellation** of registration.

Concerns

- **NFHS-5 (2021)** recorded **sex ratio at birth** at **929**, showing continued imbalance.
- Deep-rooted **son preference**, **dowry practices**, **female infanticide**, and misuse of ultrasound continue to sustain gender bias.



AIR SUVIDHA 2.0 PORTAL

The Ministry of Civil Aviation and Delhi International Airport Limited (DIAL) launched Air Suvidha 2.0 to strengthen health surveillance at India's international entry points.

About

- The move follows the **WHO** declaration of the **Ebola/Bundibugyo Virus Disease (BVD)** outbreak in **DRC** and **Uganda** as a Public Health Emergency of International Concern (PHEIC).
- **Air Suvidha 2.0** is an upgraded **contactless and paperless Passenger Health Self-Declaration Portal** for incoming international travellers.
- It has been developed in collaboration with the **Directorate General of Health Services (DGHS)** under the **Ministry of Health and Family Welfare**.
- Its objective is to improve **early disease detection**, **traveller screening**, and **cross-border outbreak control**.

Key Features

- International passengers must submit an online **Self-Declaration Form (SDF)** before immigration clearance.
- The form records **21-day travel history**, **exposure details**, and **symptoms**, if present.
- The portal allows submission up to **24 hours before arrival**.
- It uses **QR code and digital PDF validation**, making the process fully paperless.
- It enables **real-time data sharing** with:
  - Airport Health Officers
  - Bureau of Immigration
  - Integrated Disease Surveillance Programme (IDSP)
  - State Surveillance Officers

Significance

- It enables **rapid identification**, **medical referral**, and **contact tracing** of high-risk passengers.
- It strengthens **public health surveillance** at **Points of Entry (PoE)**.
- It improves India's preparedness against imported infectious diseases.
- It aligns India's border health management with **WHO International Health Regulations (IHR), 2005**.

Bundibugyo Virus Disease (BVD)

- It is a rare **viral haemorrhagic fever** caused by the **Bundibugyo virus**, a type of **Ebola virus**.
- It spreads through **blood**, **body fluids**, contaminated objects, and infected animals such as **bats** and **non-human primates**.
- Symptoms include **fever**, **headache**, **vomiting**, **diarrhoea**, **weakness**, and **bleeding**.
- There is **no approved vaccine or specific treatment** for BVD.

RURAL INTERNAL AUDIT PORTAL

The Union Minister for Rural Development launched the Rural Internal Audit Portal during the Rashtriya Gramin Vikas Sammelan in New Delhi.

About

- It is a **unified digital platform** for complete management of **internal audits**, covering both **risk-based** and **compliance audits**.
- It has been designed by the **Office of the Chief Controller of Accounts (CCA)** under the **Ministry of Rural Development** and developed with the **National Informatics Centre (NIC)**.
- It aims to strengthen **transparency**, **accountability**, and **financial governance** in rural development programmes.

Objectives

- To **digitise** and simplify the internal audit process for greater efficiency.
- To create a **centralised repository** of audit units, observations, reports, and **Action Taken Reports (ATRs)**.
- To enable **risk-based audit planning** through better identification and prioritisation of audit units.
- To automate audit reporting and standardise documentation.
- To support **real-time monitoring** of audit progress, compliance, and approvals.

Key Features

- Provides **end-to-end digital audit management**, from planning to report closure.
- Maintains a **secure digital database** of audit records and compliance history.
- Offers **role-based access** for auditors, auditees, State Governments, districts, and approving authorities.
- Includes **interactive dashboards** for real-time analytics and pending observations.
- Enables **geospatial monitoring** through a map-based module for audit coverage across India.
- Designed for future integration of **Artificial Intelligence (AI)**, **advanced analytics**, and **machine learning** for better risk assessment and decision-making.

DELHI ELECTRIC VEHICLE (EV) POLICY 2.0

The Delhi Government has notified Electric Vehicle Policy 2.0, effective from 1 July 2026 to 31 March 2030, to accelerate clean mobility and reduce urban pollution.

Key Provisions

- The policy focuses on high-polluting and high-use segments such as two-wheelers, three-wheelers, commercial goods vehicles, school buses, aggregator fleets, and government transport fleets.
- It targets **30% electrification** of Delhi's total vehicle fleet by **2030**, building on **14% EV penetration** achieved under the **2020 EV Policy**.

Phased Transition

- From **1 January 2027**, only **electric three-wheelers** and **N1 category trucks** will be registered.
- From **1 April 2028**, only **electric two-wheelers** will be registered.
- Existing **petrol**, **diesel**, and **CNG vehicles** can complete their operational lifecycle.
- **School buses** must convert **10% of fleets within two years** and achieve **30% electrification by 2030**.

Financial Support

- The government has allocated **₹7,000 crore** for implementation within a total **₹15,000 crore investment plan**.
- Buyers will receive **purchase incentives**, **road tax exemptions**, and **registration fee waivers**. Separate **scrapping incentives** are available for vehicles below **BS-IV norms**.
- **Hybrid vehicles** are excluded from subsidies to prioritise **pure EVs**.

Infrastructure and Implementation

- More than **30,000 public charging points** will be installed, supported by **₹1,000 crore**.
- The **Transport Department** will act as the nodal agency, while **Delhi Transco Ltd.** will develop charging infrastructure.
- **Electric N2 trucks (3.5–12 tonnes)** will get **10-year "No Entry" exemption** for the first **1,000 vehicles**.

DIKSHA

The Ministry of Education highlighted the expansion of DIKSHA as India's unified "One Nation, One Digital Platform," successfully scaling curriculum-linked, multilingual learning resources and certified teacher training nationwide.

About DIKSHA

- **Digital Infrastructure for Knowledge Sharing (DIKSHA)** is an open-source platform providing multilingual, curriculum-linked digital resources to students and teachers.
- It was launched in 2017, it is India's "One Nation, One Digital Platform" for school education and a key component of the Ministry of Education's PM e-Vidya initiative.
- It is spearheaded by the National Council of Educational Research and Training (NCERT) with the Central Institute of Educational Technology (CIET).
- It is adopted by boards across almost all States and Union Territories, it covers K–12 learning, from Foundational Literacy and Numeracy (FLN) to senior secondary education.

Digital Learning Ecosystem

- DIKSHA offers videos, 2D and 3D animations, augmented reality, simulations, virtual laboratories and interactive resources. QR-coded Energised Textbooks connect physical textbooks with videos, interactives and teacher guides.
- It promotes inclusive and personalised learning through Digital Accessible Information System (DAISY) format, text-to-speech and Indian Sign Language videos.
- Practice questions, detailed solutions, adaptive assessments and competency-based question banks help identify learning gaps and enable timely remediation.
- Teacher capacity-building is supported through National Initiative for School Heads' and Teachers' Holistic Advancement (NISHTHA) and State-specific professional development modules offering self-paced, certified training.

Architecture and Accessibility

- DIKSHA follows a federated architecture, allowing participants to independently create and manage content in mother tongues and regional languages according to local curricula and pedagogy.
- This keeps resources contextually relevant, updated and accessible, while CIET-NCERT periodically validates their quality and age- and grade-appropriateness.
- The platform supports 135 languages, 128 Indian and seven foreign languages.
  - NCERT textbooks for Classes 1, 2, 3 and 6 are translated into 22 Scheduled Languages and are also available on the NCERT portal.
- Offline access, including downloadable resources and content preloaded on Smart Class boards, ensures learning continuity in low-connectivity areas.

PM AWAS YOJANA–URBAN 2.0

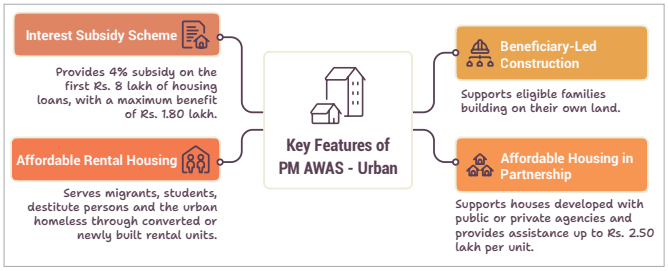
The Union Government approved over 2.13 lakh additional houses for eligible urban families under Pradhan Mantri Awas Yojana–Urban 2.0 (PMAY-U 2.0).

About

- Launched in September 2024 by the Ministry of Housing and Urban Affairs, it is the revamped form of PMAY-U, 2015.
- It aims to provide all-weather pucca houses through construction, purchase or rental support to one crore urban families over five years.
- The scheme involves an investment of ₹10 lakh crore, including ₹2.30 lakh crore in Central subsidy assistance.

Eligibility and Coverage

- Eligible families must not own a pucca house anywhere in India. Annual income limits are ₹3 lakh for Economically Weaker Sections, ₹3–6 lakh for Low Income Groups, and ₹6–9 lakh for Middle Income Groups.
- It covers statutory towns, subsequently notified towns, Planning Areas and regions under Urban or Industrial Development Authorities.



Implementation

- Cost-sharing is 100:0 for Union Territories without legislatures, 90:10 for specified regions, and 60:40 for other States.
- Monitoring uses geo-tagging, Direct Benefit Transfer, dashboards, Management Information System and a unified portal.
- By March 2025, 3.52 lakh houses had been approved, including over 2.67 lakh for women and 90 for transgender beneficiaries.

2 INTERNATIONAL RELATIONS

SHANGRI-LA DIALOGUE

India's decision to supply BrahMos missiles to Vietnam was confirmed during the Shangri-La Dialogue in Singapore.

About

- The **Shangri-La Dialogue**, also known as the **Asia Security Summit**, is Asia's premier **defence and security forum**.
- It was established in **2002** and is held annually at the **Shangri-La Hotel Singapore**.
- It is organised by the **International Institute for Strategic Studies (IISS)**, London, with support from **Singapore's Ministry of Defence**.
- Over time, it has emerged as the most important **multilateral security dialogue platform** in the **Indo-Pacific region**.

Focus Areas

- The dialogue discusses **traditional security issues** such as territorial disputes and military cooperation.
- It also addresses **non-traditional security challenges** like terrorism, cybersecurity, and climate change.
- Its agenda reflects the major security concerns and cooperation needs of the **Asia-Pacific region**.

Format

- The dialogue begins with a **keynote address** by a head of government or state.
- It includes **plenary sessions** where defence ministers present their views on major strategic issues.
- It also has **breakout discussions** involving senior officials and security experts.
- The platform provides opportunities for **bilateral and multilateral meetings**, strengthening defence diplomacy.

India's Role

- India regularly participates through the **Defence Minister**, **Chief of Defence Staff**, and senior military officials.
- India's **Raisina Dialogue** is considered to be modelled on the Shangri-La Dialogue.

INDIA-AUSTRALIA DEFENCE & STRATEGIC PARTNERSHIP

Recently, Defence Minister Rajnath Singh co-chaired the second India-Australia Defence Ministers' Dialogue in New Delhi.

Key Outcomes of the Dialogue

- Both sides agreed to advance **collaborative maritime domain awareness** activities using **maritime patrol aircraft** and to explore **undersea domain awareness** opportunities.
- Discussions were held to finalise the **Joint Maritime Security Collaboration Roadmap**.
- Both countries committed to enhancing **procedural interoperability** for exercises and operations, building on the **2020 Mutual Logistics Support Arrangement**.
- India and Australia decided to develop a **MoU on Provision of Defence Articles and Defence Services** as the next step in deepening defence-industrial collaboration.

Key Bilateral Mechanisms

- India and Australia upgraded their bilateral ties from a 'Strategic Partnership' in 2009 to a **Comprehensive Strategic Partnership** in 2020.
- The **2+2 Defence and Foreign Ministers' Dialogue**, Defence Policy Talks, and Defence Services Staff Talks form the core institutional framework.
- **AUSINDEX** is the dedicated bilateral naval exercise between the Royal Australian Navy and the Indian Navy.
- The **Indian Air Force joined Exercise Pitch Black** in Darwin in 2018.
- Australia joined the **MALABAR naval exercise** in 2020, alongside India, the US, and Japan.
- Both navies signed the **'Joint Guidance for India–Australia Navy to Navy Relationship'** document in 2021.

Other Key Pillars

- Both nations are members of the **QUAD** — the Quadrilateral Security Dialogue comprising the US, India, Australia, and Japan.
- The **India-Australia ECTA** (2022) has been reducing tariffs on bilateral trade, while negotiations toward a broader **CECA** remain underway.
- The **Australia-India Critical Minerals Investment Partnership** (2022) focuses on lithium, cobalt, and rare earths, with a **Critical Minerals Research Hub** established in late 2023 with $5 million in approved funding.
- The **Migration and Mobility Partnership Arrangement** (MMPA, 2023) provides a bilateral framework to support legal migration while addressing irregular migration.
- The **India-Australia Rooftop Solar Training Academy** was launched in 2025 to train 2,000 women and young people as solar technicians.
- Bilateral trade stood at **$24.1 billion in FY25**, with India's exports at $8.58 billion and imports at $15.52 billion.

Concerns

- A persistent **trade imbalance** exists, as India's imports from Australia ($15.52 bn) significantly exceed its exports ($8.58 bn).
- Progress on **defence technology transfer**, joint R&D, and co-production remains slow despite strong exercise ties.
- Australia's stringent **sanitary and phytosanitary (SPS) standards** continue to restrict Indian agricultural exports.
- Challenges remain in **mutual recognition of skills**, work visas, and post-study opportunities for Indian students in Australia.

8th INDIA-INDONESIA JOINT COMMISSION MEETING

External Affairs Minister Dr. S. Jaishankar co-chaired the 8th India-Indonesia Joint Commission Meeting with Indonesia's Foreign Minister.

Key Outcomes

- Both nations agreed to advance cooperation in **defence, maritime security, digital connectivity, and infrastructure**.
- The two sides exchanged perspectives on **regional and global developments** of mutual interest and reaffirmed their commitment to closer multilateral coordination.
- Both countries also discussed deepening **India-ASEAN ties** through stronger bilateral engagement.

India-Indonesia Relations: Historical Overview

- A shared colonial experience and common post-colonial goals formed the foundation of bilateral relations in the **late 1940s and 1950s**.
- In **1951**, India and Indonesia signed a **Treaty of Friendship**, aimed at perpetual peace and unalterable friendship.
- Both nations jointly championed the cause of Asian and African independence at the **Bandung Conference (1955)**, which led to the formation of the **Non-Aligned Movement (NAM) in 1961**.
- India and Indonesia were among the **five founding leaders of NAM**, along with Yugoslavia, Egypt, and Ghana.
- Since India adopted its **'Look East Policy' in 1991**, upgraded to **'Act East' in 2014**, bilateral relations have deepened significantly.
- **Shared Platforms:** Both nations actively participate in **BRICS, G20, IORA, and the East Asia Summit**, fostering cooperation on global issues.

Economic and Trade Ties

- Indonesia is **India's second largest trading partner in the ASEAN region**, after Singapore.
- Bilateral trade grew from **$4.3 billion in 2005-06** to **$38.84 billion in 2022-23**, though it moderated to **$29.40 billion in 2023-24**.
- Bilateral ties were elevated to a **Comprehensive Strategic Partnership in 2018**, when both countries also adopted the **Shared Vision of India-Indonesia Maritime Cooperation in the Indo-Pacific**.

Significance of Indonesia for India

- India's **Act East Policy** and **Indo-Pacific Oceans Initiative** align closely with Indonesia's **Global Maritime Fulcrum** vision, creating strong synergies in maritime security, connectivity, and economic development.
- Indonesia's strategic location between the **Indian and Pacific Oceans** makes it a crucial partner for maintaining regional maritime stability.
- Indonesia's growing regional influence serves as a natural **counterbalance to China's dominance** in the Indo-Pacific, aligning with India's strategic interests.
- Cooperation in **counter-terrorism** is essential given shared challenges posed by extremism and transnational crime.
- Deep-rooted **cultural ties**— particularly the influence of Hindu traditions and epics like the Ramayana and Mahabharata — foster strong people-to-people connections and offer significant **tourism potential**.

Challenges

- The **trade balance is skewed in favour of Indonesia**, primarily due to India's high imports of **palm oil and coal**, and both sides are working to diversify trade.
- **Regional tensions in the Indo-Pacific**, driven by China's growing assertiveness, continue to pose navigational challenges for the bilateral strategic partnership.

INDIA-VENEZUELA RELATIONS

Venezuela's Acting President Delcy Rodríguez travelled to New Delhi and met PM Modi, with both leaders undertaking a comprehensive review of bilateral ties and underlining the importance of Global South solidarity.

Key Outcomes

- On the energy front, both nations discussed transitioning away from **one-time oil purchases** toward **sustained, long-term supply agreements**, spanning the full spectrum from **oil exploration** to **refining and petrochemical processing**.
- Cooperation in **critical minerals including gold and diamonds** featured prominently in the talks.
- Both sides also identified **agriculture, animal husbandry, transport, automotive manufacturing, and science & technology** as priority areas for future engagement.

Trade & Energy

- Two-way trade currently stands at $678.94 million (FY 2025-26), with India's outbound shipments accounting for $210 million. These consist primarily of **pharmaceuticals, cotton, machinery, and mineral fuels**.
- Venezuela has climbed to become **India's third largest crude oil source** as of May 2026, a reflection of rapidly growing energy interdependence.

Significance of Venezuela for India

- Sitting atop the **world's largest proven oil reserves**, Venezuela is a natural strategic partner for India, which depends on foreign sources for over **85% of its oil needs** and whose refineries are technically capable of handling **heavy crude**.
- Venezuela's substantial **rare earth, nickel, and mineral wealth** aligns directly with India's growing demand for critical inputs in emerging industries.
- Deeper engagement with Venezuela also serves as a **gateway for India's broader Latin American diplomacy**, helping diversify away from traditional supplier relationships.

Venezuela

- **Location:** Venezuela is located on the **northern coast of South America.**
- **It is bordered by Colombia** to the west, **Brazil** to the south, **Guyana** to the east, and the **Caribbean Sea** lies to the north.
- **Capital:** Caracas.
- **Major Physiographic Regions:**
  - Northwestern Venezuela is traversed by the northeastern extension of the **Andes.**
  - **The Lake Maracaibo Basin** is a major geological and geographical region in northwestern Venezuela.
  - **Llanos** the vast, tropical savanna plains occupying over **250,000 square** kilometers of central Venezuela.

AUKUS ALLIANCE

Recently, on completing five years, AUKUS member nations announced plans to develop advanced underwater drone systems and further deepen maritime cooperation.

About

- **AUKUS** is a trilateral strategic security partnership between **Australia, the United Kingdom, and the United States**, launched in **September 2021** amid growing geopolitical competition in the **Indo-Pacific**.
- AUKUS aims to strengthen **defence capabilities, technological integration, and industrial capacity** of all three nations as part of a collective effort to stabilise the Indo-Pacific.
- It seeks to support each member's security and defence interests, building on longstanding bilateral ties.

Two Pillars of AUKUS

Pillar I: Nuclear-Powered Submarines	Pillar II: Advanced Technologies
➲ Focuses on helping Australia acquire conventionally armed, **nuclear-powered submarines (SSNs),** without any transfer of nuclear weapons. ➲ The US will supply **three Virginia-class submarines to Australia,** with an option for two more, making Australia the seventh country to operate nuclear-powered submarines.	➲ Covers cooperation across eight **advanced military capability areas**: artificial intelligence, quantum technologies, cyber capabilities, undersea systems, **hypersonic and counter-hypersonic technologies,** electronic warfare, innovation, and information sharing. ➲ The alliance is also developing advanced **uncrewed undersea vehicles (UUVs)** and underwater drone systems for maritime security.

BLUE HELMETS

The UN Mission in South Sudan (UNMISS) recently awarded the UN Medal of Honour to 565 Indian peacekeepers in recognition of their service and contributions on the ground.

About Blue Helmets

- Blue Helmets is the common term for **military personnel, police officers, and civilian experts** who are deployed as part of **UN peacekeeping missions** in conflict-affected areas around the world.

The Recognition

Indian peacekeepers were commended for a wide range of activities, including:

- Conducting **civilian protection patrols** and fostering **community engagement**
- Running **veterinary camps** and expanding **humanitarian access** in difficult areas
- Delivering **women's self-defence training** and actively working to counter **gender-based violence.**

India's Peacekeeping Footprint

- Among all nations contributing to UN peacekeeping, India stands as the **second-largest provider of uniformed personnel**, ranking just behind Nepal.
- Over **4,200 Indian military and police personnel** are currently deployed, with **155 women** among them, spread across missions in nine regions, namely, Abyei, Central African Republic, Cyprus, Congo, Lebanon, the Middle East, Somalia, South Sudan, and Western Sahara.

INDIAN OCEAN RIM ASSOCIATION (IORA)

Canada's application to become a Dialogue Partner of IORA is currently under consideration at the 28th Committee of Senior Officials (CSO) meeting in New Delhi.

About IORA

- IORA is an **intergovernmental body** bringing together **23 Member States and 12 Dialogue Partners** to foster regional cooperation across the Indian Ocean.
- The idea was first articulated by **South African President Nelson Mandela** during his **1995 visit to India**, highlighting the natural geographic and historical bonds among Indian Ocean states.
- This led to the **Indian Ocean Rim Initiative in 1995** and the formal establishment of **IORA in 1997**, with its secretariat headquartered in **Ebène, Mauritius**.
- **Structure & Functioning:**
  - The **Council of Ministers (COM)** serves as the apex decision-making body, operating on the principle of **consensus**.
  - Other institutional mechanisms include the **Committee of Senior Officials (CSO), TROIKA, and the IORA Secretariat**.
  - The **IORA Charter** provides the foundational framework, grounded in **multilateralism, consensus, and non-intrusive engagement**.
- **Priority Areas:** IORA works across **six priority areas**:
  - Maritime safety and security,
  - Trade and investment facilitation,
  - Fisheries management,
  - Disaster risk management,
  - Academic and scientific cooperation, and
  - Tourism and cultural exchanges (with **Blue Economy** and **Women's Economic Empowerment** as two cross-cutting themes).
- **Membership:** Member states include key Indian Ocean littoral nations such as India, Australia, Indonesia, South Africa, France, Iran, and the UAE.
  - Dialogue Partners include the **US, UK, China, Japan, Russia, and the EU**, reflecting IORA's broad geopolitical reach.
  - IORA also holds **observer status** at the **UNGA, African Union, and UNCTAD**.
- **Significance for India:** IORA directly supports India's **SAGAR vision** (Security and Growth for All in the Region).
  - This is done by advancing maritime security, freedom of navigation and Blue Economy cooperation.
  - It boosts India's overall strategic standing in the **Indian Ocean Region.**

FINANCIAL ACTION TASK FORCE (FATF)

The FATF Plenary has appointed Vivek Aggarwal, Secretary in India's Culture Ministry, as its next Vice-President. This marks the first time India will hold the Vice-Presidency of FATF. He will serve in this role from July 2026 to June 2027.

About FATF

- FATF is the global watchdog against **money laundering and terror financing**.
- It is an **inter-governmental organisation** with **40 members**. India became a member of FATF in **2010**.
- The organisation researches how illicit funds are laundered and how terrorism is financed across borders.
- It sets **global standards** to counter these risks and evaluates whether member countries are acting effectively.
- The **Vice-President** is elected by the Plenary from among its members.
- The Vice-President assists the President in carrying out the organisation's mandate during the **two-year presidential term**.

FATF's Monitoring Lists

- FATF publishes two key monitoring documents **three times a year** — in **February, June, and October**.
- These documents identify countries with weak **Anti-Money Laundering and Counter-Terrorist Financing (AML/CFT)** regimes.

Grey List: (Jurisdictions under Increased Monitoring)	Black List: (High-Risk Jurisdictions subject to a Call for Action)
Countries placed here have **significant but addressable weaknesses** in their AML/CFT frameworks.	Countries here have **serious and strategic failures** in their AML/CFT systems.
They are actively cooperating with FATF to fix these gaps within **agreed timeframes**.	All other nations are urged to apply **enhanced due diligence** when dealing with blacklisted countries.
Grey-listed nations face **increased monitoring** and suffer serious **reputational and economic damage**.	They are also expected to adopt **counter-measures** to protect the international financial system.
This damage often manifests as reduced **foreign investment** and limited access to **international aid**.	Currently, **three countries** are blacklisted — **North Korea, Myanmar, and Iran**
As of June 2026, **22 countries** are on the grey list.	

UN MILITARY GENDER ADVOCATE OF THE YEAR AWARD

Prime Minister congratulated Major Abhilasha Barak on receiving the UN Military Gender Advocate of the Year Award. She is currently serving with the UN Interim Force in Lebanon (UNIFIL).

About the Award

- The **UN Military Gender Advocate of the Year Award** was established in **2016** by the **Office of Military Affairs** under the **Department for Peace Operations**.
- It recognises military peacekeepers who best integrate a **gender perspective** into peacekeeping activities.
- It promotes the principles of **UN Security Council Resolution 1325** on Women, Peace and Security.
- The awardee is selected from candidates nominated by **force commanders and heads of mission** across all peace operations.

UN Peacekeeping Missions

- UN Peacekeeping Missions are deployed to maintain **international peace and security** in conflict-affected regions.
- The first mission was established in **1948** to monitor the armistice between **Israel and its Arab neighbours**, tasked by the **UN Security Council**.
- The three core principles are **consent of the parties, impartiality, and non-use of force** except in self-defence and defence of mandate.
- The **UN Peacekeeping Forces** received the **Nobel Peace Prize in 1988**.

India and UN Peacekeeping

- India is among the **largest troop and police contributing countries** to UN peacekeeping missions globally.
- The **International Day of UN Peacekeepers** is observed every year on **29th May** to honour the service and sacrifice of peacekeepers.

UNIFIL

- **Establishment:**
  - United Nations Interim Force in Lebanon (UNIFIL) is a United Nations Peacekeeping mission operating in Lebanon.
  - It was created by the United Nations Security Council in March 1978 following Israel's first military intervention in Lebanon during the South Lebanon Conflict.
- **Mandate:**
  - Its initial responsibility was to facilitate the withdrawal of Israeli forces and help restore peace and security in the region.
  - Following the 2006 Hezbollah–Israel war, its mandate was broadened to supervise the ceasefire, while supporting the deployment of the Lebanese Armed Forces across southern Lebanon.
- **Composition**
  - The mission comprises around 10,500 peacekeepers contributed by 48 troop-contributing countries.
  - Indonesia provides the largest contingent, followed by Italy, India, Nepal, and China.
- **Funding & Engagement:**
  - UNIFIL operates through a separate annual budget approved by the United Nations General Assembly.
  - Its rules of engagement allow the use of force only for self-defence or when required to fulfil its mandated responsibilities.

PROTECTING INDIAN SEAFARERS IN THE GULF

India recently lodged a strong diplomatic protest with the United States after US naval strikes on merchant vessels in the Persian Gulf killed three Indian seafarers.

India's Global Maritime Workforce

- Approximately **3.5 lakh Indian seafarers** serve on merchant vessels worldwide.
- More than half are actively employed, largely on **foreign-flagged ships**.
- Nearly **one in every six seafarers** on large merchant vessels globally is Indian.
- Around **23,000 Indian seafarers** work in the Gulf region, with the **UAE** accounting for a major share.
- Indian seafarers contribute significantly to India's **remittance inflows**. Their role in **oil and gas transportation** directly affects India's energy security.

International Maritime Law and Its Limitations

- The **IMO**, a UN agency, is the nodal body regulating global shipping across technical, commercial, environmental, and safety dimensions.
- Despite its mandate, the IMO has repeatedly **fallen short in protecting ships and seafarers**.
- **UNCLOS** governs ocean affairs comprehensively, including transit through straits such as **Hormuz**.
- The **US has not signed UNCLOS**, objecting to its treatment of the deep seabed as a global commons.
- **Iran has signed but not ratified** UNCLOS.

Flag of Convenience (FOC) and India's Constraints

- A **Flag of Convenience (FOC)** involves registering a ship in a country different from where its owner is based.
- Ships use FOC registries to benefit from **lower taxes and registration costs**.
- Popular FOC registries include **Panama, Liberia, and the Marshall Islands**.
- Under international law, the **flag state bears primary responsibility** for a vessel's regulation and protection.
- This limits India's ability to **directly intervene** in emergencies involving Indian seafarers on foreign-flagged ships.
- India must rely on **diplomatic channels, consular support, and flag state cooperation** in such situations.

Protective Measures

- **Operation Sankalp** was launched to safeguard merchant shipping in the Gulf through **naval deployment, maritime surveillance, and escort missions**.
- India has successfully rescued hijacked vessels and **neutralised piracy threats off the Somali coast**.
- Indian naval assets have also protected merchant shipping from **Houthi attacks in the Red Sea.**

BRICS INDORE DECLARATION

The BRICS Agriculture Ministers' Meeting was held in Indore, Madhya Pradesh under India's Presidency.

About the Declaration

- The meeting unanimously adopted the **BRICS Indore Declaration**, a joint agricultural charter focused on **farmers, food security, climate, and technology**.
- It is a **farmer-centric framework** aimed at strengthening cooperation on **food security, sustainable agriculture, agricultural trade, innovation, and climate resilience** among BRICS nations.
- The declaration was adopted amid **ongoing geopolitical tensions**, reflecting the importance of multilateral agricultural cooperation.
- BRICS countries collectively represent **nearly half of the world's population**, hold about **42% of global agricultural land**, and contribute nearly **42% of world foodgrain production**.

Four Institutional Initiatives Proposed

- **Centres of Excellence on Agro-Ecology and Regenerative Agriculture:** This initiative creates a platform for **joint research, experience sharing, and capacity building** on natural, organic, and regenerative farming practices. The **Indian Institute of Farming Systems Research, Modipuram** has been given an important coordinating role.
- **BRICS Network on Digital Agriculture:** This network promotes cooperation in **AI, geospatial technologies, digital public infrastructure, and data-driven farming solutions**. **IIT Delhi** will coordinate this network.
- **Global Forum on Farmers' Rights in Seed Systems:** This forum focuses on **protecting farmers' seed rights, indigenous seed diversity, and traditional knowledge**, supporting biodiversity conservation and food security.
- **BRICS AgriN (Agro Inputs, Genetic Resources and Information Network):** This network facilitates exchange of **agricultural inputs, seeds, genetic resources, and technical expertise** among member countries.

About BRICS

- BRICS originally comprised **Brazil, Russia, India, China, and South Africa**.
- The term was coined by economist **Jim O'Neill in 2001**.
- It was formalised at the **1st BRIC Foreign Ministers' meeting** at the margins of **UNGA in New York in 2006**.
- **South Africa** joined in **2010**, after which the grouping became BRICS. New full members include **Egypt, Ethiopia, Iran, Indonesia, and the UAE**. BRICS leaders have met annually at formal summits since **2009**.
- The **New Development Bank (NDB)**, formerly the BRICS Development Bank, supports projects through **loans, guarantees, equity participation, and other financial instruments.**

LEGAL BRAIN DRAIN IN INDIA

The Supreme Court directed the creation of a 'Young Lawyers' Professional Assistance Fund' to support financially struggling young advocates and prevent brain drain in the legal profession.

Supreme Court Directions

- Fund to be created in every State and Union Territory; placed under the jurisdictional High Court or an autonomous body constituted by Union and State governments.
- **Funding sources:** donations by senior advocates, portion of court fees, and share of costs imposed in judicial proceedings.
- **Duration:** Assistance to be proportionately reduced over time, ending after 7 years of practice.

What is Brain Drain?

- Brain drain is emigration of highly skilled and educated individuals to other countries, usually for better opportunities.
- **In India:** engineers, doctors, scientists, IT professionals, and academics migrate to the USA, UK, Canada, and Australia.
- Between 2015 and 2022, 1.3 million Indians left the country, many highly educated. In 2022 alone, 2,25,000 Indians renounced citizenship — the highest number recorded.

Reasons for Brain Drain

- **Economic Factors:** Lower salaries and limited opportunities for highly specialised skills in India.
- **Educational and Professional Opportunities:** Limited world-class research infrastructure; better training, career growth, and global higher education abroad.
- **Quality of Life:** Better healthcare, infrastructure, and living standards abroad.
- **Inadequate R&D Funding:** India's R&D expenditure at only 0.64% of GDP, below the global average of 1.79%.

Concerns

- **Loss of Skilled Human Capital:** Country loses critical talent needed for innovation and economic growth.
- **Slower Economic Development:** Reduces domestic productivity; slows high-tech industries and start-ups.
- **Health and Education Sector:** Shortages of doctors, nurses, and educators due to migration to better-paying countries.

- **Reduced Global Competitiveness:** Consistent outflow makes India less competitive in knowledge-intensive sectors; other countries benefit from India's investment in human capital.

Government Initiatives

Initiative	Purpose / Key Detail
PM Research Fellowship (PMRF, 2018)	Retains top research talent; stipends ₹70,000–80,000/month; grants up to ₹2 lakh/year.
Medical Education Expansion	Medical colleges doubled to 808 (2025–26) from 387 (2013–14); UG seats up 141%, PG seats up 144%.
VAJRA Scheme	Invites overseas scientists and experts to collaborate with Indian institutions.
SWADES	Database of returning skilled citizens; maps skills to vacancies in Indian and foreign companies in India.
Ramanujan Fellowship / INSPIRE Faculty	Attracts young Indian scientists back after overseas experience.
Atal Innovation Mission (AIM)	Fosters innovation at grassroots — supports students, start-ups, and entrepreneurs.
National Quantum Mission	₹6,003.65 crore (2023–31) to advance quantum technologies.
National Supercomputing Mission (2015)	Supercomputing infrastructure for universities, research institutions, and government agencies.

OPERATION AMISTAD

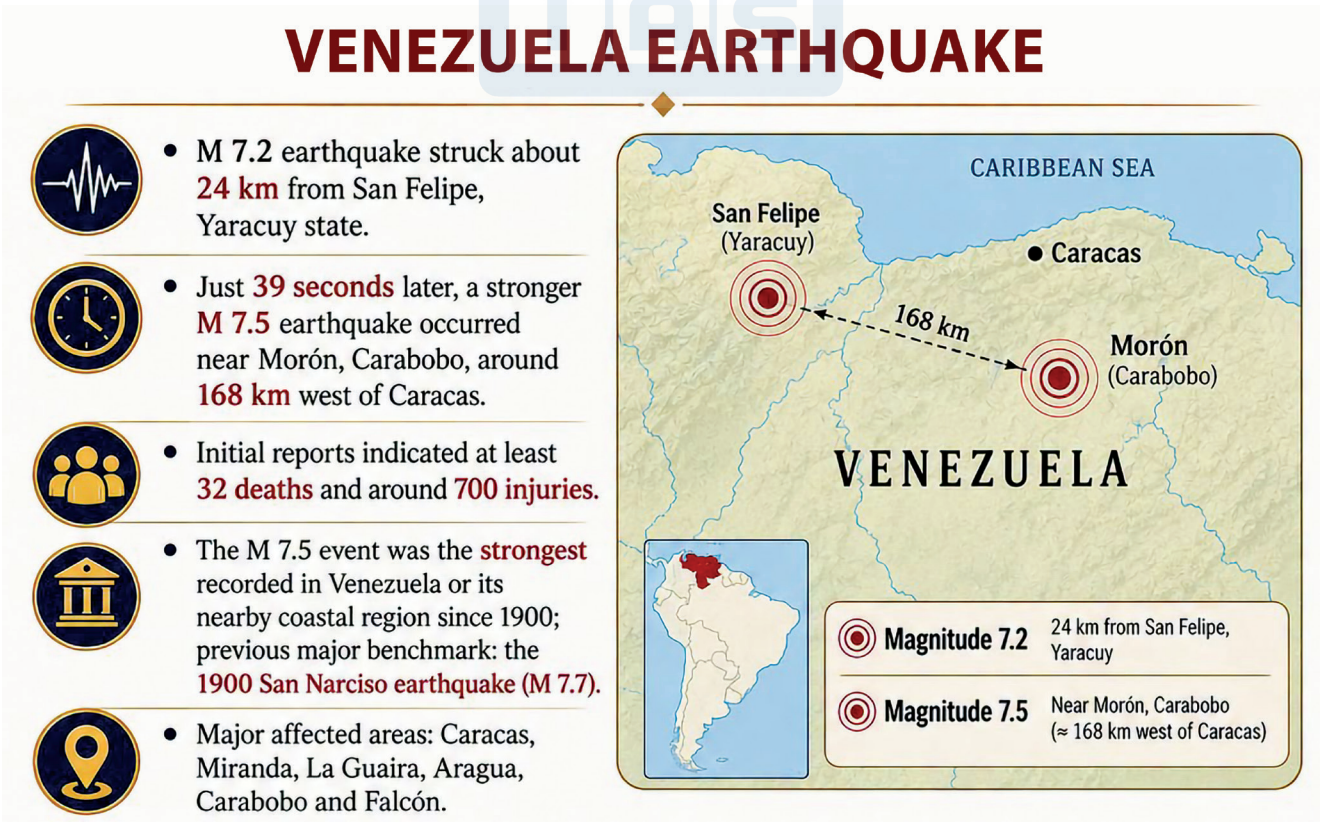
India launched Operation Amistad to provide relief and rescue support after devastating earthquakes in Venezuela.

About

- **Operation Amistad** is India's **Humanitarian Assistance and Disaster Relief (HADR)** mission for Venezuela.
- The term **"Amistad"** means **"Friendship"** in Spanish, reflecting India's solidarity and support.
- The operation highlights India's commitment to the principle of **Vasudhaiva Kutumbakam** (**the world is one family**).
- It is also one of India's **longest-range humanitarian missions**.

Relief Measures

- The **Indian Air Force** deployed **two C-17 Globemaster aircraft** from **Hindon Air Force Station**. The mission carried a **41-member rescue and medical team** from the **Indian Army's 60 Para Field Hospital**.
- The team is equipped for **emergency treatment, trauma care, and life-saving surgeries**. Over **35 tonnes of relief material** and medical supplies were sent.
- The operation included **two BHISHM Cube portable hospitals**, developed under the **Aarogya Maitri initiative**.



3 ECONOMY

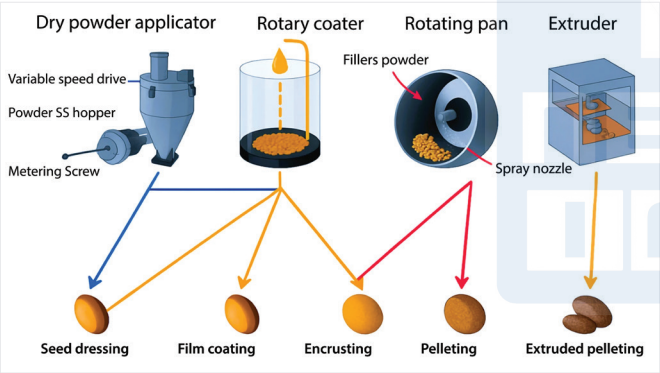
SMART SEED COATING TECHNOLOGY

The Indian Council of Agricultural Research's Indian Institute of Oilseeds Research (ICAR-IIOR), Hyderabad, has developed Smart Seed Coating Technology that improves seed quality.

Working Mechanism

The technology goes beyond traditional single-purpose seed treatments by providing a multifunctional protective shield around the seed

- **Layered Encapsulation:** Seeds are coated with biodegradable biopolymers that house primary nutrients, micronutrients, beneficial microorganisms, and plant growth-promoting compounds.
- **Controlled Release:** Once planted, soil moisture activates the shell and triggers a gradual, targeted release of these agricultural inputs directly into the root zone



About

- The **Smart Seed Coating Technology** utilizes biodegradable biopolymeric materials to create a **multifunctional protective layer** around seeds. The coating acts as a **carrier system for beneficial microorganisms,** nutrients, micronutrients, crop protection agents, and plant growth-promoting compounds, delivering them directly at the seed-soil interface.
- This protective microenvironment **promotes rapid germination, vigorous seedling growth, enhanced root development, and improved tolerance** to environmental stresses during the critical crop establishment phase.
- The innovation is particularly valuable for rainfed agriculture, which accounts for a significant share of India's cultivated area and remains highly vulnerable to delayed monsoons.

Significance

- **Climate Resilience:** The coating safeguards emerging seedlings against extreme climate stresses, such as erratic monsoons, heat spikes, and drought.
- **Resource Optimization:** It drastically reduces the need for broad-spectrum chemical spraying because crop protection agents are applied directly where they are most needed.

SEAFOOD EXPORTS

India's seafood exports reached an all-time high in both volume and value during the financial year 2025-26.

About

- With shipments touching **19.72 lakh metric tonnes (MT) worth USD 8.46 billion,** despite challenging global market conditions.
- **Nodal Agency:** Exports are monitored and promoted by the ***Marine Products Export Development Authority (MPEDA)***, functioning under the Ministry of Commerce and Industry.
- **Frozen shrimp** continued to dominate India's seafood exports, accounting for **nearly two-thirds of total export earnings.**
  - **The United States** remained the largest importer of Indian frozen shrimp, followed by China.
  - **Other major destinations** included the European Union, Southeast Asia, Japan, the Middle East, and several other countries.
- **Frozen fish emerged as the second-largest export category,** while dried seafood products ranked third.
  - **Dried seafood exports** witnessed particularly strong growth, registering a 78.05% increase in rupee value terms.
- **Top export destinations include** the United States, followed by China and the European Union (EU).
- **Visakhapatnam, Jawaharlal Nehru Port Trust (JNPT), and Kochi** emerged as the **top three ports** handling seafood export cargo during FY 2025-26.

Government Initiatives

- **PMMSY:** A flagship scheme to bring about the Blue Revolution through sustainable and responsible development of the fisheries sector.
- **Infrastructure:** The Fisheries and Aquaculture Infrastructure Development Fund (FIDF) aims to bridge infrastructural gaps.
- **Quality Control:** MPEDA has established strict quality control labs and certification processes to meet global SPS standards

Challenges :

- **High Concentration Risk:** Over-reliance on a single product (shrimp) and a handful of key markets.
- **Trade Barriers:** Exporters continuously face Anti-Dumping Duties (AD/CVD) in major markets like the US.

- **Non-Tariff Barriers:** Rejections due to stringent Sanitary and Phytosanitary (SPS) measures, primarily concerning antibiotic residues.
- **Climate Change:** Unpredictable weather patterns affecting aquaculture yields and coastal ecosystems.

INDIA's COTTON MISSION

In 2026, the Union Cabinet approved the Mission for Cotton Productivity with an outlay of Rs 5,659 crore, to run from 2026-27 to 2030-31.

About

- The intent of the Mission for Cotton Productivity is **to raise lint productivity from 441 kg per hectare (in triennium ending (TE) 2025-26) to 755 kg/ha by 2031.**
- Experts argue that India's Mission for Cotton Productivity may struggle to revive yields and exports **unless next-generation genetic technologies and science-led reforms are adopted.**

Introduction of BT Cotton in India

- In 2002, the government approved the **commercial cultivation of Bt cotton** as cleared by the **Genetic Engineering Appraisal Committee (GEAC).**
  - The **first Bt hybrids** incorporating the **cry1Ac gene** were approved to resist the **bollworm complex.**
  - By 2006, GEAC had approved **Bollgard II,** a second-generation hybrid with two stacked genes.

Bt Cotton

- **Bt cotton** has two alien genes from the **soil bacterium Bacillus thuringiensis (Bt)** that allows the crop to develop a protein toxic to the common pest **pink bollworm.**

- Till now, it is the **only Genetically Modified (GM) crop that is allowed in India.**

- **Impact on Cotton production:**
  - It rose from 13.6 million bales in 2002-03 to 39.8 million bales in 2013-14, a **193% increase.**
  - Annual output grew at 10%, and area expanded by 56%, from 7.6 million hectares (mha) to 11.9 mha.
  - India became the largest producer and second-largest exporter of cotton.
- **Further Hybrids:**
  - After Bollgard II, India developed the next generation: **Bollgard II with Roundup Ready Flex, and Bollgard III**.
  - These variants incorporate three stacked genes with herbicide-tolerant traits designed to address evolving pest resistance and rising weed-management costs. **But they were not released.**
- **Decline in Production:** Since 2014-15, **production has declined at an average annual rate of 2%.** India went from a **net cotton exporter to importing 4 million bales in 2025-26.**

Reasons for Decline in Cotton Production and Related concerns

- **Regulatory hurdles for GM technology:** New-generation cotton technologies were not commercialized due to regulatory uncertainties and delays.
- **Price controls on cotton seeds:** Government-imposed seed price caps and reduction of trait fees reduced incentives for private-sector R&D and innovation.
- **Declining productivity:** Cotton yields have stagnated due to pest resistance, climate stress, and lack of access to advanced technologies.
- **Increasing imports:** India has shifted from being a major exporter to importing cotton because domestic production growth has slowed.

Way Ahead

- **Develop Climate-Resilient Cotton Varieties:** Invest in research for drought-tolerant, pest-resistant, and high-yielding cotton varieties suited to changing climatic conditions.
- **Strengthen Public-Private R&D Partnerships:** Encourage collaboration between research institutions, universities, and the private sector to accelerate the development and dissemination of advanced technologies.
- **Enhance Seed Quality and Availability:** Ensure timely access to certified, high-quality seeds through robust seed production and distribution systems.
- **Strengthen Extension Services:** Improve last-mile delivery of scientific knowledge, best practices, and weather advisories to cotton farmers.
- **Improve Cotton Value Chains:** Modernise ginning, processing, storage, and marketing infrastructure to enhance cotton quality and global competitiveness.
- **Implement the Cotton Productivity Mission Effectively:** Focus on outcome-based implementation, regular monitoring, and convergence with existing agricultural schemes to achieve productivity and income gains.

INDEX OF SERVICES PRODUCTION

In July 2026, MoSPI will introduce the Index of Services Production (ISP), marking a new measure of services sector activity.

About

- The **Index of Services Production (ISP)** is a **monthly high-frequency indicator** developed by the **Ministry of Statistics and Programme Implementation (MoSPI)** to measure short-term changes in the **real output of India's formal services sector**.
- It is designed to complement the **Index of Industrial Production (IIP)** for the services sector.
- It is **developed by** a Technical Advisory Committee (TAC) chaired by **Debjani Ghosh**.

Objectives of ISP

- Economic trends that would complement an IIP on the short – term movement of an economy; and
- High frequency information on the performance of the services sector to strengthen the existing statistical framework to support analytical and policy framework.

Indicator

- **Quantity-based indicators -** Quantity based indicators directly measure the output in physical quantities terms such as passenger-kilometers travelled in case of Air Transport. In ISP, indices of only two sub – sectors, namely, Air Transport and Railways are based on quantity output.
- **Value-based indicators -**Indicators where output is measured in value terms such as revenue, sales or outward supplies are the value-based indicators

Significance

- India's services sector accounts for **over 50% of the Gross Value Added (GVA)** but lacked a monthly indicator to monitor real growth.
- ISP will provide timely data for economic monitoring, policy formulation, and forecasting.

Key Features

- **Coverage:** It covers only the **formal services sector** and excludes the informal sector and non-market government services.
- **Base Year:** 2024–25.
- **Methodology:** Uses a **fixed-weight Laspeyres volume index** with **GVA-based weights**.
- **Measures Real Growth:** Converts nominal service output into real output using price deflators such as **CPI** and **WPI**.

Major Data Sources

- **GST data:** Trade, transport, telecom, accommodation, real estate, professional services, etc.
- **Administrative data:** Railways, air transport, banking etc.
- **ASISSE:** Private health and education services.

Output Measurement

- Most sectors use **turnover or GST-based value indicators** adjusted for inflation.
- **Railways** and **air transport** are measured using **quantity-based indicators** such as passenger-kilometres.

Excluded Sectors

- Public administration and defence
- Government-run health and education
- Personal services
- Gambling and other non-market activities
- ***Note:*** In the absence of a comprehensive **Service Producer Price Index (SPPI)**, the ISP will primarily use **CPI (Non-Food)** as a proxy deflator to estimate real growth in the services sector.

NAVACHAR MANTRA INITIATIVE

Navachar Mantra is a national initiative launched by the Union Minister at IIT Delhi.

About

- The **Navachar Mantra Initiative** is a flagship national program launched by the Ministry of Skill Development and Entrepreneurship (MSDE).
- **Implementation:** It is a joint programme of National Institute for Entrepreneurship and Small Business Development (NIESBUD) and Foundation for Innovation and Technology Transfer (FITT), IIT Delhi.
- It is strategically designed to identify, mentor, and scale grassroots innovations originating from Tier-2, Tier-3, and rural India.
- For bridging the gap between local creators and the national entrepreneurial ecosystem.

Key Features

- **Target Demographic:** Open to Indian citizens aged 18 to 55 residing in aspirational districts and underserved rural or semi-urban geographies.
- **Eligibility:** Flexible criteria allow individuals with ideas in the validation or early prototype stages to apply; a registered corporate entity or finished market product is not required.
- **Focus Sectors:** Prioritizes high-impact verticals including Agritech, HealthTech & Wellness, EdTech, Climate Action, Rural Commerce, and MSME Enablement.
- **Support Ecosystem:** Selected participants enter a structured 1-year incubation cycle providing mentorship, regulatory compliance support, IP structuring, and fundraising roadmaps.

DRUNIX PLATFORM

The National Payments Corporation of India (NPCI) rolled out Drunix, an open-source blockchain platform, to help companies build and scale tokenisation platforms, digital asset ecosystems, multi-organisation networks.

About

- Drunix is a high-performance **distributed ledger platform** designed for enterprise-scale and public infrastructure adoption.
- Drunix is built as an enhanced fork of **Hyperledger Fabric.**
  - Hyperledger Fabric is an open-source enterprise blockchain framework, developed under the umbrella of the **Linux Foundation** and widely used for permissioned blockchain applications.

Tokenization

- Tokenization is the process of **converting ownership rights or assets** into digital tokens on a blockchain.
- These assets include **financial securities, real estate, commodities, digital currencies and identity credentials.**

Features

- **Scalability & Security:** Re-engineered from Hyperledger Fabric, Drunix improves transaction throughput and operational efficiency without compromising on privacy.
- **Real-World Tokenisation:** It is designed to assist businesses and government agencies in accelerating blockchain readiness, particularly for securely tokenizing real-world assets
- **Interoperability:** It allows for the rapid deployment of permissioned blockchain networks that can integrate seamlessly with India's broader Digital Public Infrastructure (DPI)

KHURASANI IMLI

The fruit of Mandu's Baobab tree, known locally as Khurasani Imli, has secured a Geographical Indication (GI) tag.

About Khurasani Imli

- Khurasani Imli is the fruit of the Baobab tree (Adansonia digitata), a species native to **Africa and Madagascar.**
  - It is popularly known as the "Tree of Life" because of its multiple uses and exceptional resilience.
  - In India, baobabs occur in the **semi-arid regions of central India** and **parts of the Western Ghats.**
- **Mandu in Madhya Pradesh** is one of the few places in India where Baobab trees are found in large numbers.
- Historical accounts suggest that the seeds were brought to **Mandu by Afghan rulers or Arab traders** around the 14th–15th century.
- The tree is known for its **distinctive bottle-shaped trunk** and its ability to **store large quantities of water.**
- The fruit is rich in **Vitamin C, antioxidants,** and has **traditional medicinal uses.**

Health and Medicinal Benefits

- **Immune Support:**
  - The fruit is highly concentrated with Vitamin C, helping to strengthen your immune system and protect against infections.
  - It is packed with antioxidants, and essential minerals, offering traditional remedies for digestive ailments, fatigue, and diabetes.
- **Blood Sugar Regulation:** Tribal communities traditionally utilize the fruit pulp, juice, and dried bark as a natural remedy to help manage diabetes.
- **Digestive Relief:** It acts as a natural remedy for common digestive complaints, with tribal healers using it to soothe stomach issues.
- **Energy and Fatigue:** It contains essential minerals and antioxidants that tribal communities have long relied on to combat fatigue and fever.

ZERO RISK WEIGHT FOR ECLGS 5.0 LOANS

The Reserve Bank of India (RBI) has permitted banks and other lenders to assign a zero-risk weight to a significant portion of loans covered under the Emergency Credit Line Guarantee Scheme (ECLGS) 5.0.

What is Risk Weight?

- A risk weight is a **percentage value assigned to different bank assets or loans** to reflect their level of credit risk.
- Regulators use these percentages to determine exactly **how much core capital a bank must set aside** as a buffer against potential defaults.

RBI's New Provision under ECLGS 5.0

- Exposures covered under ECLGS 5.0 will attract a 0% risk weight for up to **75% of the guaranteed portion of the loan.**
- This benefit applies where the guarantee settlement is expected within **30 days of invocation.**
- The remaining exposure will continue to be assigned **risk weights** according to existing prudential norms.

Emergency Credit Line Guarantee Scheme (ECLGS) 5.0

- **ECLGS 5.0** is the latest version of the Emergency Credit Line Guarantee Scheme, originally introduced during the COVID-19 pandemic.
  - The scheme aims to provide **additional working capital support** to businesses facing temporary financial stress.
  - The scheme launched in **2026** addresses financial stress faced by MSMEs and the aviation sector due to disruptions arising from the ongoing West Asia conflict.
- It allows eligible borrowers to obtain additional loans of up to **20%** of their existing working capital limits.

Credit Guarantee Structure:

- **Guarantee coverage:** For MSMEs, the government provides a **100% guarantee** on the additional credit extended by banks. For non-MSME borrowers as well as the airline sector, the guarantee coverage is **90%.**
  - Guarantees are provided through the **National Credit Guarantee Trustee Company Limited (NCGTC).**
- **Tenor of Loan:**
  - **For MSMEs/Non MSMEs (except Airline sector): 5 years** from the date of first disbursement including a moratorium of 1 year.
  - **For the airline sector: 7 years** from the date of first disbursement including a moratorium of 2 years.
- **Tenure of Guarantee Cover:** Maximum period of guarantee cover shall be co-terminus with the tenor of the loan.

TReDS PLATFORM

The Reserve Bank of India (RBI) has introduced the TReDS Directions, 2026, aimed at easing MSME onboarding and improving access to receivables financing.

About TReDS

- **Trade Receivables Discounting System (TReDS)** is an online platform which helps small businesses auction their invoices or trade receivables to banks and other financial institutions to unlock working capital.
- The platform **facilitates financing against receivables** due from corporate buyers, government departments, and public sector undertakings (PSUs).

About the RBIs Directions

- RBI fixed a minimum net worth of **₹25 crore** and should get it certified by a **statutory auditor** to provide discounting services.
- Existing entities providing the service have been given a deadline of March 31 2028 to comply with the networth criterion.

About onboarding process

- The onboarding process for MSMEs involves registering the business on the official Udyam Registration portal using your Aadhaar and PAN.
- Once certified, you can seamlessly onboard onto government e-commerce initiatives like the MSME TEAM Portal for ONDC or access fast-tracked invoice discounting via TReDS Platforms.

MSME Registration

- **Udyam Registration:** This is the primary requirement. You can register for free on the Udyam Registration Portal by inputting your Aadhaar or authorized signatory details and PAN.
- **Benefits:** Once registered, your enterprise can easily access government procurement benefits, priority sector lending, and CGTMSE credit guarantees

BHARATI PROGRAMME

The Agricultural and Processed Food Products Export Development Authority (APEDA), under the Ministry of Commerce & Industry, has successfully concluded the first cohort of BHARATI (Bharat's Hub for Agritech, Resilience, Advancement and Incubation for Export Innovation).

About

- BHARATI stands for Bharat's Hub for Agritech, Resilience, Advancement and Incubation for Export Innovation
- It is APEDA's flagship export acceleration programme
- It aimed at helping Indian agri-food startups become globally competitive exporters.

Objectives:

- Promote an **'export-first'** approach among agri-food startups.
- Build a pipeline of export-ready enterprises to support India's target of **USD 50 billion in APEDA-scheduled exports by 2030**.
- Address challenges related to product development, quality standards, sustainability, logistics, and export compliance.

Who Can Apply?

- Agri-food startups
- APEDA-registered exporters
- Farmer Producer Companies (FPCs)
- Startups and researchers working on **Sanitary and Phytosanitary (SPS)** solutions

Startup Eligibility

An entity must:

- Be registered as a **Private Limited Company, LLP, or Partnership Firm**.
- Be **not more than 5 years old**. Have an annual turnover **not exceeding ₹10 crore** in any financial year.

Key Features

- Selected **100 startups** from over **700 applications**.
- Offers a **120-hour export acceleration programme** covering export readiness, branding, regulatory compliance, business scaling, and investor engagement.
- Provides international market exposure, with top-performing startups participating in **Gulfood 2026, Dubai**.
- Encourages participation across age groups, with entrepreneurs ranging from **17 to 75 years**.
- Aligned with the Government of India's vision of an Atmanirbhar Bharat, Vocal for Local, Digital India and Start-Up India, the BHARATI initiative will create globally competitive agri-products, fuel demand-driven backward integration for food innovation and boost global demand for Indian food, beverage and processed food products and services.

COAL EXCHANGE RULES, 2026

The Ministry of Coal has notified the Coal Exchange Rules, 2026, paving the way for the establishment of Coal Exchanges in the country to enable transparent and market-driven coal trading.

About

- A Coal Exchange is an electronic marketplace where **coal producers, consumers, traders, and other participants can buy and sell coal** through transparent trading mechanisms.
- It facilitates **efficient price discovery** based on market demand and supply conditions.

Key Features of the Coal Exchange Rules, 2026

- **Market-Based Trading:** The framework shifts coal marketing from the traditional one-to-many model (producer to multiple consumers) to a **many-to-many trading model.**
- **Price Discovery:** Coal prices will be determined through **market forces** rather than administrative allocations.
- **Regulatory Oversight:** The **Coal Controller Organisation (CCO)** is the nodal authority tasked with registering and overseeing these exchanges.

- **Exchange Registration:** Entities operating an exchange must be incorporated as a company in India with a minimum net worth of ₹50 crore. Registrations are granted for 25 years.
- **Transition Timeline:** Pre-existing electronic coal trading platforms must transition and register as a Coal Exchange within **six months** of the first registered exchange's commencement.
- **Software Audits:** To maintain fair market algorithms, the platform's price-discovery software must be audited by a certified auditor before operations, and re-audited every two years.
- **Demutualization:** The ownership and management do **not hold any trading rights** in the exchange.

Coal Sector in India

- India is the world's **second-largest producer and consumer of coal**. India has the **fifth-largest coal reserves** globally.
- Coal accounts for around 55% of India's primary commercial energy requirement and about **70% of electricity generation.**
- Major **coal-producing regions** are concentrated in states such as **Odisha, Jharkhand, Chhattisgarh, Madhya Pradesh, and West Bengal.**

ACUTE HUNGER IN 13 HOTSPOTS

United Nations' food agencies have warned that acute hunger is expected to worsen across 13 global hotspots in the coming months due to conflict, climate shocks and funding shortages.

About

- Around **266 million** people are already facing high levels of acute food insecurity **according to** a joint report **by The Food and Agriculture Organisation (FAO) and World Food Programme.**
- **Sudan, South Sudan, Yemen and Palestine** remain the countries of greatest concern, while **Nigeria and Somalia** have been added to the high-risk list as famine threats grow.
- The report noted that funding for food assistance has fallen by nearly **60 per cent since 2022**, even as humanitarian needs continue to rise.
- The UN agencies also warned that spillover effects from the **Middle East conflict and an Ebola outbreak in eastern Congo** are further disrupting livelihoods and aid access.

Food Security

- Food security exists when people have access to **enough safe and nutritious food for normal growth and development**, and an active and healthy life.
- By contrast, **food insecurity** refers to when the aforementioned conditions don't exist. **Acute food insecurity** is any type that threatens people's lives or livelihoods.
- The global standard for measuring acute food insecurity is the **Integrated Food Security Phase Classification, or IPC for short.** It describes **five levels,** from "no/minimal food insecurity" (IPC Phase 1) to **"catastrophe" or "famine"** (IPC Phase 5).

Types of Hunger

- **Acute Hunger (Famine):**
  - The most severe and life-threatening form of hunger. It happens over a specific, definable period and occurs when people are entirely unable to consume enough calories to survive.
  - **Causes:** Frequently triggered by sudden crises like extreme droughts, natural disasters, and wars
- **Chronic Hunger:**
  - Long-term undernourishment where the body absorbs fewer calories than it needs to lead a normal, healthy, and active life. This is the most widespread form of hunger globally.
  - **Causes:** Usually deeply intertwined with extreme poverty and chronic inequality
- **Hidden Hunger (Micronutrient Deficiency):** A chronic lack of essential vitamins and minerals (such as iron, iodine, zinc, or Vitamin A) even if a person consumes enough daily calories. It is a form of malnutrition that leads to serious developmental and immune-system disorders, especially in children
  - **Wasting:** When an individual (typically a child) is dangerously too thin for their height, signaling acute and recent extreme food deprivation or disease.
  - **Stunting:** When a child is too short for their age, indicating prolonged or recurrent undernutrition often compounded by poor health, sanitation, and lack of micronutrient.

ENERGY TRANSITION INDEX (ETI) 2026

The ETI 2026 highlights that the global energy transition has stalled despite record investments of $3.3 trillion in 2025, due to rising geopolitical risks and infrastructure constraints.

About ETI

- The Energy Transition Index is an annual index published by the World Economic Forum that measures how effectively countries are transitioning toward secure, sustainable, equitable, and affordable energy systems.
- **Evaluation Criteria:** The index is based on two broad dimensions:
  - **System Performance:** Energy security, sustainability, and equity.
  - **Transition Readiness:** Policies, regulations, investment, infrastructure, innovation, education, and institutional support.
- **Significance:** It helps governments identify strengths and weaknesses in their energy transition efforts and guides policy reforms.

Major Findings of ETI 2026

- **Sweden, Finland and Denmark** retained their top three positions globally.

- India advanced two places to rank **70th**.
- **Global electricity demand grew by 3%** driven by electrification, cooling, digital infrastructure and AI, and was seen as emerging as a defining constraint on the transition.
- **Emerging economies accounted for around 80%** of demand growth but continued to face higher financing costs and infrastructure gaps
- **The WEF identifies three priorities:** embedding resilience and security into energy system design, accelerating grid and infrastructure development, and creating stable policy environments that attract long-term investment, particularly in emerging markets.

Other reports by WEF

- **Global Risks Report:** Assesses systemic, environmental, geopolitical, and economic risks over a short and long-term horizon.
- **Global Gender Gap Report:** Benchmarks gender parity across political, economic, educational, and health dimensions.
- **Global Competitiveness Report:** Measures national capabilities and microeconomic and macroeconomic foundations of national competitiveness.
- **Future of Jobs Report:** Evaluates the impact of technology, automation, and AI on labor markets and skills development.
- **Energy Transition Index:** Ranks countries on their energy system performance, focusing on security, environmental sustainability, and economic development.
- **Travel and Tourism Development Report:** Analyzes the factors and policies that enable the sustainable and resilient development of the Travel and Tourism sector.
- **Global Information Technology Report:** Tracks the drivers of information and communication technology (ICT) and the digital economy.

HIGHER INTEREST RATES TO NRIS/PIOs FOREX

As per the directions of RBI interest rates on NRE/NRO deposits will not be higher than those offered by the bank on comparable domestic rupee term deposits.

About

- **FCNR(B) and NRE Deposits:** NRIs and PIOs can hold fixed deposits in designated foreign currencies through Foreign Currency Non-Resident (Banks) accounts or Non-Resident External accounts, which helps India directly inject foreign liquidity into its reserves.
- It has decided to **temporarily withdraw interest rate ceiling** on fresh **Foreign Currency Non-Resident- Bank [FCNR(B)] deposits** of 3-5 year tenors and restriction on **interest rates on Non-Resident External (NRE) deposits** of three year and above tenors **till September 30, 2026 to boost forex reserves.**
- **Significance:**
  - This move will help Non Resident Indians (NRIs) and People of Indian Origin (PIOs) to avail **higher interest rates from India banks to park their funds.**
  - It will help **India to mobilise dollars to swell its foreign exchange reserves** that may lend support to a depreciating rupee and help meet balance of payment obligations.

Foreign Currency Non-Resident Bank

- A **Foreign Currency Non-Resident Bank, or FCNR (B) account**, means the deposit is held in a foreign denomination. This secures it against currency fluctuations.
- **Only NRIs/PIOs/OCIs** can open an FCNR (B) account and the NRI status should be as per Foreign Exchange Management Act (FEMA) rules.
- Deposits are maintained in **foreign currencies such as USD, GBP, EUR, JPY, AUD, CAD, etc.**
- It can only be a **term deposit** with maturities r**anging from 1 year to 5 years.**
- They are **intended to attract foreign currency deposits from NRIs,** helping India strengthen its foreign exchange reserves while providing NRIs protection against currency fluctuations.

AI-BASED SMART WAREHOUSING SYSTEM

The Ministry of Consumer Affairs, Food and Public Distribution launched the Smart Warehousing System for foodgrain storage in New Delhi.

About

- It is the world's largest deployment of Artificial Intelligence (AI) and Internet of Things (IoT) technologies in public-sector foodgrain warehousing.
- **The platform integrates:**
  - FASTag and ANPR-based gate automation.
  - Geo-tagged smart locks for intelligent access control.
  - AI-enabled bag counting, face recognition, and object detection.
  - IoT-based monitoring of environmental parameters.
  - AI-powered surveillance for fire, smoke, and rodent detection.
  - Supports ERP integration, automated record generation, and advanced analytics for warehouse management.

Importance of Foodgrain Storage

- Reduces post-harvest losses through scientific storage.
- Maintains buffer stocks for food security and distribution under the National Food Security Act (NFSA).
- Prevents distress sales by enabling farmers to store produce and sell at better prices.
- Supports price stabilisation through strategic foodgrain reserves.
- Preserves grain quality by controlling moisture and pest infestation.

Foodgrain Storage Systems in India

- **Centralized Storage:** Managed mainly by the Food Corporation of India (FCI) and State Government Agencies (SGAs).
- **Decentralized Storage:** Through rural godowns, Primary Agricultural Credit Societies (PACS), and on-farm storage.
- **Cold Storage:** For fruits, vegetables, dairy products, and meat.

Centralized Storage

- FCI or SGAs procure foodgrains for the Central Pool.
- Foodgrains procured by SGAs are transferred to FCI, which reimburses procurement costs.
- FCI stores and distributes foodgrains through the PDS.
- As of July 2025, FCI and State agencies had 917.83 Lakh Metric Tonnes (LMT) of covered and CAP storage capacity.
- Covered storage consists of roofed warehouses and silos, while Cover and Plinth (CAP) storage uses elevated plinths with wooden dunnage.

Government Initiatives

- **Agriculture Infrastructure Fund (AIF):** Farm-gate storage and logistics.
- **Agricultural Marketing Infrastructure (AMI) under ISAM:** Financial support for godowns and warehouses.
- **Pradhan Mantri Kisan SAMPADA Yojana (PMKSY):** Modern food processing and supply-chain infrastructure.
- **Private Entrepreneurs Guarantee (PEG) Scheme (2008):** Expands covered storage through private players, CWC, and SWCs.
- **Digital initiatives:** Depot Darpan, Anna Chakra, and SMART PDS improve storage, monitoring, and distribution

BILATERAL INVESTMENT TREATY MODEL

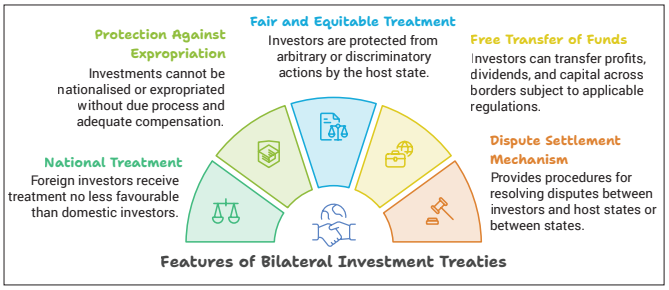
The Government of India is revising its 2016 Model Bilateral Investment Treaty (BIT) to make it more investor-friendly while safeguarding India's regulatory sovereignty and legal system.

About BIT

- A BIT is an **agreement between two countries that promotes and protects investments** made by investors of one country in the other.
- It provides legal safeguards such as protection against expropriation, fair treatment, and dispute resolution mechanisms.
- BITs aim to improve investor confidence and Facilitate FDI.

India's Progress on BITs

- **Evolution:** India signed its first **Model BIT in 1993,** which was amended in **2003.**
  - Following several international arbitration disputes, India adopted a **new Model BIT in December 2015,** which became operational in **2016.**
- **Recent Developments:** India has signed BITs or investment agreements with countries such as; Belarus, Kyrgyz Republic, United Arab Emirates, Uzbekistan and Brazil (through an Investment Cooperation and Facilitation Treaty).
- **In Budget 2025-26,** the Government announced a review of the BIT framework to make it more investor-friendly while safeguarding national interests.



Features of Bilateral Investment Treaties

Key Features of the Proposed New BIT Model

- **Two-Year Local Remedies Requirement:**
  - Foreign investors will be required to pursue remedies within India's domestic legal system for **at least two years** before initiating international arbitration.
  - For certain partner countries, a shorter **one-year cooling-off period** may also be considered during negotiations.
- **No Most-Favoured Nation (MFN) Clause:** The revised model is likely to exclude the Most-Favoured Nation (MFN) clause.
  - MFN clauses **allow investors to claim more favourable treatment** available under India's treaties with other countries. The government believes removing the clause will **reduce treaty-shopping** and legal uncertainties.
- **Taxation Matters Excluded:** Tax-related disputes will remain outside the scope of investment treaties.
  - This approach is influenced by past arbitration cases involving foreign companies such as **Vodafone Group and Cairn Energy.**
  - The government maintains that **taxation is a sovereign policy matter** and should **not be subject to investor-state arbitration.**

Concerns

- **Investor Concerns:** Mandatory exhaustion of local remedies before international arbitration may increase costs and delays. **Lengthy judicial processes** can discourage foreign investors.
  - **The absence of a Most-Favoured Nation (MFN)** clause may reduce investor protections available under other treaties.
- **India's Concerns:**
  - **Excessive investor rights** may constrain legitimate public policy measures.
  - **Investor-State Dispute Settlement (ISDS)** mechanisms can challenge sovereign regulatory actions.
  - **International arbitration awards** may impose significant financial liabilities on governments.

4 ENVIRONMENT

THE ARAVALLIS PREVENTS DESERTIFICATION

A recent dust storm in Rajasthan's regions highlighted the crucial ecological role of the Aravalli Range in shielding northern India from dust storms.

Desertification

Dust Storms in Northwestern India

- Dust storms frequently occur in northwestern India during the pre-monsoon months of April to June.
- **Intense heating of the land surface** creates dry and unstable atmospheric conditions that **favor the formation of dust storms.**
  - Strong **south-westerly and westerly winds** transport large quantities of dust from the Thar Desert and adjoining regions towards northern India.

How Do the Aravallis Protect Northern India?

- The Aravalli Range, stretching over approximately **692 kilometres (430 miles)** in a northeastern direction, traverses the Indian states of **Gujarat, Rajasthan, and Haryana** before culminating in **Delhi**, is the oldest mountain range in India.
  - **Rajasthan** accounts for nearly **two-thirds** of the mountain range.
- The Aravallis support water-recharge systems and are the source of rivers such as the **Sabarmati and Luni.**
- The region is **rich in minerals** including sandstone, limestone, marble, granite, lead, zinc, copper, gold, and tungsten.

Significance

- Dust-laden winds lose their speed when they encounter the Aravalli hills, causing sand and dust particles to settle on the western slopes.
- The presence of forests and vegetation further reduces the movement of dust by trapping airborne particles.
- The range helps prevent the eastward expansion of desert conditions and protects agricultural and urban regions from excessive dust deposition.

Causes of Degradation

- **Extensive mining** of granite, red silica, marble, and other minerals has damaged hills and natural landscapes across the range.
- **Removal of forests and natural vegetation** has reduced the capacity of the Aravallis to trap dust and stabilize soils.
- **Conversion of forest and grazing lands** into settlements and agricultural areas has weakened ecological resilience.

Aravalli Green Wall Initiative

- In 2025, the Union Government launched the Aravalli 'Green Wall' project.
- The initiative aims to expand green cover in a **five-kilometre buffer** around the Aravalli range.
- It covers **29 districts** across Gujarat, Rajasthan, Haryana, and Delhi.
- The project seeks to restore **26 million hectares** of degraded land by 2030 and strengthen ecological resilience against desertification.

BANNI GRASSLANDS

The proposed solar project by NTPC Renewable Energy Limited in Gujarat's Banni grasslands has raised concerns over its impact on local communities, biodiversity, and wetlands.

About

- The **Banni grasslands** in **Kachchh** are among Asia's largest natural grasslands and support pastoral communities such as the **Fakirani Jat.**
- contains over 70 species of nutritious grasses
- supports grazing of **camels, buffaloes, sheep, and goats.**
- Nearby **Chhari Dhand Wetland Conservation Reserve** is a **Ramsar site** important for migratory birds and local biodiversity.

Significance

- **Ecological and Climate Importance:**
  - **Carbon Sequestration:** Store roughly 27 million tonnes of carbon in its soil, making it a surprisingly effective carbon sink.
  - **Biodiversity Hotspot:** It harbors 40+ species of drought-tolerant grasses, hundreds of resident and migratory bird species, and diverse wildlife (including the Caracal, Desert Fox, and Nilgai).
  - **Wetlands:** Banni encompasses the Chhari Dhand Conservation Reserve, a Ramsar wetland site vital to thousands of migratory birds.
  - **Wildlife Reintroduction:** Apotential reintroduction site for the Cheetah identified by the Wildlife Institute of India (WII).
- **Pastoralist Livelihoods:**
  - **Maldharis & Ethnic Groups:** The reserve is home to 22 semi-nomadic and pastoral communities (such as the Maldharis and Fakirani Jat), whose traditional grazing and animal husbandry practices since centuries.

- **Banni Buffalo:** The grasslands sustain the Banni Buffalo, a distinct, highly resilient breed known for surviving harsh saline environments and yielding high-quality milk.
- **Swimming Camels:** It is one of the habitats of the unique Kharai camel, which is adapted to swim in the sea and graze on mangrove islands.

➲ **Current Ecological Challenges:**

- **Invasive Species:** The introduction of *Prosopis juliflora* (a colonial-era shrub) to stop desertification has aggressively taken over native grasses, degrading the pastureland and putting the livelihoods of local pastoralists at risk.
- **Industrial Threat:** The area faces ongoing tensions as pastoralists and conservationists protest nearby large-scale infrastructure and energy projects (such as proposed solar energy installations) that threaten to fragment this fragile ecosystem.

Concerns Over the Solar Project

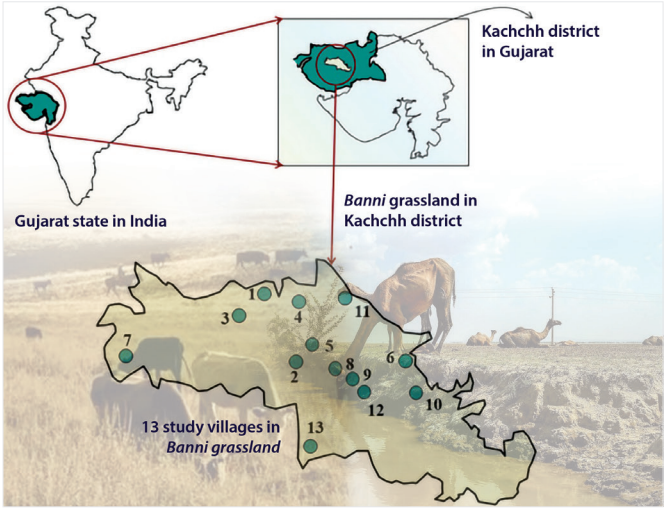
➲ The proposed project covers nearly 4,500 acres across 16 villages and lies close to eco-sensitive areas.

➲ Local communities fear loss of grazing land, cultural spaces, graveyards, and traditional livelihoods.

➲ Conservationists warn that **solar infrastructure, light pollution, and human activity** may disturb bird habitats and migratory routes.

➲ Solar panels may also disorient birds, increasing collision risks.

➲ Concerns have also been raised regarding weak implementation of safeguards related to pasturelands and the **Forest Rights Act, 2006.**



BIOMIMICRY

Biomimicry is shifting business innovation from mere replication to nature-inspired breakthroughs, offering sustainable frameworks across industries.

About

➲ Biomimicry involves learning from and **replicating nature's billions of years of evolutionary ingenuity to design sustainable, efficient human solutions**. Rather than exploiting nature, it positions nature as mentor and model.

➲ **Core Disciplines:** Innovators typically look to nature for inspiration in three primary ways:

- **Form:** Replicating shapes or physical structures (e.g., using shark skin patterns to prevent bacteria buildup).
- **Process:** Emulating chemical or biological mechanisms (e.g., creating artificial photosynthesis for solar energy).
- **Ecosystem:** Designing systems that mirror natural cycles, where one organism's waste is another's resource, aiming for zero waste.

➲ Its **applications are transformative like** Japan's Shinkansen bullet train, redesigned after the kingfisher's streamlined beak, eliminating disruptive tunnel pressure waves while enhancing speed and energy efficiency.

➲ As India advances its green transition, integrating biomimicry into manufacturing, urban design, and agriculture can drive innovation that is inherently circular, resource-efficient, and ecologically harmonious.

Famous Real-World Examples

➲ **Bullet Trains & Kingfishers:** Japanese engineers redesigned the nose of the Shinkansen bullet train to mimic the aerodynamic beak of the kingfisher. This allowed the train to exit tunnels quietly and consume less power.

➲ **Self-Ventilating Buildings:** The Eastgate Centre in Zimbabwe regulates its internal temperature without air conditioning by mimicking the self-cooling, mound-building structures of African termites.

➲ **Velcro & Burrs:** Engineer George de Mestral invented Velcro after observing how burrs with tiny hooks attached themselves to the fur of his dog and his own clothing.

YELLOW-THROATED MARTEN

Kaziranga National Park has confirmed the presence of a yellow-throated marten for the first time.

About

➲ **Scientific name:** Martes flavigula

➲ It belongs to the **weasel family (Mustelidae),** which also **includes otters, badgers, and wolverines.**

➲ It is a **smaller carnivore** that sits below apex predators, such as tigers and bears, in food chains.

➲ It is a **diurnal (active during the day), treeclimbing mustelid that assists seed dispersal,** a role that supports healthy forest regeneration and ecosystem balance.

- It is found across the **Himalayas, South Asia, Southeast Asia, China, Korea, and parts of Russia.**
- **In India,** the yellow-throated marten is found across the Himalayan region and in other parts of the northeastern region, including Assam.
- **IUCN Status:** Least Concern. It is protected as a Schedule II animal under India's Wildlife Protection Act.

Kaziranga National Park

- It is located in the northeastern state of Assam.
- It was established in **1908** as a reserve forest and became a **national park in 1974.**
- It was declared a UNESCO world **heritage site in 1985.**
- It is the largest habitat of the **Indian rhinoceros (Rhinoceros unicornis).**

SURHA TAL: INDIA'S 100TH RAMSAR SITE

Jai Prakash Narayan Bird Sanctuary (Surha Tal) in Ballia, Uttar Pradesh, has been designated as India's 100th Ramsar Site.

About

- Established in **1991**, the sanctuary is centred around **Surha Tal**, a natural perennial **oxbow lake** formed by the shifting course of the **Ganga River**. It is located in the **Indo-Gangetic Plain**, near the confluence of the **Ganga and Ghaghara** rivers.
- It hosts several migratory birds from **Siberia and Central Asia**, including the **Greylag Goose, Pintail, Common Teal, and Bar-headed Goose**.
- Local species include **Sarus crane, Heron, and Cormorant**.

Ramsar Convention

- The **Ramsar Convention on Wetlands** was signed in **Ramsar, Iran, in 1971** and came into force in **1975**.
- India became a signatory on **1 February 1982**.
- There are **over 2,500 Ramsar Sites** worldwide.

Objectives & Pillars

The convention is built on three main pillars:

- **Wise Use:** Committing member nations to manage and conserve all wetlands within their national territories in a sustainable manner.
- **Ramsar Sites:** Designating outstanding, rare, or internationally important wetlands to the global "List of Wetlands of International Importance".
- **International Cooperation:** Collaborating globally on transboundary wetlands, shared water systems, and migratory species.

Recent Addition

- **95th site - Kopra Reservoir (Chhattisgarh):** Recognized for its rich wetland biodiversity and supporting regional water birds.
- **96th site - Siliserh Lake (Rajasthan):** A scenic lake in the Aligarh/ Alwar region acting as a critical habitat for diverse flora and fauna.
- **97th site - Patna Bird Sanctuary (Uttar Pradesh):** Located in the Etah district, it is a key destination for various native and migratory bird species.
- **98th site - Chhari-Dhand (Gujarat):** Located in the arid Banni grassland region, it is globally recognized as a premier birdwatching site.
- **99th site - Shekha Jheel Bird Sanctuary (Uttar Pradesh):** Designated in April 2026, it is a significant wetland in the Aligarh district, serving as a haven for over 150 bird.

SUMMER AIR POLLUTION AND GROUND-LEVEL OZONE

Severe heatwaves during the summer of 2026 led to the reimposition of GRAP Stage-I measures in Delhi, amid growing concerns over rising ground-level ozone pollution. An IIT Kharagpur study estimated that ozone exposure contributed to over 26,500 deaths in India in 2024.

Ground-Level Ozone

- Ground-level ozone is a **secondary pollutant** and is not released directly into the air.
- It forms when **Nitrogen Oxides (NOx)** from vehicles and **Volatile Organic Compounds (VOCs)** from industries, paints, solvents, and fuel emissions react under strong sunlight.
- Ozone and particulate matter can cause serious respiratory illnesses, especially among children, the elderly, and people with lung diseases.

Why Do Heatwaves Increase Ozone Levels?

- During a heatwave, **temperature becomes high and there is strong sunlight.** These conditions help pollutants like **nitrogen oxides (NOx)** and **volatile organic compounds (VOCs)** react faster and produce more ozone.
- Heatwaves are accompanied by **calm weather and low wind speed**. Because of this, **pollutants stay trapped** near the ground instead of getting dispersed.
- In hot weather, people **use more electricity for cooling**, leading to higher burning of fossil fuels, releasing more ozone-forming pollutants into the air.
- Even after the heatwave ends, ozone levels remain high for a few days and continue to affect air quality and human health..

Ozone

- **Ozone (O_3)** is a gas composed of three oxygen atoms. It occurs both in the Earth's upper atmosphere (**stratosphere**) and at ground level (**troposphere**).
- **Stratospheric ozone** is beneficial as it forms the ozone layer that **shields the Earth** from the sun's harmful ultraviolet radiation.

- **Tropospheric ozone**, however, is a **harmful air pollutant** and greenhouse gas. It is not emitted directly but is formed by chemical reactions between **oxides of nitrogen (NOx)** and **volatile organic compounds (VOCs)** in the presence of sunlight.
- **The WHO** recommends a maximum ozone level of **100 micrograms per cubic meter (µg/m^3)**, measured as an 8-hour maximum moving average within a day.

Major Causes of Summer Air Pollution

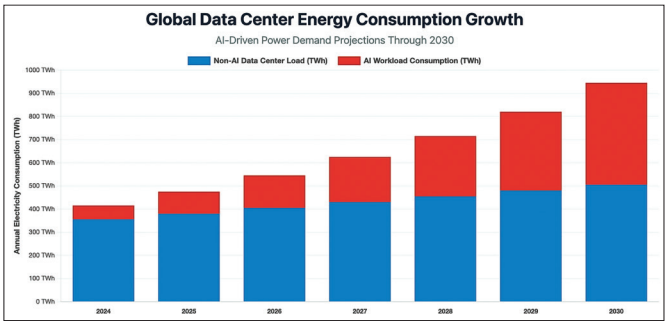
- **Regional Dust Storms (The Loo):** Hot and dry winds carry desert dust from the Thar Desert and West Asia, sharply increasing PM10 levels.
- **Localized Thunderstorms (Andhi):** Local dust storms caused by thunderstorms lift loose soil into urban areas.
- **Urban Heat Island Effect:** Concrete surfaces and loss of green cover increase local temperatures and speed up smog formation.
- **Construction Activities:** Dust from construction and demolition rises after winter restrictions are relaxed.
- **Human Activities:** Vehicle emissions, industries, and waste burning continuously release pollutants.

UN REPORTS ON AI POWER CONSUMPTION

United Nations report Environmental Cost of Artificial Intelligence highlights that by 2030, AI could consume 3% of world's electricity.

Major Findings

- **Water and Power Consumption:**
  - AI-related water consumption could equal the basic annual domestic needs of 1.3 billion people by the end of the decade.
  - Data centres could consume 945 terawatt-hours of electricity annually by 2030 – nearly triple the combined annual electricity use of Pakistan, Bangladesh, and Nigeria.
- **Water and Land Footprint:** Every unit of electricity used by data centres also carries a "water footprint" for cooling and energy production, and a "land footprint" associated with power generation and supply chains.
- **Electronic Waste:**
  - The report warns of a growing electronic waste challenge, with AI infrastructure projected to generate up to 2.5 million tonnes of e-waste annually by 2030.
  - Much of this burden is likely to fall on lower-income countries with limited capacity for safe disposal.
- **The production of critical minerals needed for AI hardware** also raises concerns about environmental degradation and social inequities in extraction regions.
- **Disparities:** More than 90% of AI-specialised computing capacity is concentrated in just two countries – the United States and China. At the same time, over 150 nations lack significant domestic AI infrastructure.
  - This imbalance not only limits economic opportunities but also raises questions of **environmental justice,** as some countries bear the environmental costs without sharing in the benefits of AI-driven growth.



UN Recommendations

To mitigate these compounding factors, the UN advocates for:

- **Efficiency by Design:** Transitioning to smaller, localized AI models rather than resource-heavy Large Language Models, which can reduce energy consumption by up to 90%.
- **Transparency and Behavior Change:** Encouraging technology companies and end-users to adopt responsible defaults (e.g., limiting image resolution and token length) to curb unnecessary resource consumption.
- **Global Cooperation:** Integrating AI into climate, water, and land-use planning to ensure innovation does not shift environmental costs onto vulnerable communities.

NEW NORM FOR CAUSTIC SODA WASTE WATER

Wastewater from caustic soda plants using membrane cell technology will now have to pass a laboratory-based fish survival test under new environmental standards notified by the Union government.

About

- The new standards apply to standalone caustic soda plants that use membrane cell technology.
  - Membrane cell technology uses a special membrane to control the chemical process and is considered less polluting than older mercury-based processes.
- The rules say at least 90% of fish must survive after 96 hours in 100% wastewater during laboratory-based bioassay testing.
  - The standards also set limits for **pH, chloride, suspended solids, dissolved solids, water use and wastewater generation.**
- Experts say enforcement will be key, as bioassay testing requires specialised laboratories, trained staff and regular independent monitoring.
- **Specific parameters dictate that the discharge must meet the following metrics:**

- **pH Level:** 6.5 to 8.5
- **Chloride Content:** Max 250 mg/L
- **Total Dissolved Solids (TDS):** Max 2,100 mg/L (or 2.1 kg per tonne of caustic soda produced)
- **Total Suspended Solids (TSS):** Max 100 mg/L
- **Water Consumption:** Max 5 cubic metres per tonne of caustic soda
- **Effluent Generation:** Max 1 cubic metre per tonne

Caustic Soda

- **Caustic soda,** also known as **sodium hydroxide,** is one of India's most widely used industrial chemicals.
- **It is used in industries such as** soap, detergents, paper, textiles, aluminium, petrochemicals and water purification.
- India has about **32 to 37 caustic soda plants,** with annual production of more than **five million metric tonnes.**
- But the industry can also pose environmental risks because its **wastewater is often highly alkaline and saline.** It may contain **chlorine, hydrochloric acid and high levels of dissolved solids.**

BANDIPUR AND NAGARAHOLE TIGER RESERVES

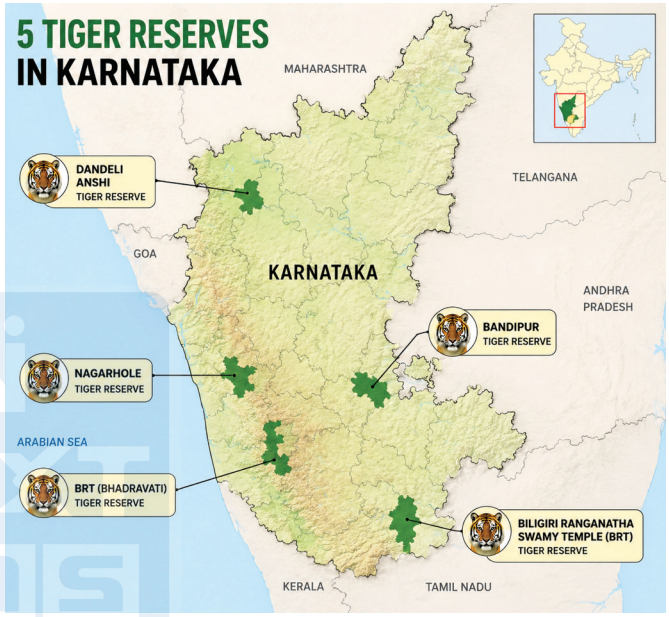
The Karnataka Government announced the full restoration of the jungle safari (park excursion) at the Bandipur and Nagarahole Tiger Reserves, suspended since November 2025 in the wake of human-tiger conflict in the region.

About

- **Location:** Both tiger reserves are located in **Karnataka** and form part of the **Nilgiri Biosphere Reserve,** India's first Biosphere Reserve.
- **Project Tiger:**
  - **Bandipur** was among the first nine Tiger Reserves notified under Project Tiger **in 1973.**
  - **Nagarahole** was declared a Tiger Reserve of India in **2003.**
- **Landscape:** Together with **Mudumalai Tiger Reserve (Tamil Nadu)** and **Wayanad Wildlife Sanctuary (Kerala),** they form one of the largest contiguous protected forest landscapes for tigers and Asian elephants in the world.
- **River system:** The **Kabini Reservoir** separates the Bandipur and Nagarahole Tiger Reserve on the North-west.
- **Fauna:** Tiger, Leopard, Asiatic Wild Dog , Sloth Bear, Asiatic Elephant, Four Horned Antelope, Mouse Deer and South-western langur etc.
- **Flora:** Predominantly tropical moist deciduous, dry deciduous, and scrub forests, with patches of bamboo and teak.

Tiger Reserves in Karnataka

- **Bandipur Tiger Reserve**: Located in the Chamarajanagar district, it is the largest and one of the most famous reserves in the state.
- **Nagarahole Tiger Reserve** *(formerly known as Rajiv Gandhi National Park)*: Spans the Mysuru and Kodagu districts.
- **Bhadra Tiger Reserve**: Located in the Chikkamagaluru and Shivamogga districts, known for its picturesque landscape and reservoir.
- **Kali Tiger Reserve** *(formerly Dandeli-Anshi Tiger Reserve)*: Situated in the Uttara Kannada district.
- **Biligiri Ranganatha Temple (BRT) Tiger Reserve**: Located in the Chamarajanagar district, forming an important wildlife corridor between the Eastern and Western Ghats.



INDIA'S ABS FRAMEWORK

India's Access and Benefit Sharing (ABS) framework under the Biological Diversity Act, 2002 has mobilized more than Rs 266 crore since 2008, with around ₹145 crore disbursed to beneficiaries.

About Access and Benefit Sharing

- ABS refers to the framework through which benefits arising from the use of biological resources and associated traditional knowledge are **shared fairly and equitably with the communities** that have conserved these resources.
- It is a principle under the **Convention on Biological Diversity (CBD).**
- India operationalizes ABS through the **Biological Diversity Act, 2002**, and its recent amendment the **Biological Diversity (Amendment) Act, 2023.**

Enforcement is managed via a three-tier system:

- **National Biodiversity Authority (NBA):** Regulates access by foreign entities and intellectual property applicants.
- **State Biodiversity Boards (SBBs):** Regulates access by Indian entities.

- **Biodiversity Management Committees (BMCs):** Local-level bodies that promote conservation and document traditional knowledge.

Three Main Components of ABS

- **Prior Informed Consent (PIC):** Prior Permission must be obtained from local community or concern country to get accessing their genetic resources.
- **Mutually Agreed Terms (MAT):** The mechanism for benefit sharing are based 0n negotiation and agreement between the users and providers.
- **Equitable Sharing:** Benefits can be monetary (royalties, upfront payments) or non-monetary (technology transfer, capacity building).

Significance

- India's ABS framework is advancing the objectives of the **Nagoya Protocol,** supporting the **National Biodiversity Strategy and Action Plan (NBSAP) 2024-2030,** and contributing to the **Kunming-Montreal Global Biodiversity Framework**, particularly Target 13 on fair and equitable benefit sharing.

Biological Diversity Act, 2002

- The Act was introduced to achieve the objectives of **United Nations Convention on Biological Diversity (CBD), 1992.**
- It provides a framework for **access to biological resources and sharing the benefits arising out of such access and use.** It is in line with the **Nagoya Protocol on Access and Benefit Sharing.**

Nagoya Protocol

- The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS) is a supplementary agreement to the **Convention on Biological Diversity (CBD).**
- It provides a transparent legal framework for the effective implementation of one of the three objectives of the CBD: **the fair and equitable sharing of benefits arising out of the utilization of genetic resources.**
- It was adopted in **2010 in Nagoya,** Japan and entered into force in **2014.**

CORAL TRANSLOCATION

Coral colonies and giant clams that will be impacted due to the work on the transhipment port proposed at Galathea Bay as part of the Great Nicobar Island (GNI) mega project will be translocated to four sites on the west coast.

Great Nicobar Island Project

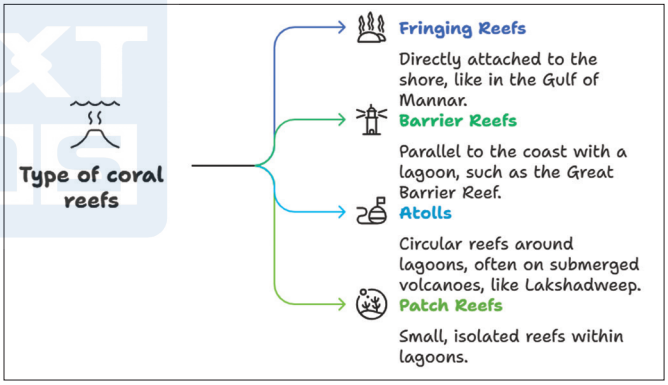
- The project received **Stage-I clearance in 2022**.
- **Implementing authority:** The Port Blair-based Andaman and Nicobar Islands Integrated Development Corporation Ltd **(ANIIDCO)** Incorporated in 1988
- **The Project involves** developing an **International Container Transshipment Terminal (ICTT)**, an international airport, township development, and a **450 MVA gas and solar-based power plant** on the island.
  - The site for the ICTT and power plant is **Galathea Bay** on the southeastern corner of Great Nicobar Island, where there is no human habitation.

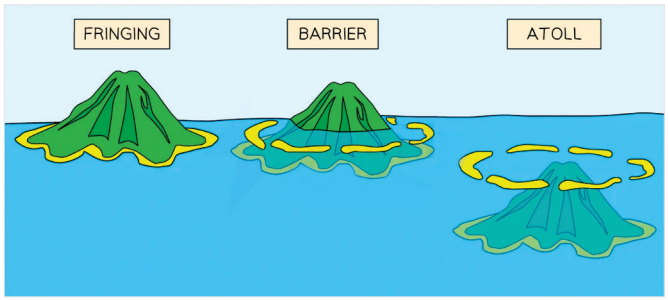
About Corals

- Corals are **invertebrates** that belong to a large group of animals called **Cnidaria**.
- Corals are formed by **multiple small, soft organisms known as polyps.**
- They secrete a **rocky chalk-like (calcium carbonate) exoskeleton** around themselves for protection.
- **Coral reefs** are therefore created by **millions of tiny polyps forming large carbonate structures.**

Appearance

- Corals range in colour from **red to purple and even blue,** but are most commonly shades of **brown and green.**
- Coral are bright and colorful because of microscopic algae called **zooxanthellae**.

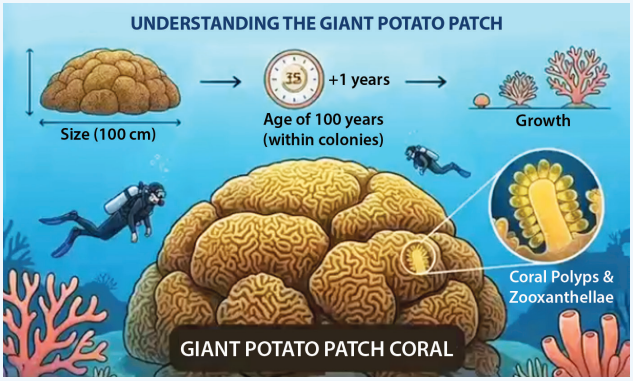




- **Significance:**
  - They provide food, shelter, resting and breeding grounds to a quarter of all marine life, acting as nurseries and refuges to protect critical biodiversity.
  - They also support more than 1 billion people living in coastal regions around the world by providing food, livelihoods and recreation.

Giant Potato Coral

- Giant potato coral patch, coral colony found on southeastern side of Kadmat Island in Lakshadweep. Known as the **"Potato Patch,"** this 700 to 1,800-year-old formation is roughly half the size of a football pitch and serves as a major climate-resilient sanctuary in the Indian Ocean.



Understanding the Giant Potato Patch Coral:

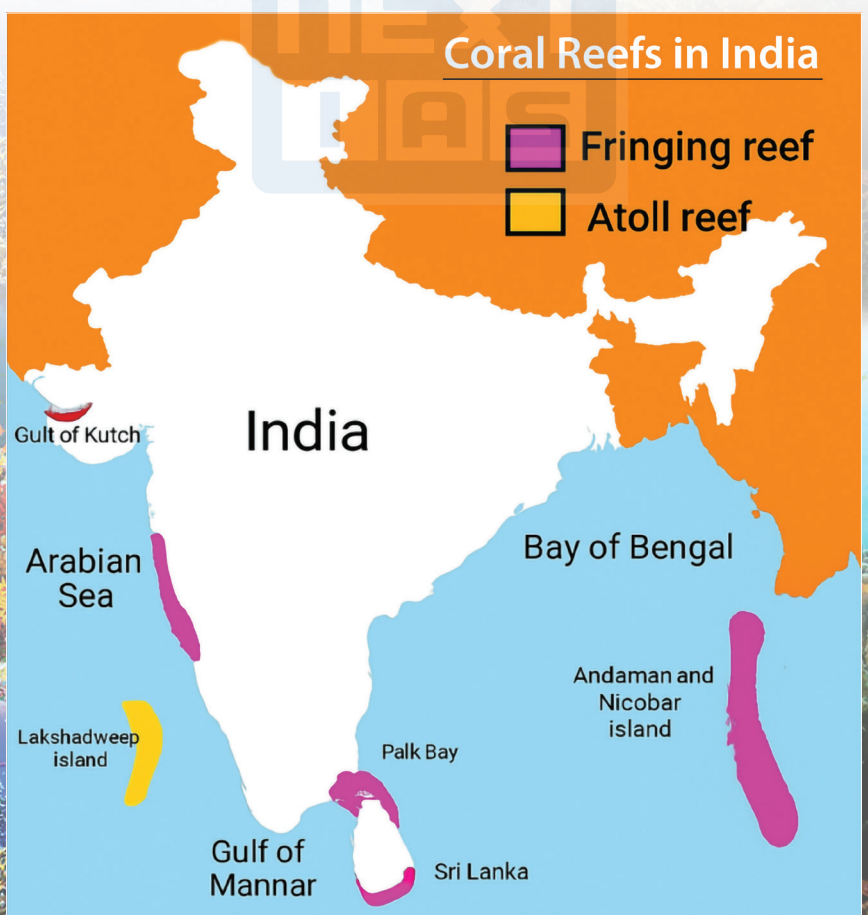
- **Common Name:** Giant Potato Patch Coral
- **Scientific Name**: Porites spp.

Key Features

- Large dome-shaped massive coral colony.
- **Approximate colony size:** 100 cm (1 m) or more.
- **Estimated age:** Around 10 years or more (large colonies can actually live for hundreds of years under favorable conditions).
- Grows slowly over many years and is built by tiny coral polyps. Polyps live in a symbiotic relationship with Zooxanthellae (photosynthetic algae). Zooxanthellae provide food through photosynthesis, while corals provide shelter and nutrients.

Reef Resilience Mechanisms

- **Heat Tolerance:** Able to survive relatively high sea temperatures. Some colonies are naturally more resistant to coral bleaching.
- **Rapid Recovery:** Healthy reefs can regenerate after disturbances. Recovery depends on good water quality and reduced human pressure.
- **Genetic Diversity:** Different genetic strains increase the chances of survival. Helps reefs adapt to changing climate conditions.
- **Ecological Significance:** The massive formation provides researchers with crucial data on coral longevity, climate adaptation, and marine survival.



5 GEOGRAPHY

MAJULI ISLAND

A recent study by scientists from the Birbal Sahni Institute of Palaeosciences has reconstructed nearly 4,000 years of climate, vegetation, and river dynamics of Majuli Island.

About

- **Location: Brahmaputra River system** in Assam and is recognized as the **world's largest inhabited river island.**
- Majuli is a **unique fluvial island** formed by the Brahmaputra River and its tributaries, covering about **875 sq. km.**
- **It is bounded by**
  - **Subansiri River** in the north
  - **Kherkatia Suti** in the northeast,
  - **Brahmaputra River** in the south.
- **Its landscape consists of**
  - Alluvial plains
  - Braided channels
  - Wetlands (Beels)
  - Riverine sandbars known as **Chaporis**

Art and Culture

- The island is an important centre of **Neo-Vaishnavite culture** established by Srimanta Sankardeva.
  - It hosts around **30 Sattras (Vaishnavite monasteries),** which serve as centres of religion, culture, education, and community governance.
  - Major Sattras include **Auniati Satra, Kamalabari Satra, Garamur Satra, and Dakhinpat Satra.**
- **Intangible Heritage:** unique traditions like the Sattriya dance, Bhaona (theatrical performances), mask-making, and specialized boat/pottery-making
- It is home to several indigenous tribal communities, including the **Mising, Deori, and Sonowal Kachari tribes.**

Economy and Society

- **Demographics:** Primarily inhabited by the Mishing, Deori, and Sonowal Kachari tribes, alongside non-tribal Assamese communities.
- **Agriculture:** cultivating unique, flood-tolerant rice varieties like *Komal Saul* and *Bao Dhan*.
- **Threat:** The island faces recurrent **floods, riverbank erosion, deforestation, and land loss.**

Conservation and Status

- **UNESCO Tag:** It is currently on the UNESCO Tentative List for World Heritage Site nomination under the mixed (cultural and natural) category.
- **Government Initiatives:** Various state and central government projects (including funding from the North Eastern Council) are actively working on shoreline protection and sustainable development for the region.

PADMA BARRAGE

Bangladesh has approved a large river engineering project called the Padma barrage, on the Padma river, which is Bangladesh's stretch of the Ganga, in Rajbari district.

About

- It is Bangladesh's attempt to **partially re-engineer the hydrology of its southwest region,** which has become prone to drought after decades of reduced seasonal flows.
- The barrage will be **2.1-km-long and have 78 spillway gates,** undersluices, navigation locks, fish passages, and associated embankments.
- According to Bangladesh, the project will affect roughly **37% of the country's land area and irrigate around 2.88 million ha of farmland.**

India's Stance

- India's stance on Bangladesh's Padma Barrage is one of caution and diplomatic concern. Because the barrage alters the downstream hydrology and sediment dynamics of the shared Ganga-Padma basin.
- New Delhi views the unilateral mega-project as a challenge to regional water-sharing, especially as the Ganges Water Treaty is set to expire.

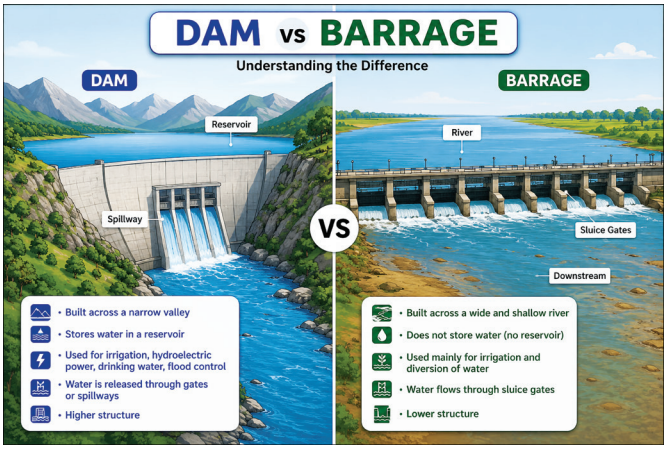
Padma River

- The Padma River is one of the largest and most important rivers in Bangladesh.
- It is the main distributary of the Ganges River after the Ganges enters Bangladesh from India.
- The Padma flows southeast, joins the Jamuna River (the lower Brahmaputra), and later merges with the Meghna River before emptying into the Bay of Bengal.
- It is a major part of the world's largest delta system, the Ganges–Brahmaputra–Meghna Delta.

Dam vs Barrage

- A dam is a massive structure built to store vast amounts of water in a reservoir, primarily for hydroelectricity and flood control.

- A barrage is a type of diversion dam constructed across a river with a series of large gates along the riverbed, designed mainly to control and divert water into canals.



CASPIAN SEA

Since the mid-1990s, the Caspian Sea has lost nearly 24,000 sq km of its surface area, roughly equivalent to the size of Sicily, the largest island in the Mediterranean Sea.

About

- The **Caspian Sea** is the **world's largest inland body of water**, located between **Europe and Asia**.
- It is bordered.by **TARIK; Turkmenistan; Azerbaijan; Russia; Iran; Kazakhstan**
- Despite its name, it is technically a **saltwater lake** with **no natural outlet**.
- Major rivers draining into it include the **Volga** (largest), **Ural**, **Kura**, and **Terek** rivers.
- The region is rich in **oil and natural gas reserves**, making it strategically important.

Do You Know?

- Despite the **2018 Aktau Convention** (Convention on the Legal Status of the Caspian Sea), the Caspian Sea still lacks a comprehensive and enforceable framework for water sharing, hydrological monitoring, and ecological protection.
- The Caspian Sea is rapidly shrinking due to climate change and human-driven river diversion, with studies warning of a potential 8 to 30-meter drop in water levels by 2100.

Trade and Connectivity (INSTC)

- India's connection to the Caspian Sea primarily revolves around **energy security** and **trade connectivity**
- The Caspian Sea is an integral transit corridor for the **International North–South Transport Corridor (INSTC)**, a multi-modal network of ship, rail, and road routes designed to move freight between India, Iran, Azerbaijan, Russia, and Central Asia.

ESTONIA

Estonian government and business executives are expressing greater interest in cooperation with India in defence and trade.

About

- **Location:** A Baltic nation in Northern Europe, situated on the eastern shores of the Baltic Sea
- **Boundaries:** It is bordered by Russia to the east and Latvia to the south. To the north, it faces the Gulf of Finland, and to the west lies the Baltic Sea. It shares maritime borders with Finland and Sweden.
- **Estonia** the **northernmost of the three Baltic states:** Estonia, Latvia, and Lithuania.
  - Estonia's area includes some 1,500 islands and islets; the two largest of these islands, **Saaremaa and Hiiumaa,** are off mainland Estonia's west coast.
  - To the east Estonia is bounded by **Russia** and to the **south it is bounded by Latvia.**
- **Official language:** Estonian.
- **Estonia remained a Soviet republic until 1991,** when, along with the other Baltic states, it declared its independence.
- It sought **integration with greater Europe and in 2004** joined the **North Atlantic Treaty Organization (NATO) and the EU.**
- Estonia is often **recognized as one of the world's most digitally advanced countries,** widespread online public services and electronic voting.

Bilateral Relations with India

- India and Estonia have growing economic and defense ties.
- Cooperation has expanded significantly in Information Technology, cyber security, e-governance, and blockchain.

ZIMBABWE

India and Zimbabwe agreed to enhance bilateral defence ties by expanding existing cooperation.

About

- **Zimbabwe is a landlocked country** situated in south-central Africa between the **Limpopo** and **Zambezi** rivers, covering an area of over 390,000 sq km.
- **It is bounded by**
  - **Zambia** to the north and northwest.
  - **South Africa** to the south.
  - **Mozambique** to the east and northeast.
  - **Botswana** to the southwest.

Do You Know?

- Zimbabwe lies entirely north of the **Tropic of Capricorn** and forms part of the southern African plateau.
- The Victoria Falls, located on the border between Zimbabwe and Zambia, is the world's largest sheet of falling water.

Topography & Minerals:

- The country sits primarily on a high plateau (Highveld) which tempers its tropical climate.
- **Eastern Highlands:** Contains the highest peak, **Mount Nyangani** (2,592 meters). Rich in mineral reserves like coal, chromium, vanadium, and lithium.

ZOJILA TUNNEL

The Zojila Tunnel achieved its final breakthrough in June 2026, marking a significant milestone in India's efforts to establish all-weather connectivity between Kashmir and Ladakh.

About

- The Zojila Tunnel is a **13.14-km-long single-tube, bi-directional road tunnel** being constructed beneath the Zojila Pass in the Himalayas.
- It is located at an altitude of approximately **11,578 feet** and connects **Baltal in Kashmir** with **Meenamarg in Ladakh.**
- The tunnel is designed as a **two-lane horseshoe-shaped structure** and is among the world's longest road tunnels at such a high altitude. Reduces travel time between Baltal and Minamarg from 3.5 hours to just 15–20 minutes, while reducing the physical travel distance from 40 km to 13 km.
- The project is being executed by **Megha Engineering & Infrastructures Ltd.** The tunnel has been constructed using the **New Austrian Tunnelling Method (NATM)**.
  - NATM relies on sequential excavation, immediate support measures such as shotcrete and rock bolting, and continuous geotechnical monitoring, allowing engineers to respond flexibly to changing ground conditions during tunnelling.

Strategic Importance

- It will provide all-weather connectivity between **Kashmir Valley and Ladakh.** It will reduce dependence on the **snow-bound Zojila Pass**, which remains closed during winter due to heavy snowfall and avalanches.
- It will **improve military logistics and troop mobility** in areas close to the **Line of Actual Control.**

6 INTERNAL SECURITY

RUDRAM-II MISSILE

Defence Research and Development Organisation (DRDO) and the Indian Air Force successfully conducted the flight-test of the indigenous RudraM-II missile from a Sukhoi Su-30MKI.

About

- **RudraM-II** is an indigenous **air-to-surface anti-radiation missile** developed by **Research Centre Imarat (RCI)**, the nodal DRDO laboratory. It is part of the **RudraM series**, which includes **RudraM-I, RudraM-II and RudraM-III**.
- These missiles are designed to strengthen the **Suppression of Enemy Air Defence (SEAD)** capability of the Indian Air Force.

Features

- Anti-radiation missiles are designed to destroy enemy **radars**, **communication systems**, and other **radio-frequency emission sources**.
- RudraM-II uses a **hybrid navigation system** combining **Inertial Navigation System (INS)**, **GPS** and a passive homing head.
- It can achieve a speed of **Mach 5.5**, strike targets up to **300 km**, and carry a **200 kg warhead**.
- It can be launched from aircraft flying at altitudes between **3 km and 15 km**.

Significance

- In the initial phase of an air conflict, it helps destroy enemy air-defence assets from **stand-off ranges**, improving the survivability of friendly aircraft.
- It is expected to replace the older **Kh-31** missiles in service.
- The successful test strengthens India's **precision-strike capability**, **SEAD operations**, and **Aatmanirbharta in defence.**

GALLANTRY AWARDS

The President of India conferred Gallantry Awards during the Defence Investiture Ceremony at Rashtrapati Bhavan, honouring acts of bravery by personnel of the Armed Forces, Central Armed Police Forces, and Police.

About

- **Gallantry Awards** are among India's highest honours for acts of **bravery**, **sacrifice**, and **exceptional courage**.
- They are awarded to members of the **Armed Forces**, **paramilitary forces**, **police forces**, and civilians.
- These awards are conferred by the **President of India** and administered by the **Ministry of Defence** and **Ministry of Home Affairs**. They are announced twice every year on **Republic Day** and **Independence Day**.

Categories

- **Wartime Gallantry Awards** are given for bravery in the presence of the enemy. These include **Param Vir Chakra**, **Maha Vir Chakra**, and **Vir Chakra**.
- They were instituted on **26 January 1950** with retrospective effect from **15 August 1947**.
- **Peacetime Gallantry Awards** are given for bravery other than in direct combat.
- These include **Ashoka Chakra**, **Kirti Chakra**, and **Shaurya Chakra**.
- They were instituted on **4 January 1952** with retrospective effect from **15 August 1947**. Initially, they were known as **Ashoka Chakra Class I, II and III**, and were renamed in **1967**.

Order of Precedence

- The order is **Param Vir Chakra**, **Ashoka Chakra**, **Maha Vir Chakra**, **Kirti Chakra**, **Vir Chakra**, and **Shaurya Chakra**.

Key Points

- In the latest ceremony, the President conferred **7 Kirti Chakras**, **15 Vir Chakras**, and **29 Shaurya Chakras**.
- **Prasanth Balakrishnan Nair**, one of India's **Gaganyatris**, received the **Kirti Chakra**.
- All six gallantry awards can be awarded **posthumously**.
- In **Balaji Raghavan v. Union of India (1995)**, the Supreme Court held that these awards are not **titles** under **Article 18(1)**.

PROJECT KUSHA

Defence Minister Rajnath Singh described Project Kusha as a potential game changer for India's security architecture.

About

- Project Kusha is a **long-range indigenous surface-to-air missile (SAM) system** being developed by **DRDO**. It is designed to provide **layered air defence** against a wide range of aerial threats.
- The system is intended to rival advanced platforms such as **Russia's S-400 Triumf**.
- It will feature **three interceptor variants:**
  - **M1** interceptor with a range of around **150 km**
  - **M2** interceptor with a range of around **250 km**
  - **M3** interceptor with a range of **350–400 km**

- The system is designed to counter fighter aircraft including stealth platforms, drones, cruise missiles, precision-guided munitions, and certain ballistic missile threats.
- Project Kusha is linked to **Mission Sudarshan Chakra**, an initiative aimed at building a **multi-layered air and missile defence shield for India by 2035**.

Development Status

- The **Defence Acquisition Council (DAC)** granted **Acceptance of Necessity (AoN) in 2023** for procurement of **five squadrons** for the Indian Air Force.
- Operational deployment is expected between **2028 and 2030**.

ARMY UNIFORMS-2026 MANUAL

The Indian Army, the world's second-largest standing army, has introduced the Army Uniforms-2026 manual.

About

- The new manual **replaces the 2015 uniform regulations**.
- It reflects the Army's efforts to **modernise military attire** while preserving **operational effectiveness and regimental traditions**.
- Key changes include:
  - Introduction of the traditional **Bandi (Nehru) jacket** in formal military attire.
  - Removal of **colonial-era terminology** such as "Royal."
  - Making **sword carriage by the Reviewing Officer optional**.
- This move reflects India's broader push toward **decolonisation and indigenisation**.

HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS)

Taiwan recently conducted its first-ever live-fire exercise using HIMARS in the Taiwan Strait, simulating a defence scenario against a potential Chinese military threat.

About HIMARS

- HIMARS is a **lightweight, mobile, multiple rocket launcher** manufactured by **Lockheed Martin**, a US-based aerospace and defence company.
- It is mounted on a **six-wheeled truck**, enabling rapid movement across roads and rough terrain.
- It carries either a **pod of six precision-guided rockets** or **one MGM-140 ATACMS missile** capable of striking targets up to **200 miles away**.
- Its operational range of around **300 km** allows it to strike targets across the Taiwan Strait, including **China's Fujian Province**.
- It is known for its **"shoot-and-scoot" capability**, firing rapidly and relocating before enemy forces can respond.
- It is equipped with an **Increased Crew Protection cabin** to shield its **three-man crew**.
- HIMARS is designed to engage **artillery, air defence systems, light armour, and troop concentrations**.

Do You Know?

HIMARS has been **extensively used by Ukraine** in its conflict with Russia and has emerged as one of its key **long-range strike systems**.

MULTI-LAYERED BALLISTIC MISSILE DEFENCE

DRDO successfully conducted three consecutive flight tests validating India's multi-layered Ballistic Missile Defence (BMD) system and the Naval Anti-Ship Missile-Medium Range (NASM-MR).

What is a Ballistic Missile?

- A ballistic missile is launched by a rocket and then travels **mainly under the influence of gravity** along a curved path called a **ballistic trajectory**.

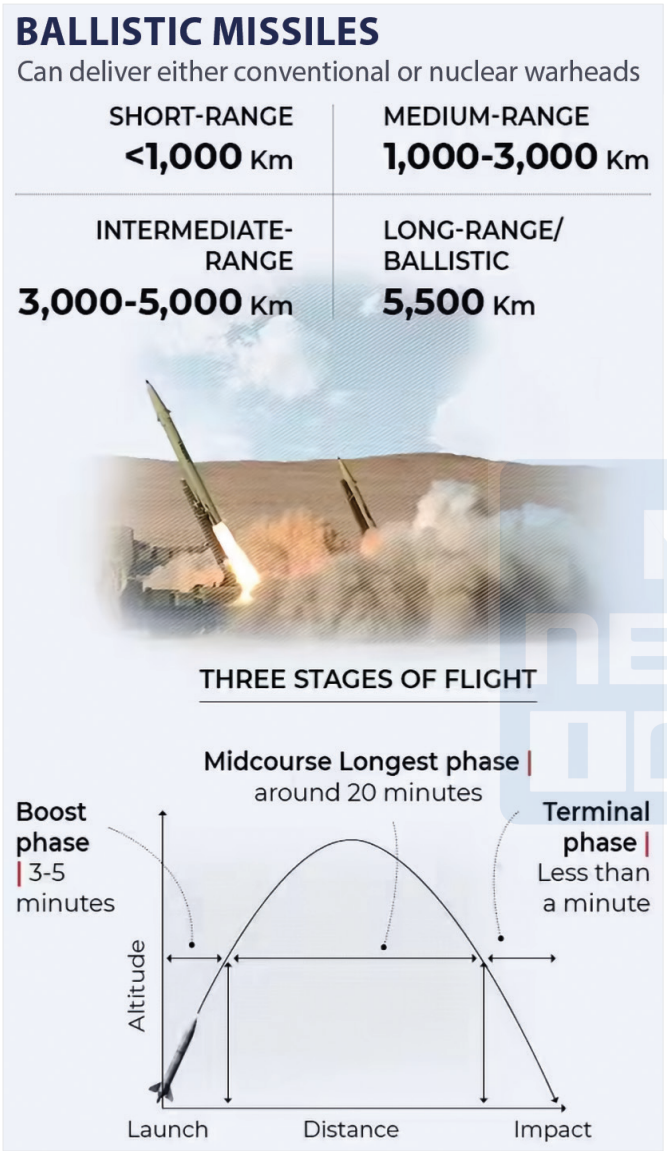
What is a Missile Defence System?

- A missile defence system is an **integrated military system** designed to **detect, track, intercept, and destroy** incoming missiles before they reach their targets.
- It relies on a network of **satellites, radars, command centres, and interceptor missiles** working together in real time.

India's Missile Defence Architecture

- **Prithvi Air Defence (PAD):** Designed for **exo-atmospheric interception** at altitudes of **50 km to 180 km**.
- **Advanced Air Defence (AAD):** Designed for **endo-atmospheric interception** during the terminal phase at altitudes **up to 30 km**.
- **S-400 Triumf:** A highly advanced **Russian-developed mobile SAM system** inducted by India for **long-range air defence**.
- **Barak-8 (MRSAM/LRSAM):** Co-developed with **Israel**, it provides **360-degree protection** for land and naval assets at **medium range (70–100 km)**.

- **Akash system and Israel's SPYDER:** Provide **short-range protection (25–50 km)** for strategic points and mobile army units.
- **Mission Sudarshan Chakra:** A comprehensive vision for **2035**, aimed at creating an **AI-enabled national missile and air defence shield.**



INDIA'S RECORD DEFENCE PRODUCTION

India's annual defence production reached an all-time high of ₹1.78 lakh crore in FY 2025–26. This is a 15.6% growth over the previous year and 110% increase since FY 2020–21.

Key Facts

- **Production Mix:** DPSUs and PSUs – 76%; Private sector – 24%.
- **Domestic Share:** ~65% of defence equipment now produced domestically, against 65–70% import dependence earlier.
- **2029 Targets:** ₹3 lakh crore in production; ₹50,000 crore in exports.

Factors Behind Rising Production

- **Rising Defence Budget**: Sustained increase in allocations.
- **R&D Investment:** Defence R&D allocation increased by over **112%** (FY 2026–27 vs FY 2014–15). **25% of the defence R&D budget** opened to industry, start-ups, and academia in 2022–23.
- **iDEX (Innovations for Defence Excellence)**: Engages MSMEs, start-ups, innovators, research institutions, and academia in indigenous defence technology development.
- **DcPP (Development cum Production Partner) Model**: DRDO identifies manufacturing partners through competitive processes and transfers technology for production.
- **DYSLs (DRDO Young Scientists Laboratories)**: DRDO established **five DYSLs** in 2020; a sixth is scheduled for 2026 – total 36.
- **DAP 2020 (Defence Acquisition Procedure):** Prioritised indigenous procurement, domestic manufacturing, and higher indigenous content.
- **Defence Diplomacy**: Expanded to technology collaboration, industrial partnerships, and joint manufacturing with global powers.

Need for Indigenisation

- **Strategic Autonomy:** Reduces dependence on foreign suppliers during crises and geopolitical tensions.
- **Capability Gaps:** Ageing platforms in Army, Navy, and Air Force need replacement; complex challenges in IOR.
- **Reducing Import Bill:** India is among the world's largest arms importers; indigenous production lowers costs and reduces foreign exchange outflow.
- **Customisation:** Domestic platforms can be tailored to Indian terrain i.e. Himalayan high altitudes, deserts, maritime zones.
- **Technology Sovereignty:** Prevents vulnerability due to sanctions, supply chain disruptions, or technology denials.

Significance

- **Buyer to Builder:** Indian defence products now exported to over 80 countries.
- **Ecosystem Scale:** 16 DPSUs, ~500 licensed companies, ~17,000 MSMEs.
- **Defence Corridors:** UP corridor – ₹42,057 crore; Tamil Nadu corridor – ₹32,699 crore (2026).

KHAAN QUEST			
Exercise	**Venue**	**Participants**	**Remarks**
KHAAN QUEST (23rd Edition)	Five Hills Training Area in Ulaanbaatar (Mongolia)	From 18 Countries including India, Mongolia, USA	A Multinational Peacekeeping Exercise

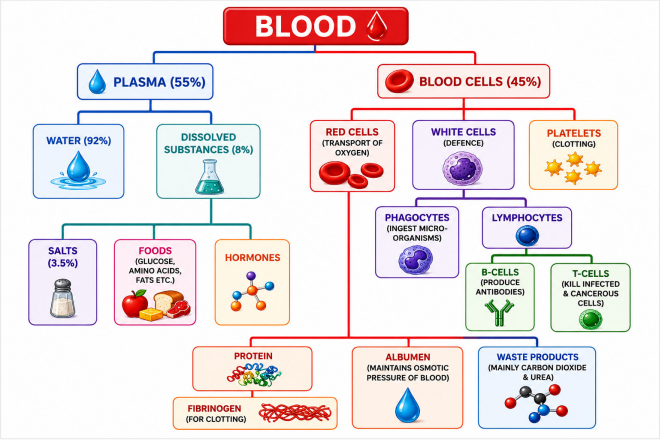
7 SCIENCE & TECHNOLOGY

BLOOD TEST THAT PREDICTS LUNG CANCER EARLY

A new study has zeroed in on a set of 14 blood plasma proteins, called the '14-protein signature', as a strong predictor of being diagnosed with lung cancer years in advance.

About

- **Blood plasma** is the liquid portion of the blood that flows in the human body.
  - It contains **thousands of proteins** that come from every organ and tissue.
  - This entire set of proteins is called the **plasma proteome.**
  - The large-scale systematic study of the proteome is called **proteomics**.
- **The plasma proteomics** profile provides a **real-time snapshot of health and disease.**
  - If scientists could compare the profiles of people before and after the onset of a disease, they can predict important clues about changes.
- Scientists are currently on the threshold of finding a new way to identify people who may be **predisposed to developing lung cancer and protect them proactively.**
- **Lung cancer** is mainly due to smoking and, to a lesser extent, air pollution and occupational exposure.
  - According to the latest World Health Organization estimates, **there are about 2.5 million new cases and 1.8 million deaths every year.**

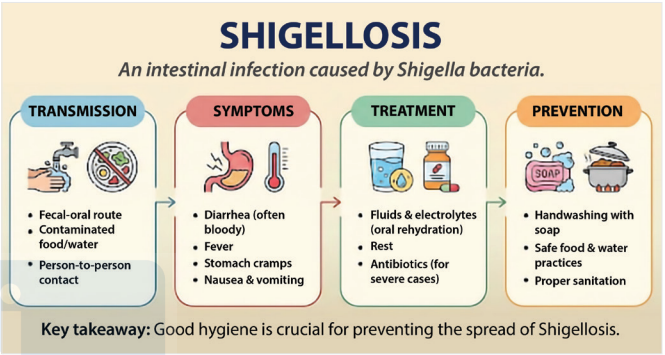


SHIGELLOSIS OUTBREAK

Kerala has reported 85 confirmed cases and over 70 probable cases of shigellosis (bacillary dysentery) till June 2026.

About

- Shigellosis is a **highly contagious bacterial infection** caused by bacteria of the genus Shigella.
- It primarily **affects the intestines** and causes bacillary dysentery, characterized by severe diarrhoea.



The Pathogen & Transmission

- **Causative Agent:** *Shigella*, a genus of Gram-negative bacteria that causes bacillary dysentery.
- **Infectious Dose:** It is incredibly virulent; ingestion of just 10 to 100 bacteria can cause infection.
- **Transmission Route:** Primarily spreads via the fecal-oral route, direct person-to-person contact, contaminated water and food, or surfaces.
- **Reservoir:** Humans are the only natural reservoir

Symptoms & Complications

- **Incubation Period:** Typically 1 to 4 days.
- **Primary Symptoms:** Severe diarrhea (often bloody or mucoid), high-grade fever, abdominal cramps, and tenesmus (a painful, persistent urge to pass stool).
- **Vulnerable Groups:** Children under five face the highest risk of mortality due to rapid dehydration.
- **Complications:** In severe cases, it can cause seizures, toxic megacolon, or Haemolytic Uremic Syndrome (HUS), a type of kidney failure

Treatment & Challenges

- **Management:** Most cases are self-limiting and treated via hydration, Oral Rehydration Therapy (ORT), and zinc tablets.
- **Antibiotics:** Used for severe cases to shorten the illness and prevent spread, but multi-drug resistant and Extensively Drug-Resistant (XDR) strains are a growing concern in India.
- **Vaccines:** There are currently no approved vaccines available

ARBUSCULAR MYCORRHIZAL (AM) FUNGI

Science study has mapped the global distribution of AM fungi for the first time, revealing their significance for soil health and climate regulation.

About

- These fungi have **sustained plant life for millions of years** but their scale and distribution has been largely invisible until now.
  - **By forming symbiotic relationships with 70% of plant species,** trading nutrients for carbon, the AM networks sequester an estimated 4 billion tonnes of CO2-equivalent a year.
- **Grassland ecosystems** like those in South Sudan, the Tibetan plateau, and India's Banni grasslands house **40% of the world's AM fungal networks.**
- Grasslands are being **converted to farms four-times faster than forests,** these ecosystems are at extreme risk. The work hopes to move fungi from the periphery of environmental policy to the centre of climate action.

AM fungi

- These are **soil fungi** that form a **mutually beneficial symbiotic relationship** with the **roots of about 70% of terrestrial plant species.**
- They belong mainly to the **phylum Glomeromycota** and form specialized structures called **arbuscules inside root cells for nutrient exchange.**
  - AM fungi **enhance the uptake of essential nutrients** such as phosphorus, nitrogen, zinc, and copper, as well as water from the soil.
  - In return, **plants provide the fungi with carbohydrates and lipids** produced through photosynthesis.

Fungi

- Fungi are eukaryotic organisms that include yeasts, molds, and mushrooms and belong to the kingdom Fungi.
- They lack chlorophyll and cannot perform photosynthesis; instead, they obtain nutrients by absorbing organic matter from their surroundings.
- Fungi reproduce through spores and can be either unicellular (e.g., yeast) or multicellular (e.g., mushrooms).
- They play an important role as decomposers, breaking down dead plants and animals and recycling nutrients in ecosystems.

EMERGING POWER OF SYNTHETIC BIOLOGY

The rapid evolution of genome sequencing, gene editing technologies, artificial intelligence, and DNA synthesis has propelled synthetic biology to new heights.

About Synthetic Biology

- Synthetic Biology is the application of engineering principles to biology, where biological components are designed, assembled, and modified to perform specific functions.
- It involves engineering organisms to possess **new or enhanced abilities beyond those found in nature.**

Applications

- **Healthcare:** Engineered microbes now produce artemisinin (anti-malarial) and insulin without plant or animal extraction.
  - **CAR-T cell therapy** where immune cells are reprogrammed to attack cancers is a direct product of **SynBio techniques**.
- **Agriculture:** Nitrogen-fixing microbes are being engineered to deliver nutrients directly to plants, reducing dependence on chemical fertilisers.
- **Energy and Environment:** Designer microorganisms can convert greenhouse gases like methane into high-value compounds.
- **Forensics and Materials:** Synthetic DNA watermarking demonstrates how biological systems can carry encoded information.

Challenges and Concerns

- **Biosafety and Biosecurity:** Engineered organisms, if accidentally or deliberately released, could disrupt ecosystems.
- **Regulatory Gaps:**
  - India currently lacks a comprehensive, standalone synthetic biology regulation. The DNA Technology (Use and Application) Regulation Bill has been pending for years (withdrawn).
  - Existing frameworks under the Environment Protection Act and the Recombinant DNA Safety Guidelines are inadequate for the scale of current SynBio activity.
- **Equity and Access**: SynBio heavily draws on biodiversity data often from megadiverse countries like India. Yet the benefits have historically flowed to labs and corporations in the Global North. This raises **Nagoya Protocol-linked questions around Access and Benefit Sharing (ABS).**
- **Ethical Concerns:** The possibility of engineering multicellular organisms or introducing designer genomes into fertilised eggs raises deep ethical questions. The line between therapy and enhancement remains contested.

India's Policy Response

- The **BioE3 Policy (Biotechnology for Economy, Environment, and Employment)**, approved by the Union Cabinet in August 2024, is a central pillar. It identifies six thematic areas: bio-based chemicals, biopolymers, APIs and smart proteins, precision biotherapeutics, climate-resilient agriculture, and carbon capture.
- **India's bioeconomy, valued at just $10 billion in 2014**, crossed $165 billion in 2024 and is targeting $300 billion by 2030. India is among the first countries globally to have a dedicated bioeconomy policy framework.
- Under BioE3, **"Moolankur"** Biofoundry Hubs were launched to give startups, academia, and SMEs access to shared biomanufacturing infrastructure.

Way Forward

- India needs a dedicated **National Synthetic Biology Policy**, one that consolidates regulatory frameworks, establishes clear biosafety protocols, and protects India's biodiversity-linked data interests.
- Academic curricula must integrate **computational biology and AI alongside conventional bench science.**
- International engagement through forums like the **Cartagena Protocol and CBD-COP** must reflect India's interests as both a biodiversity-rich nation and an emerging SynBio power.

CHANDRAYAAN-3 REVEALS DEEP LUNAR SECRETS FROM SHIV SHAKTI POINT

Data from Chandrayaan-3's Pragyan rover has revealed that the soil at Shiv Shakti Point near the Moon's South Pole is chemically very similar to a lunar meteorite (ALHA 81005) discovered in Antarctica. The findings are based on observations made by the Alpha Particle X-ray Spectrometer (APXS) onboard the rover.

About APXS

- An **Alpha Particle X-ray Spectrometer** is a highly specialized, lightweight instrument used on space missions to determine the elemental composition of extraterrestrial rocks and soils.
- **Woking principle:**
  - **Bombardment:** The instrument exposes a target surface to alpha particles and X-rays.
  - **Detection:** As the radiation hits the atoms in the rock or soil, it scatters the alpha particles and causes the target atoms to emit characteristic X-rays.
  - **Analysis:** By measuring the energy and intensity of these returning X-rays and alpha particles, scientists identify the exact chemical elements present and their relative abundances.

Significance of the Chemical Similarity

- The composition differs from conventional lunar highland rocks dominated by **ferroan anorthosite.**
- The soil shows a mixture of:
  - Ferroan anorthosite materials.
  - Magnesium-rich (Mg-suite) rocks.
- This suggests that **materials from deeper layers of the Moon** have mixed with the surface regolith.

Validation of the Lunar Magma Ocean Theory

- The findings provide fresh evidence for the **Lunar Magma Ocean Theory,** which states that:
  - The early Moon was covered by a **global ocean of molten rock.**
  - As it cooled, lighter minerals floated upward to form the crust, while **denser iron- and magnesium-rich minerals sank deeper.**
  - Detection of deep-seated iron and magnesium-bearing materials at the surface supports this model of lunar evolution.

Chandrayaan 3 and Shiv Shakti Point

- **Shiv Shakti Point** is the official name approved by the International Astronomical Union (IAU) for the Chandrayaan-3 landing site at 69.37°S on the Moon.
- **Lander Module (Vikram):** Designed with a "failure-based" approach featuring sturdier legs and more fuel. Its payloads include *ChaSTE* (thermal conductivity), *ILSA* (seismicity), and *RAMBHA* (plasma density).
- **Rover (Pragyan):** A 26 kg, 6-wheeled rover using *LIBS* and *APXS* instruments to analyze the elemental composition of the lunar surface.

GRAPES-3

Researchers from India and Japan have used the GRAPES-3 (Gamma Ray Astronomy PeV EnergieS phase-3) Telescope to develop a method for monitoring changes in the Earth's upper atmosphere in real time.

About

- **GRAPES-3 (Gamma Ray Astronomy PeV EnergieS–Phase 3)** is a cosmic ray observatory located at **Ooty, Tamil Nadu** at an altitude of about **2,200 metres** above sea level.
- Operated by- the **Tata Institute of Fundamental Research**.
- **The Earth's upper atmosphere**—spanning the mesosphere, thermosphere, and exosphere (roughly 50 km to 10,000 km above the surface)—is an extreme environment.
- **Objective:**
  - It is designed to **study the origin, acceleration, and propagation** of cosmic rays.
  - The observatory **investigates extensive air showers,** which are cascades of secondary particles produced when high-energy cosmic rays or gamma rays enter the Earth's atmosphere.
  - It measures particles in the **tera-electronvolt (TeV) to peta-electronvolt (PeV) energy range**, among the highest energies observed in nature.
- **Besides cosmic ray research, GRAPES-3 also studies:**
  - **Solar phenomena**, including the influence of solar activity on cosmic rays.
  - **Thunderstorm-related phenomena**, particularly atmospheric electric fields and their interaction with **cosmic-ray muons.**
- **The observatory uses:**
  - **An array of plastic scintillator detectors** to detect extensive air showers.
  - **A large-area muon detector** based on proportional counters to measure high-energy muons reaching the Earth's surface.

Gamma Rays

- **Gamma rays (symbol γ):**
  - They are the highest-energy, shortest-wavelength form of electromagnetic radiation (light).
  - Emitted from the atomic nucleus during radioactive decay or extreme cosmic events,
  - These weightless packets of energy are highly penetrating and can cause cellular damage because of their ionizing nature
- **Sources of Gamma Rays**
  - **Cosmic events:** They are produced by supernova explosions, neutron stars, pulsars, and black holes.
  - **Radioactive decay:** On Earth, they are typically emitted by the unstable nuclei of radioactive elements (like Cobalt-60 or Cesium-137) as they shed excess energy.
  - **Other phenomena:** Terrestrial sources also include lightning flashes and nuclear explosions.

Muons

- Muons are elementary subatomic particles similar to electrons but about 200 times heavier.
- They are produced when high-energy cosmic rays originating from outer space collide with atoms in the Earth's upper atmosphere.
- Due to their high energy and penetrating ability, many muons reach the Earth's surface and can be detected.

100 YEARS OF SOLAR DATA

The Kodaikanal Solar Observatory, home to India's longest continuous solar data record, has provided valuable insights for predicting future solar cycles.

About

- The energy generated within the Sun is **transported through its outer layers via convection.**
  - **Convective cells** lead to the formation of **small-scale granulations** and **large scale supergranulations** as a network structure on the solar surface.
  - **The network cells** have an average lifetime of **24 hr,** and a size of about 30,000 km., The width of the cooler intergranular lanes is about 6000 km.
  - The origin of these supergranulations, their size, and what is their relation with the 11-year solar cycle **is not known.**
  - A recent study from the Indian Institute of Astrophysics based on more than 100 years of data from the Kodaikanal Solar Observatory **sheds some light on these questions.**
- **The findings suggest** that **supergranular properties,** such as lane width and intensity, are **influenced by local magnetic flux and solar activity levels.**
  - The analysis confirms that **while no single latitude follows the solar cycle exactly, significant correlations exist at specific latitudes** for different quantities.
  - It highlights the **importance of understanding these correlations for predicting solar activity**.

Solar Cycle

- The solar cycle is the cycle that the **Sun's magnetic field goes through approximately every 11 years.**
- The Sun is a huge ball of electrically-charged hot gas. This charged gas moves, **generating a powerful magnetic field.**
  - Every 11 years or so, the Sun's **magnetic field completely flips.** This means that the **Sun's north and south poles switch places.**
  - Then it takes about **another 11 years for the Sun's north and south poles to flip back again.**
- The solar cycle affects activity on the surface of the Sun, such as **sunspots which are caused by the Sun's magnetic fields.**
  - As the magnetic fields change, so does the amount of activity on the Sun's surface.
- **Tracking of Solar Cycle:** One way to track the solar cycle is by **counting the number of sunspots.**
  - The beginning of a solar cycle is a **solar minimum,** or when the Sun has the least sunspots.
  - Over time, solar activity and the number of sunspots increases.
  - The middle of the solar cycle is the **solar maximum**, or when the Sun has the most sunspots.
  - As the cycle ends, it fades back to the solar minimum and then a new cycle begins.
- **Forecasting:**
  - Astronomers use many different ways to forecast the strength of the next solar cycle.
  - This includes theoretical calculations based on dynamo models, extrapolations, precursor methods, etc.
  - The precursor method uses the value of some measure of solar activity at a specified time to predict the strength of the following solar maximum.

INDIGENOUS AI MODEL VARYA

The IndiaAI Mission has supported the launch of Varya, an indigenous AI-powered video generation model developed by Avataar.

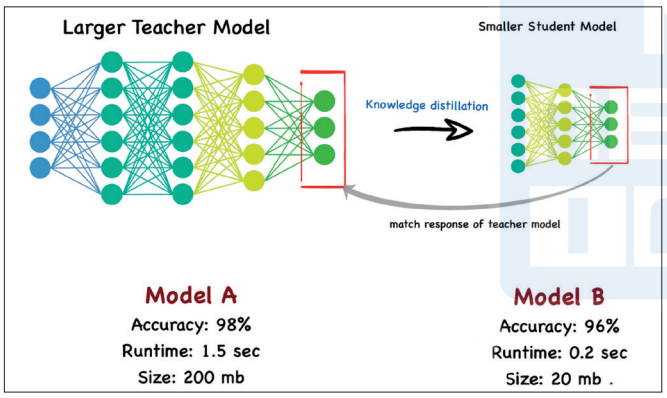
About

- Varya is a **distilled video generation model** that converts text prompts and images into videos.
  - Model Distillation is a machine-learning technique in which a **smaller AI model** is trained using the outputs of a **larger AI model** so that it can achieve similar performance with lower computational cost, faster processing, and reduced energy consumption.

- It is designed to generate culturally relevant visual content reflecting India's regions, festivals, traditions, clothing, food, and everyday life. The platform follows the workflow, **from Idea to Video to Story,** allowing users to create and extend visual narratives through simple prompts.
- **Key Features:** Reduces video generation steps from **50 to 4,** significantly improving efficiency.
  - Generates videos at an estimated cost of Rs 0.48 per second, and claims to be up to **10 times more cost-efficient** than several leading global video-generation models.

How Varya Works: Distilled AI

- Varya uses a machine learning compression technique called "distillation". By teaching a smaller "student" model to replicate a larger "teacher" model, it bypasses redundant computations to reduce processing steps from 50 down to just 4.
- **Speed:** It can generate a 5-second, 720p video clip in about 45 seconds.
- **Affordability:** It costs approximately ₹0.48 per second, making it significantly more accessible and cost-efficient than leading global models.



Distilled AI

- AI model distillation (or knowledge distillation) is a machine learning technique where a small, compact model (the "student") learns to replicate the behavior and predictions of a massive, complex model (the "teacher").
- This produces a lightweight, fast, and cost-effective AI model that retains near-teacher accuracy

HIGH ENERGY MEDICAL CYCLOTRON PROJECT

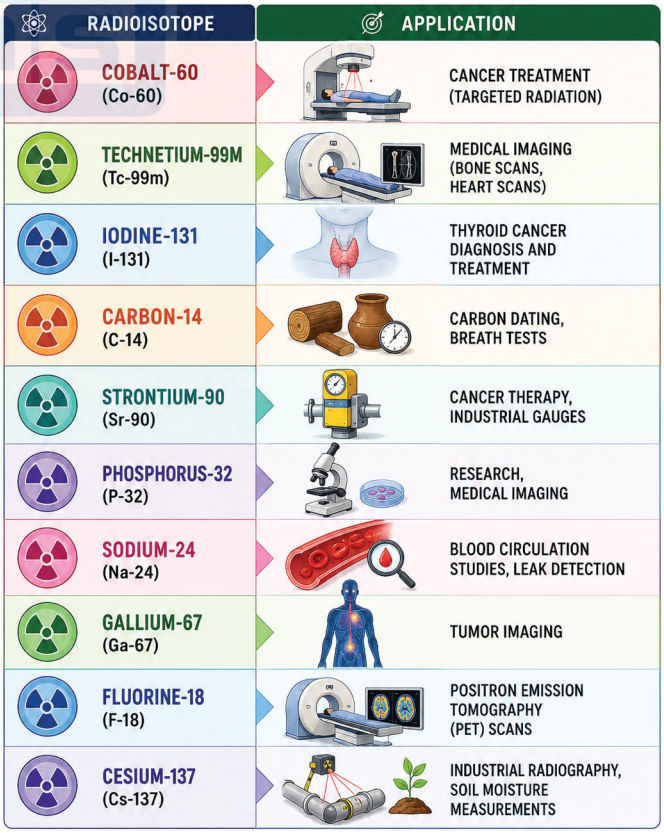
The Maharashtra Cabinet approved the establishment of the High Energy Medical Cyclotron Project (HEMCP) in Nagpur with an allocation of ₹300 cr.

About

- A medical cyclotron is a **specialized particle accelerator** that produces radioactive substances called **radioisotopes** for use in healthcare.
  - It works by **accelerating charged particles, such as protons,** to very high speeds using electric and magnetic fields.
  - These high-speed particles are then directed at a target material, triggering nuclear reactions that generate radioisotopes.
- **The radioisotopes produced are used in:** PET (Positron Emission Tomography) scans and PET-CT imaging; various nuclear medicine diagnostic procedures and targeted radionuclide therapies for treating diseases such as cancer.
- **Common medical radioisotopes** include Fluorine-18 (F-18), Gallium-68 (Ga-68), Lutetium-177 (Lu-177) etc.

Radioactive Isotopes and their Uses

- **Cobalt-60 (Co-60):** Emits high-energy gamma rays and is a primary isotope used in External Beam Radiation Therapy (EBRT) and teletherapy (e.g., to treat tumors and leukemia).
- **Iodine-131 (I-131):** Used for thyroid cancer and hyperthyroidism. Because the thyroid naturally absorbs iodine, this acts as a highly targeted therapy.
- **Iridium-192 (Ir-192):** Used in brachytherapy to place localized radioactive sources directly inside or near tumors (common in cervical or breast cancers).
- **Lutetium-177 (Lu-177):** Utilized in targeted radionuclide therapy for neuroendocrine tumors and prostate cancer.
- **Yttrium-90 (Y-90):** Commonly used in radioembolization for liver cancer (hepatocellular carcinoma).



India's Institutional Framework

- **BARC (Bhabha Atomic Research Centre):** Produces medical radioisotopes at reactors like *Dhruva* in Trombay. They have also developed tiny titanium-encapsulated Iodine-125 seeds to treat eye cancer.
- **BRIT (Board of Radiation and Isotope Technology):** The operational arm of the Department of Atomic Energy (DAE) responsible for processing and supplying these radioisotopes for medical use.
- **AERB (Atomic Energy Regulatory Board):** The statutory body responsible for regulating the safety and usage of radiation technology in India.

EPICHLOROHYDRIN

India has banned the use of epichlorohydrin, a paper-strengthening chemical classified as a potential carcinogen, and chlorine bleaching in tea bags sold in the country.

About

- **Epichlorohydrin** is a chemical commonly used in paper manufacturing to improve the strength and **durability of paper products.** It has been used in the production of **tea bag paper to prevent tearing during brewing.**
- The International Agency for Research on Cancer (IARC) classifies **epichlorohydrin as probably carcinogenic to humans.** Concerns have been raised that residues of the chemical may migrate into beverages when tea bags are immersed in hot water.
- The ban aims to reduce potential health risks associated with prolonged exposure to hazardous chemicals in food-contact materials.
- **BIS Ban on Tea Bags:** The BIS introduced first-ever quality standards for tea bags in India, completely prohibiting the use of epichlorohydrin (a paper-strengthening agent) and chlorine bleaching agents due to potential migration into hot beverages.
- **Trade Remedies (Anti-Dumping):** To protect domestic manufacturers, India's Department of Revenue (acting on the recommendation of the DGTR) has imposed anti-dumping duties on epichlorohydrin imported from China, South Korea, and Thailand

AMPLIFYING' RANDOM NUMBERS

Researchers at ETH Zürich have experimentally demonstrated device-independent randomness amplification, converting weakly random data into certifiably perfect randomness using quantum entanglement.

About

- Modern digital security relies on **cryptographic keys,** which are generated using random numbers.
  - If random numbers contain patterns or biases, **attackers may predict keys and compromise encryption.**
- **True randomness is difficult to achieve** because practical random number generators often contain small biases due to noise, heat, or hardware imperfections. **This represents a fundamental limitation of classical computation** and motivated the search for quantum methods to achieve perfect randomness.
- **Randomness Amplification:** It is the process of starting with an imperfect or biased random source and using quantum correlations generated through entanglement **to produce output that is certifiably unbiased and unpredictable.** It has potential use in **lotteries, blockchain systems, auditing, and secure digital infrastructure.**

Working

- **The Problem:** Modern digital encryption relies on cryptographic keys generated by random numbers. Classical algorithms cannot create true, perfectly unbiased randomness from a single weak, imperfect source.
- **The Quantum Solution:** This technique utilizes quantum correlations and Bell tests to "amplify" weak randomness into perfect randomness.
- **Device-Independent:** It offers the highest level of security because it mathematically guarantees unpredictable outputs, regardless of whether the hardware was tampered with or contains manufacturer biases.
- **Limitations:** The setup is currently large, complex, and laboratory-based. Output rates are much lower than commercial random-number generators.

Cybercrime

About:

- Cybercrime refers to criminal activities that involve the **use of computers, networks, and digital technologies.**
- It encompasses a **wide range of illicit activities** conducted in the virtual space, often with the intent to compromise, damage, or gain unauthorized access to computer systems, networks, and data.
- Cybercriminals employ **various techniques and tools** to exploit vulnerabilities in networks, and they may target individuals, organizations, or even governments.

Impact:

- **National Security Threat:** Cyber crimes target critical infrastructure, government institutions, and military systems, posing serious security risks.
- **Data Breaches:** They expose personal information, trade secrets, intellectual property, and other confidential data.
- **Service Disruptions:** Cyber attacks disrupt essential services such as power grids, communication networks, and transportation systems.

CERVAVAC'S IN NIP

Indigenously developed HPV vaccine by SII, backed by DBT, is likely to be incorporated into the National Immunisation Programme (NIP) post-2027.

About

- **Cervavac**, India's first indigenously developed HPV vaccine, is currently administered in a **two-dose schedule**, which limited its inclusion in the national HPV vaccination programme.
- An ongoing clinical trial is assessing the effectiveness of a **single-dose regimen**, with results expected next year.
- Earlier this year, the Ministry of Health and Family Welfare launched a nationwide HPV vaccination campaign targeting 14-year-old girls using MSD's Gardasil vaccine.

Human Papillomavirus (HPV)

HPV is a common sexually transmitted infection. Most infections are asymptomatic and self-limiting.

- **Nature:** HPV is a DNA virus from the Papillomaviridae family.
- **Diseases Caused by HPV:**
  - Cervical cancer (over 95% of cases linked to HPV).
  - ***Other cancers:*** anal, vaginal, vulvar, penile and oropharyngeal cancers.
  - Genital warts (non-cancerous).
- **High-Risk and Low-Risk Types:** HPV types 16 and 18 are high-risk strains responsible for the majority of cervical cancer cases (over 80% in India). Types 6 and 11 are low-risk strains that primarily cause genital warts.
- **HPV vaccination:** It prevents infection from the most dangerous HPV types. Most effective when given before sexual debut (ages 9–14 years).

Cervical Cancer: India and Global Scenario

- **Global burden:** Around **6.6 lakh new cases** and **3.5 lakh deaths** are reported annually worldwide.
- India Accounts for nearly **one-fourth of global cervical cancer** deaths, the highest burden for any country. Around one Indian woman dies from cervical cancer every **7–8 minutes**.
- Globally, cervical cancer causes approximately **350,000 deaths annually**, with the majority occurring in low- and middle-income countries.
- The disease is largely preventable through HPV vaccination, regular screening, and early treatment.

Recent Discoveries and Medical Advancements in Cervical Cancer:

- **HPV Vaccines:** Introduction of vaccines such as **Cervavac, Gardasil**, and **Cervarix** for effective prevention.
- **AI-Based Screening:** Artificial Intelligence is being used for faster and more accurate cervical cancer screening.
- **HPV DNA Testing:** More sensitive than traditional Pap smear tests for early detection.
- **Immunotherapy:** Drugs such as **Pembrolizumab** are improving outcomes in advanced cervical cancer cases.

WORLD'S FASTEST SUPERCOMPUTER

China has overtaken the United States to win the top spot on a list of the world's fastest supercomputers.

About

- A supercomputer called **LineShine,** housed at the **National Supercomputing Center in Shenzhen,** has been crowned the **world's fastest supercomputer.**
  - The system **clocked 2.198 exaflops**— more than 2 quintillion calculations every second.
  - LineShine runs **entirely on CPUs**, the ordinary processors most supercomputers ditched years ago in favor of GPUs.
- **El Capitan,** a supercomputer that the US government uses to develop and maintain its nuclear weapons stockpile has been **ranked second.**
- **India's Ranking:**
  - India's most powerful supercomputer, **Shakti Cloud,** is currently **ranked 32nd** on the TOP500 list, with a performance of **84.31 petaflops.**
  - China's LineShine is roughly **26 times faster** than India's most powerful listed system.
- India's supercomputing ambitions are being driven by the **National Supercomputing Mission (NSM),** launched in 2015.
  - Under the mission, India has deployed **38 supercomputers** across research and academic institutions, creating a **combined computing capacity of 47 petaflops.**
  - India has also developed indigenous systems such as the **PARAM Rudra series** while expanding its broader digital and computing infrastructure.

Supercomputers

- A supercomputer is an extremely powerful computer designed to perform **vast numbers of calculations at very high speeds.**
- Supercomputers are used for problems that are too complex or time-consuming for ordinary computers.
- Performance is often measured in **FLOPS (floating-point operations per second).**
- Modern supercomputers can perform quintillions (10^{18}) of calculations per second, reaching exascale computing levels.

Features:

- **Massive processing power:** Thousands to millions of processors work together.
- **Parallel computing:** Many calculations are performed simultaneously.
- **Huge memory and storage:** Can handle enormous datasets.
- Specialized design: Optimized for scientific and engineering tasks rather than everyday applications.

INDIA'S SUPERCOMPUTER JOURNEY
FROM PARAM 8000 SUCCESS
TO FALLING BEHIND IN THE GLOBAL AI RACE

India built its first supercomputer in 1991 and created a global buzz.
But today, it is missing from the world's top 30.
Here's a look at India's journey, current standing and the road ahead.

THE BEGINNING: PARAM 8000 (1991)

- Developed indigenously by **C-DAC** (Centre for Development of Advanced Computing Technology) in 1991.
- **64-node PARAM 8000** was the first machine in the series and built from scratch.
- Created a buzz worldwide and exported to Germany, the UK, Russia and 14 other countries.
- Sold at a price of just **$350,000**, much lower than competing systems.

WHERE INDIA STANDS TODAY – GLOBAL SUPERCOMPUTER RANKING

India launched the **National Supercomputing Mission (NSM)** in 2015 with an outlay of **₹4,500 crore.**

Despite the mission, India does not have a place in the top 30. Its highest-ranked system is:

Shakti Cloud

32nd in the TOP500 list (June 2026)

TOP 5 SUPERCOMPUTERS IN THE WORLD (JUNE 2026)

RANK	SYSTEM (COUNTRY)	PERFORMANCE
1	LineShine (China)	2.198 Exaflops
2	El Capitan (US)	1.809 Exaflops
3	Frontier (US)	1.353 Exaflops
4	Aurora (US)	1.012 Exaflops
5	JUPITER Booster (Germany)	1.000 Exaflops

China's LineShine (2.198 Exaflops) is approximately 26 times faster than India's top-ranked Shakti Cloud (84.31 PFlop/s).

INDIA'S BEST PERFORMER

SHAKTI CLOUD

Located at Yotta Data Services.

- India's fastest and best supercomputer.
- Achieved a performance of **84.31 PFlop/s (petaflops per second)** on the High Performance Linpack (HPL) benchmark.

PARAM RUDRA SERIES – INDIGENOUS SUPERCOMPUTERS DEPLOYED ACROSS INDIA

IIT BOMBAY

Involved in research in AI, biotechnology and advanced manufacturing.

Performance:
3 PetaFLOPS

IIT PATNA

180-node compute machine working in computational biology, cryptography, quantum computing and climate modeling.

IUAC, DELHI

Performance:
3 PetaFLOPS

Helps more than 350 universities in research of energy production and environmental monitoring.

GMRT, PUNE

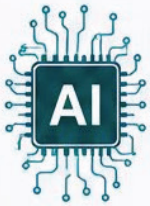
1 PetaFLOPS system equipped with GPUs to enhance the sensitivity of radio telescopes for advanced studies in astrophysics.

SNBNCBS, KOLKATA

Designed to handle complex problems in earth science, cosmology and high-energy physics.

Performance:
838 TeraFLOPS

WHY SUPERCOMPUTERS ARE CRUCIAL FOR AI AND NATIONAL GROWTH



- Complex and complicated simulations
- Training large AI models like the LLM
- Processing massive datasets
- Parallel processing of data
- Faster research and development
- Supporting complex scientific and industrial applications

India's lag in supercomputing is one reason it is left behind in the race for Artificial Intelligence leadership.

AI systems need enormous computing power to process data, train models and make predictions efficiently.

FOCUS ON THE FUTURE

Inaugurating the PARAM Rudra supercomputer at the S.N. Bose National Centre for Basic Sciences (SNBNCBS), Kolkata on September 27, 2024, Prime Minister Narendra Modi emphasised the role of supercomputers.

PARAM RUDRA Powering India's Computing Future

PARAM Rudra will assist computational researchers in Institutes like:

- Bose Institute
- Saha Institute of Nuclear Physics (SINP)
- Indian Institute of Chemical Biology (IICB)
- Indian Institute of Science Education and Research (IISER) Kolkata

8 SOCIETY

EVOLUTION OF LGBTQ+ RIGHTS IN INDIA

June is observed globally as Pride Month to celebrate the LGBTQ+ community and raise awareness about issues of equality, inclusion, and human rights.

About LGBTQ+ Community

- **LGBTQ+** is an umbrella term for **Lesbian, Gay, Bisexual, Transgender,** and **Queer persons,** with '+' representing other identities that are not specifically included in these letters.
- **Notably, LGBTQ+** persons do not conform with traditional gender roles and expectations, display sex characteristics that do not fit the typical male or female binary, and their gender identities that differ from the sex they were assigned at birth.

What is Pride Month?

- Pride Month traces its origins to the **1969 Stonewall Uprising** in New York City. It commemorates the struggle for LGBTQ+ rights and celebrates diversity and inclusion.
- In India, the **'Friendship Walk'** held in Kolkata on **2 July 1999** is widely regarded as the precursor to the country's Pride Parade movement.

India's Position on LGBTQ+ Rights

- **As per census 2011,** there were 4.87 lakhs persons in India who opted for "**other" in gender category.**
- **Constitutional Provisions:** Article 14 Right to equality, Article 15 No discrimination on grounds of sex and Article 21 Right to life and personal liberty.
- **Legislation:** The Transgender Persons (Protection of Rights) Act, 2019 provides legal recognition of transgender identity.

Challenges Faced by LGBTQ Community in India

- **Lack of Marriage Equality & Legal Protections:** Despite the 2018 decriminalization of Section 377, the Supreme Court ruled in 2023 that there is no fundamental right to marry for LGBTQ+ couples. This leaves partners without essential legal protections regarding adoption, inheritance, joint bank accounts, and emergency medical decision-making.
- **Societal Stigma & Family Rejection:** Deep-seated cultural conservatism makes family acceptance difficult. Queer youth face immense pressure to enter heterosexual marriages for family prestige.
- **Housing and Employment Discrimination:** Landlords routinely refuse to rent to queer and transgender individuals. In the workplace, community members endure harassment, bias in promotions, and microaggressions. High unemployment rates and systemic discrimination force many individuals to conceal their identities or drive them into begging and sex work.
- **Healthcare Barriers:** The medical system is largely unequipped for LGBTQ+ needs, often subjecting patients to insensitivity, misgendering, and pathologization.
  - Severe isolation, bullying, and identity concealment fuel high rates of mental health issues, which remain unaddressed due to a lack of queer-affirming therapists.
- **Systemic Transgender Barriers:** Although the Transgender Persons (Protection of Rights) Act, 2019 established a framework for legal gender recognition, the transgender community still faces severe systemic barriers when trying to avail basic services, including immense difficulties in formally updating official identity documents.

Supreme Court Cases

- **Navtej Singh Johar v. Union of India (2018):** This historic Supreme Court ruling partially struck down Section 377 of the Indian Penal Code.
- **National Legal Services Authority (NALSA) v. Union of India (2014):** The Supreme Court legally recognized transgender individuals as a "third gender.
- **Supriyo Chakraborty v. Union of India (2023):** A five-judge Supreme Court Constitution Bench unanimously ruled against the legalization of same-sex marriage in India.
- **Deepika Singh v. Central Administrative Tribunal (2022):** The Supreme Court recognized that "atypical" families (including queer relationships and non-traditional parenting roles) are equally deserving of legal protection, such as maternity leave benefits.
- **Arun Kumar v. Inspector General of Registration (2019):** The Madras High Court declared that a marriage between a Hindu male and a transgender woman is valid under the Hindu Marriage Act, 1955, and directed the registration of such unions.

Measure to bring betterment in LBGTQ+ in Society

- **Legislative Reforms**: Amend the Special Marriage Act (SMA) 1954 or pass a civil union law to grant same-sex couples rights regarding adoption, surrogacy, inheritance, and joint taxation.
- **Anti-Discrimination Laws**: Enact comprehensive anti-discrimination legislation applicable to both public and private spheres (workplaces, housing, healthcare).
- **Sensitization Drives**: Implement targeted gender-sensitivity training for law enforcement (police), the judiciary, and healthcare professionals to curb institutional harassment.
- **Inclusive Education**: Integrate LGBTQIA+ topics and comprehensive gender and sexuality studies into school and university curricula to reduce stigma from an early age.

RUNG COMMUNITY

The Rung community in Uttarakhand opposed the installation of a Shivling and near Om Parvat citing their tradition of nature worship.

About

- The Rung (or Shauka) are an indigenous Tibeto-Burman tribal community native to the high-altitude valleys of Vyans, Darma, Chaudans, and Johar in Pithoragarh, Uttarakhand
- **Tribal Status:** Legally recognized as a Scheduled Tribe in India, and fall under the broader Bhotia group
- **Language/Culture:** Speak the Runglo (Rangkas) language and various localized dialects. They practice the unique **Kandali Festival**, a celebration held once every 12 years commemorating the community's historical victory over invading forces
- **Livelihoods:** Traditionally practiced trans-Himalayan trade, which ceased after the 1962 Sino-Indian War. Today, they rely on subsistence agriculture, pastoralism, and the collection of rare medicinal herbs
- They Revere natural manifestations of **Lord Shiva**, including sacred mountains such as **Om Parvat and Adi Kailash.**

Notable Figures and Achievements

- **Nrip Singh Napalchyal:** A prominent retired Indian Administrative Service (IAS) officer and former Chief Secretary of Uttarakhand. He has been a leading figure in the Rung Kalyan Sanstha, working to preserve the Rungs' unique trans-Himalayan identity, cultural heritage, and oral history.
- **Mohan Upreti:** A celebrated folk singer and music composer from the Kumaon region, widely credited with composing the classic Kumaoni folk song "Bedu Pako Baro Masa," which is deeply intertwined with the cultural roots of the region.
- **Community Recognition:** The community's efforts to preserve their indigenous dialects (such as Runglo/Rangkas) gained national recognition when Prime Minister Narendra Modi praised them on his *Mann Ki Baat* program for their dedication to passing down their mother tongue

Do You Know?

- Uttarakhand officially recognizes five major Scheduled Tribes (STs), i.e. Tharu, Jaunsari, Buksa (Bhoksa), Bhotia, and Raji.
- Uttarakhand has two officially recognized Particularly Vulnerable Tribal Groups (PVTGs), i.e. the **Raji** and the **Boxa** (or Buksa).

DECLINING FERTILITY RATE IN INDIA

According to the Sample Registration System> (SRS) Statistical Report 2024, India's Total Fertility Rate (TFR) has declined to 1.9, below the replacement level of 2.1.

Key Findings

- TFR is the average number of children a woman is expected to have during her **reproductive years (15–49 years)**.
- Replacement level fertility is the number of children required to keep the population stable without migration.
- In 2024, only Bihar, Uttar Pradesh, Madhya Pradesh, Rajasthan, and Chhattisgarh recorded a **TFR above 2.1**.
- **Delhi** recorded the lowest TFR (1.2), followed by **Tamil Nadu, Kerala,** and **West Bengal** (1.3 each).
- India's TFR has declined from 4.3 in 1985 to 1.9, and is projected to fall below 1.6 by 2031.

Reasons

- Delayed marriage and postponement of childbirth.
- Urbanisation and rising cost of housing, education, healthcare, and childcare.
- Better access to family planning and contraceptive services.
- Declining infant and child mortality due to improved healthcare.
- Higher cost of raising children and preference for smaller families.
- Advancement to the later stage of the Demographic Transition Model.

Implications

- Slower population growth and eventual population stabilisation.
- Rising ageing population, increasing demand for pensions, healthcare, and geriatric care.
- Declining future workforce, which may affect long-term economic growth.
- **Regional fertility differences** may influence migration, political representation, resource allocation, and labour markets.

Major Concerns

- India is ageing at a lower income level with a narrow tax base and fiscally constrained States.
- High informal employment limits pension coverage and retirement security.
- Existing social security schemes provide limited financial support for the elderly.

Government Initiatives

- State population policies promoting family support and fertility.
- Jiyo Parsi Scheme for infertility assistance.
- National Health Mission (NHM) and Pradhan Mantri Matru Vandana Yojana for maternal and child health.
- Mission Shakti and Palna Scheme for childcare and women's empowerment.
- Atal Vayo Abhyudaya Yojana, Integrated Programme for Senior Citizens (IPSrC), and Seniorcare Ageing Growth Engine (SAGE) to support the elderly and promote the silver economy.

9 CULTURE & HISTORY

LOKMATA AHILYABAI HOLKAR (1725–95)

Prime Minister Narendra Modi paid tribute to Ahilyabai Holkar on her birth anniversary.

About

- **Ahilyabai Holkar** was the celebrated queen of the **Holkar dynasty** and ruler of the **Malwa kingdom** in the 18th century.
- Born on **31 May 1725** in **Chondi**, she was the daughter of **Mankoji Rao Shinde**.
- She married **Khanderao Holkar**, son of **Malhar Rao Holkar**.
- After the deaths of her husband, father-in-law, and son, she assumed administration of **Malwa in 1767** with the **Peshwa's approval**. Her capital was **Maheshwar**.
- She is remembered as the **"Philosopher Queen"** for her wise and people-centric rule.

Major Contributions

- Held **daily public audiences** for grievance redressal and justice.
- Introduced welfare reforms for **farmers, artisans, tribal communities, and lower castes**.
- Promoted **irrigation**, **crop diversity**, and **rural entrepreneurship**.
- Supported **women's education**, **widow remarriage**, **property rights for women**, and opposed **sati**.
- Formed a **women's army**, village safety units, and personally led military campaigns, including establishing the **Holkar army in 1792**.

Cultural Legacy

- Rebuilt and restored **hundreds of temples**, including **Kashi Vishwanath Temple (1780)** and **Somnath Temple**, and built **two Jyotirlinga temples**.
- Constructed roads, ghats, wells, tanks, dharamshalas, and rest houses across **Rameshwaram, Haridwar, Kashi, and Somnath** pilgrimage routes.
- Made **Maheshwar** and **Indore** major trade centres and founded the **Maheshwari saree** tradition. Established **gurukuls** and schools.
- She died on **13 August 1795** and is remembered for combining **development with dharma (duty)**.

BIRSA MUNDA (1875–1900)

Prime Minister Narendra Modi paid tribute to Birsa Munda on his martyrdom day (9 June).

About

- **Birsa Munda** was born on **15 November 1875** in **Ulihatu** in the then **Bengal Presidency**.
- He was a tribal freedom fighter, socio-religious reformer, and folk hero of the **Munda tribe** in the **Chotanagpur region**.
- He founded the **Birsait religion**, based on belief in **One God**, social reform, and tribal identity.
- His followers called him **"Dharti Abba" (Father of Earth)**.

Major Contributions

- He mobilised tribal communities against **British rule**, **landlords**, **moneylenders**, **missionary influence**, **forced labour**, and **land alienation**. His movement was influenced by the earlier **Sardari Larai (Sardar Movement)**.
- He opposed the destruction of the traditional **Khuntkatti system**, which gave tribals collective land rights. He gave the slogan **"Abua Raj Ete Jana, Maharani Raj Tundu Jana"**, meaning tribal self-rule.

Ulgulan Movement

- Birsa led the **Munda Rebellion**, also called **Ulgulan (Great Tumult)**, to restore tribal rights and end exploitation by **Dikus**.

Legacy

- He was arrested in **Jamkopai forest** and died in **Ranchi Jail** on **9 June 1900**, officially due to **cholera**.
- His struggle influenced the **Chotanagpur Tenancy Act, 1908**, which restricted transfer of tribal land to non-tribals.
- Since **2021**, **Janjatiya Gaurav Divas** is observed on his birth anniversary to honour tribal contributions.

INDIA–CHINA JOINT UNESCO NOMINATION FOR XUANZANG'S RECORDS

India and China are in advanced discussions for a joint UNESCO nomination of The Great Tang Records on the Western Regions. The proposal is being led by China and is under consideration by India's Ministry of External Affairs.

Who was Xuanzang?

- **Xuanzang** (Hiuen Tsang) was a Chinese Buddhist monk, scholar, and traveller of the **7th century Common Era (CE)**.
- He travelled across **India** and **Central Asia** for nearly **19 years** during the reign of **Harshavardhana**.
- He studied at **Nalanda University** for nearly **five years**.
- He played an important role in spreading **Mahayana Buddhism** in China.

Importance of His Work

- After returning to China, he wrote **Si-yu-ki**, also known as **The Great Tang Records on the Western Regions**.

- The work provides detailed information on:
  - **Political conditions** under Harshavardhana and other rulers.
  - **Social and economic life** of early medieval India.
  - **Religious traditions** and Buddhist institutions.
  - **Geographical and trade conditions** of the period.

Other Joint UNESCO Nominations

- Panchatantra with Iran.
- Satyagraha philosophy with South Africa.

Significance

- **UNESCO** allows only a limited number of dossiers from each country in one nomination cycle.
- Joint nominations improve chances of inscription and help preserve **shared civilisational traditions**, such as **Ramayana** links with **Indonesia** and Buddhist heritage between India and China.

NCERT DANCING GIRL ROW

National Council of Educational Research and Training restored the original image of the Dancing Girl after criticism over its altered textbook depiction.

About

- The Dancing Girl is a 4,500-year-old bronze statuette of the Indus Valley Civilization (c. 2600–1900 Before Common Era (BCE)).
- It was discovered in 1926 at Mohenjo-daro by archaeologist Ernest Mackay.
- The figurine is around 10.5–10.8 cm tall and shows a bare-torso female figure with a necklace and 24–25 bangles on one arm.

Technique and Importance

- It was made using the **lost-wax technique (cire perdue)**, showing the advanced metallurgical skills of the Harappans.
- This technique is still practiced in **West Bengal, Jharkhand, and Chhattisgarh**.
- The original artefact is preserved at the **National Museum**.

Historical Debate

- The term **"Dancing Girl"** was given by **John Marshall**, but there is **no archaeological proof** that she was a dancer.
- Scholars suggest alternative interpretations such as **Mother Goddess**, **ritual figure**, or even a **warrior figure**.
- The label reflects possible **colonial bias** in interpreting Indian heritage.

Significance

- The controversy raises an important question: whether historical artefacts should be shown **in their original form** or modified according to modern moral standards.
- Altering such artefacts may distort the actual material culture of the Harappan civilisation.

Indus Valley Civilization (IVC)

- The IVC, also known as the Harappan Civilization, is believed to be one of the oldest world civilizations that flourished roughly between 2600 and 1900 BC.
- It developed primarily along the Indus River system and covered large parts of present-day Pakistan and north-western India.
- The civilization is known for its well-planned cities, drainage systems, standardized weights and measures, craft production, and long-distance trade networks.
- It is considered a Bronze Age Civilization due to the widespread use of copper-based alloys.

Major Sites of the Indus Valley Civilization

Site	Present Day
Harappa	Punjab, Pakistan
Mohenjo-Daro	Sindh, Pakistan
Dholavira	Kutch district of Gujarat,
Kalibangan	Rajasthan
Lothal	Gujarat
Rakhigarhi	Haryana
Chanhudaro	Sindh, Pakistan
Ganweriwala	Punjab, Pakistan
Sutkagendor	Baluchistan Province, Pakistan
Alamgirpur	Uttar Pradesh

GI RECOGNITION FOR JHARKHAND'S TRADITIONAL HERITAGE

Eleven traditional products of Jharkhand have recently received the Geographical Indication (GI) Tag, strengthening the State's tribal heritage and cultural identity.

New GI-Tagged Products

Textiles:

- **Bhagaiya Silk** – produced in the **Bhagaiya region of Godda district**, known for traditional handloom weaving and fine silk.
- **Kuchai Silk** – cultivated naturally on **Asan** and **Arjun** trees in **Seraikela-Kharsawan**, historically known as **Kuchai**.
- **Tumka Chadar** – a traditional handwoven shawl or bedspread made by tribal artisans.
- **Pancho Saree and Fabric** – handwoven textile known for unique tribal patterns.
- **Bhoya Saree and Fabric** – another important traditional textile of Jharkhand.

Crafts:

- **Dokra Craft –** one of India's oldest metal-casting traditions using the lost-wax technique.
- **Munda Jewellery** – traditional ornaments reflecting the artistic identity of the **Munda tribe**.
- **Jharkhand Bamboo Craft** – bamboo-based utility and decorative items.

Paintings:

- **Baroni Paintings** – folk art depicting tribal customs, nature, and daily life.
- **Jadopatia Painting** – scroll painting of the **Santhal community**, based on folklore and mythology.

Food:

- **Kesaria Kalakand** – a traditional sweet of the region.
- Earlier, **Sohrai Painting** had also received GI recognition.

About Geographical Indication (GI)

- A **GI Tag** identifies products whose quality and reputation are linked to a specific place.
- It allows only **authorised producers** of that region to use the name and protects against imitation.

Legal Framework

- Governed by the Geographical Indications of Goods (Registration and Protection) Act, 1999.
- Administered by the Controller General of Patents, Designs and Trade Marks under the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry.
- It is also protected under the World Trade Organization Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement.
- GI registration remains valid for **10 years** and is renewable.

Significance

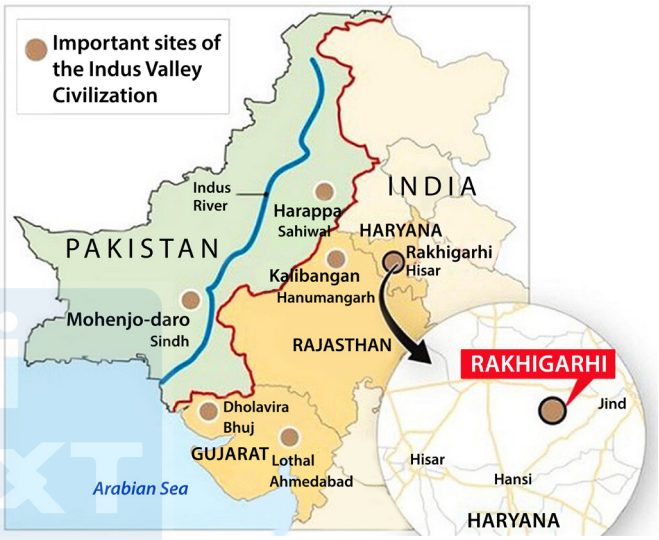
- GI tags improve **market value**, preserve **tribal traditions**, protect **indigenous craftsmanship**, and create better livelihood opportunities for artisans and weavers.

RAKHIGARHI

The Archaeological Survey of India (ASI) has sent nearly 5,000-year-old skeletons unearthed at Haryana's Rakhigarhi, for scientific examination and facial reconstruction.

Rakhigarhi

- The present-day Rakhigarhi is located **27 km** from the **Ghaggar river**, in the **Ghaggar-Hakra river plain** in Haryana.
- The archaeological site, dating back to **2600-1900 BCE.**
- It is the **largest Harappans site** in the Indian Subcontinent.
- The site was first excavated by **Amarendra Nath of Archaeological Survey of India (ASI).**
- **Findings**
  - **Granary:** A granary belonging to the mature Harappan phase (2600 BCE to 2000 BCE) has been found here. It has 7 rectangular or square chambers.
  - **Culture, clothing and worship:** Fire altars and apsidal structures were revealed in Rakhigarhi.
  - **Cemetery and burial sites:** A cemetery of Mature Harappan period is discovered at Rakhigarhi, with eight graves found.



Harappan Civilization

- The Harappan civilization is believed to be **one of the oldest world civilizations** together with Egypt and Mesopotamia.
- It was developed along the **river Indus** and for that reason it is also known as the **Indus Valley Civilization.**
- The Harappan civilization is identified as a **Bronze-age civilization** because many objects have been found that are made up of **copper based alloys.**

KHEER BHAWANI MELA

Prominent leaders of Jammu and Kashmir joined Kashmiri Pandits in offering prayers at the Mata Kheer Bhawani Temple on the occasion of Jyeshtha Ashtami.

About

- It is a famous **Hindu temple** located at **Tulmulla village** in **Ganderbal district**, near **Srinagar, Jammu and Kashmir**.
- The temple is dedicated to **Goddess Ragnya Devi**, regarded as an incarnation of **Goddess Durga**.
- It was built in **1912** by **Maharaja Pratap Singh** and later renovated by **Maharaja Hari Singh**.
- Originally called **Bhawani Mandir**, it later became known as **Kheer Bhawani** because **kheer (rice pudding)** is the main offering.

- The goddess is worshipped as the **Kuldevi (family deity)** of the **Kashmiri Pandit community**.
- **Architectural Features:**
  - The temple is made of **smooth grey stones** with a simple but elegant structure.
  - The main shrine stands in the middle of a **sacred pond** with a **marble platform** inside the sanctum.
  - A **holy spring** flows from the western side, believed to change colours. It is traditionally believed that the water turns **black** before major calamities.

Mela Kheer Bhawani

- It is the most important annual festival of the **Kashmiri Pandits**, celebrated on **Jyeshtha Ashtami** in **May–June**.
- Devotees offer **kheer**, **milk**, **flowers**, and **aromatic leaves** to the goddess.
- The festival symbolizes **faith**, **cultural continuity**, **resilience**, and **communal harmony**.

CHAPEKAR BROTHERS

On 22 June 1897, the Chapekar brothers carried out the assassination of Walter Charles Rand, the British Plague Commissioner of Pune, in one of the earliest revolutionary acts against colonial rule.

About

- The **Chapekar brothers**, **Damodar Hari**, **Balkrishna Hari**, and **Vasudeo Hari Chapekar**, were early **revolutionary nationalists** from **Pune**.
- They belonged to a family of **kirtankars (religious storytellers)** and were influenced by **Vasudev Balwant Phadke** and **Bal Gangadhar Tilak's** nationalist writings in **Kesari**.
- They organised the **Chapekar Club**, a secret body for **physical training** and **military preparation**.

Damodar Hari Chapekar

Balkrishna Chapekar

Vasudeo Chapekar

Plague and Assassination

- During the **bubonic plague outbreak (1896–97)**, the British created the **Poona Plague Committee** under **Walter Charles Rand**.
- British troops carried out **forcible house searches**, violated **religious customs**, and humiliated residents.
- In protest against this oppression, the brothers planned Rand's assassination during **Queen Victoria's Diamond Jubilee celebrations**.
- In the attack, **Lieutenant Charles Ayerst** was shot first, followed by Rand, who later died of injuries.
- The brothers were later betrayed by **Ganesh and Ramchandra Dravid**, arrested, and executed by the British.

Legacy

- Their action marked one of the earliest examples of **armed anti-colonial resistance** in western India.
- Their martyrdom inspired later revolutionaries, especially **Vinayak Damodar Savarkar**, strengthening the tradition of militant nationalism.

THEWA ART

Prime Minister Narendra Modi presented Thewa motif cufflinks to the President of Slovakia, bringing global attention to this traditional craft of Rajasthan.

About

- **Thewa Art** is a unique traditional craft practiced mainly in **Pratapgarh district of Rajasthan**.
- It is nearly **400 years old** and originated during the **Mughal-Rajput period**.
- The craft is known for its **intricate gold work on coloured glass**, making it one of India's most distinctive art forms.
- It received the **Geographical Indication (GI) tag** in **2013–14**.

Technique

- The art involves engraving delicate patterns on **23-carat gold sheets**.
- These gold sheets are then carefully fused onto specially treated **coloured glass** without using glue or artificial materials.
- The process demands high **precision**, **patience**, and craftsmanship.
- Usually, it takes around **three days** to complete one set.

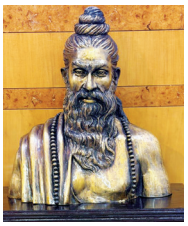
Features

- Thewa designs often depict **flora**, **fauna**, **mythological scenes**, and **royal court life**.
- Common motifs include **lotus**, **peacock**, **elephant**, **deer**, and scenes from the lives of **Krishna** and **Radha**.
- The coloured glass base is usually in shades of **red**, **green**, **blue**, and **maroon**, enhancing its visual appeal.

MAHARSHI SUSHRUTA

The Royal College of Surgeons of Edinburgh recently unveiled a statue of Sushruta, recognising his pioneering contribution to surgery and medicine.

About



- **Sushruta** was an ancient Indian **physician, surgeon, and scholar**, believed to have lived around the **7th century BCE**.
- He is widely honoured as the **Father of Surgery** and **Father of Plastic Surgery** for his systematic surgical innovations.
- He belonged to the ancient tradition of **Ayurveda** and is often associated with the lineage of **Sage Vishvamitra**. His period is regarded as the **Golden Age of Surgery** in ancient India because of the remarkable advancement in surgical science.

Sushruta Samhita

- His medical knowledge is compiled in the **Sushruta Samhita**, one of the oldest and most comprehensive medical treatises.
- It is part of the **Ayurvedic Great Trilogy**, along with **Charaka Samhita** and **Ashtanga Hridaya**.
- The text broadly consists of **Purva Tantra** and **Uttara Tantra**.
- It explains **surgery**, **anatomy**, **medicine**, **pediatrics**, **toxicology**, **eye diseases**, **ENT disorders**, **psychiatry**, and **geriatric care**.
- It records over **100 surgical instruments**, **300 surgical procedures**, and nearly **650 medicinal formulations**.

Major Contributions

- He pioneered **rhinoplasty** using the **pedicle flap technique**, which remains the foundation of modern plastic surgery.
- He developed advanced methods of **cataract extraction** and contributed significantly to **ophthalmology**.
- He classified eight surgical procedures (Ashtavidha Shastrakarma): excision, incision, scraping, puncturing, probing, extraction, drainage, and suturing.
- He made **human dissection** essential for surgical training, making anatomy central to medical education.
- He used substances like **wine** and **henbane** as primitive anaesthesia during operations.
- He classified different types of **burns, fractures, and dislocations** and explained treatment methods such as **traction, manipulation, stabilisation, and post-operative care**.
- He described diseases similar to **diabetes, obesity, and heart disorders**, stressing the importance of lifestyle in health.

RANI LAKSHMIBAI

Rani Lakshmibai attained martyrdom on 18 June 1858 near Gwalior while fighting British forces during the Indian Rebellion of 1857.

Background

- Rani Lakshmibai was the queen of **Jhansi** and one of the most courageous leaders of India's anti-colonial struggle.
- She was married to **Gangadhar Rao**.
- After his death, the royal family adopted a son to continue the dynasty.

Role in the Revolt

- During the **1857 Revolt**, she assumed control of Jhansi and organised its defence against British attacks.
- She restructured the army and personally led military resistance with remarkable courage.
- After Jhansi fell, she allied with **Tatya Tope** and other revolutionaries to continue the struggle.
- She moved to Gwalior and fought there to keep the rebellion alive.

Martyrdom and Legacy

- She died on the battlefield on **18 June 1858**, becoming an enduring symbol of sacrifice and resistance.
- Her determination is remembered through the famous phrase **"Main apni Jhansi nahi doongi."**
- Her bravery inspired later nationalists, and **Subhas Chandra Bose** named the women's wing of the **Indian National Army** as the **Rani of Jhansi Regiment**.
- She remains one of the greatest symbols of India's freedom struggle.

Doctrine of Lapse

- The **East India Company** refused to accept the adopted heir.
- It annexed Jhansi under the **Doctrine of Lapse**, a policy under which princely states without a natural male heir were taken over by the British.
- This policy became the immediate trigger for her revolt.

10 MISCELLANEOUS

QS WORLD UNIVERSITY RANKINGS 2027

The QS (Quacquarelli Symonds) World University Rankings 2027 assessed over 1,500 universities across 106 countries and territories, highlighting major trends in global higher education.

About QS Rankings

- **Quacquarelli Symonds (QS)** was founded in **1990** and is headquartered in **London**.
- The rankings were launched in **2004** and are among the most reputed global university ranking systems.
- They assess institutions on **10 indicators**, including **academic reputation**, **employer reputation**, **faculty-student ratio**, **citations per faculty**, **employment outcomes**, **internationalisation**, and **sustainability**.
- They evaluate institutions on 10 indicators, including:
  - Academic Reputation
  - Employer Reputation
  - Faculty-Student Ratio
  - Citations per Faculty
  - International Faculty Ratio
  - International Student Ratio
  - International Research Network
  - Employment Outcomes
  - Sustainability
  - International Student Diversity

Global Trends

- **Massachusetts Institute of Technology** retained **1st rank** for the **15th consecutive year**.
- **Imperial College London** and **Stanford University** secured **joint 2nd**, followed by **University of Oxford** at **4th**.
- The **United States** remained the most represented country with **184 institutions**, followed by **United Kingdom (93)**, **China (85)** and **Germany (60)**.
- However, the number of US universities in the global **Top 200 for international student ratio** declined from **28 to 14** over the past decade.
- **Asia and the Middle East** showed rapid improvement, especially **China**, **Singapore**, **United Arab Emirates**, and **Saudi Arabia**.
- **Peking University** ranked **13th**, while **Technical University of Munich** ranked **25th**.

India's Performance

- India featured **52 universities**, down from **54 last year**, but remains the **5th most represented** higher education system globally.
- This marks a rise from **11 institutions in 2015**, reflecting a **271% increase** over the decade.
- **Indian Institute of Technology Delhi** emerged as India's highest-ranked institution at **118th**, improving due to strong **research output** and **employer reputation**.
- **Indian Institute of Technology Bombay (134)** and **Indian Institute of Technology Madras (170)** remain India's **only three institutions in the global Top 200**.
- **University of Delhi** ranked **322nd**, becoming the highest-ranked non-technical university.
- **Jawaharlal Nehru University** ranked **555th**.
- **24 private universities** entered the rankings, including **Shoolini University**, **BITS Pilani**, and **Chandigarh University**.
- **Vellore Institute of Technology** recorded the largest jump, climbing **94 ranks**.

Key Indicators

- In **citations per faculty**, **Indian Institute of Science Bangalore** ranked **21st globally**.
- In **employer reputation**, **IIT Bombay** ranked **32nd globally**.
- In **employment outcomes**, only **University of Mumbai** and **University of Delhi** entered the **Top 100**.
- No Indian institution entered the global **Top 100 in academic reputation**.

Challenges

- Indian universities continue to lag in **foreign faculty**, **foreign students**, and **international research networks**.
- Weak **internationalisation** remains the biggest obstacle to entering the global **Top 100**.

QS World Future Skills Index 2027

- India ranked **13th globally** and became the **top performer in South Asia**.
- It ranked **5th globally** in the **Future of Work** indicator.
- India scored **100 in Economic Capacity**, reflecting strong **Gross Domestic Product (GDP)** growth and **Artificial Intelligence (AI)** investments of **$90 billion**. However, it ranked only **73rd in Human Capital**, showing a gap between the quantity of graduates and the quality of employable skills.

FOOD PLANET PRIZE 2026

The Andhra Pradesh Community Managed Natural Farming (APCNF) programme has won the Food Planet Prize 2026, becoming the first Indian initiative to receive this award.

About the Prize

- The **Food Planet Prize** was established in **2019** by the **Curt Bergfors Foundation**. It is regarded as the **world's largest environmental award** focused on transforming global food systems.
- The award carries a prize of **US$ 1.5 million (about ₹14 crore)**.
- It supports innovative initiatives aimed at building **sustainable and resilient food systems**.

About APCNF

- **APCNF** was launched in **2016** through **Rythu Sadhikara Samstha**.
- It promotes **natural farming** by reducing dependence on **chemical fertilisers and pesticides**.
- The programme now covers over **8,000 villages** and nearly **18 lakh farmer families**, making it one of the world's largest **community-led agroecology initiatives**.
- It functions through **women's self-help groups (SHGs)** and a network of more than **10,000 community resource persons**.

Significance

- The programme helps farmers reduce **cultivation costs** and improve **farm incomes**.
- It strengthens **sustainable agriculture** and ecological balance.
- The Andhra Pradesh model is now being studied and replicated.

OPERATION DRISHTI

The Indian Army and Indian Air Force have launched a Mega Advanced Surgical Eye Camp under Operation DRISHTI at Military Hospital Namkum.

About

- **Operation DRISHTI** is a flagship **humanitarian outreach programme** of the **Armed Forces Medical Services (AFMS)**.
- It combines **advanced ophthalmic care** with social service to deliver specialized eye treatment in **remote, underserved, and difficult regions**. Its main objective is to reduce **avoidable blindness** and improve access to quality eye care.

Key Features

- The camp is being conducted through **inter-service coordination** between the Army and Air Force medical teams.
- The surgical team is performing advanced procedures such as:
  - **Phacoemulsification** for cataract treatment.
  - **Minimally Invasive Glaucoma Surgery (MIGS)** for glaucoma management.
  - **Anti-VEGF intravitreal injections** for retinal diseases.
- The team is led by **Sanjay Kumar Mishra**, Consultant and Head of Ophthalmology at **Army Hospital (Research and Referral)**.

Previous Outreach

- Earlier, Operation DRISHTI successfully conducted **eight advanced surgical eye camps** in regions such as **Leh**, **Lakshadweep**, **Bhuj**, **Kutch**, and **Bagdogra**.

PRADHAN MANTRI RASHTRIYA BAL PURASKAR (PMRBP)

The Ministry of Women and Child Development has invited nominations for the Pradhan Mantri Rashtriya Bal Puraskar (PMRBP) 2026.

About

- The award is India's **highest civilian honour for children**, recognising exceptional achievements by young achievers.
- It was instituted in its present form in **2019**.
- The award is conferred annually by the **President of India** on **Veer Bal Diwas**. It is observed every year on **26 December** to commemorate the martyrdom of the two younger sons (Sahibzadas) of Guru Gobind Singh, Sahibzada Zorawar Singh (aged 9) and Sahibzada Fateh Singh (aged 6).

Eligibility

- The nominee must be an **Indian citizen** residing in India.
- The age of the nominee should be between **5 and 18 years**.
- The child should not have received the award earlier.
- The recognised achievement must have been made within **two years** before the nomination deadline.

Award Categories

- The award recognises excellence in **six categories** i.e. Bravery, Art and Culture, Environment, Science and Technology, Social Service and Sports.

Award Components

- Each awardee receives a **medal**, a **certificate**, and a **citation booklet**.
- The award is generally not given **posthumously**, though exceptional cases may be considered.

Significance

- PMRBP aims to honour talent, courage, innovation, and social commitment, while inspiring children to contribute positively to society.

PADMA AWARDS

The Droupadi Murmu conferred the second set of Padma Awards 2026 at Rashtrapati Bhavan, presenting 65 awards. For 2026, a total of 131 Padma Awards were approved.

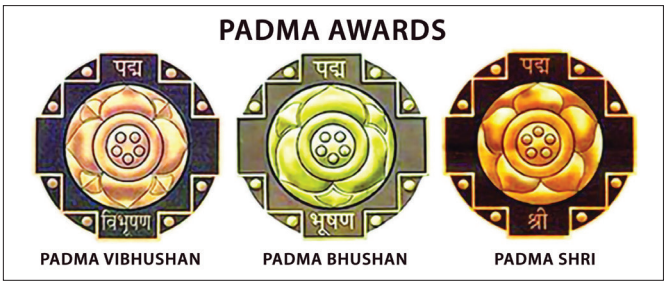
About

- Instituted in **1954**, the **Padma Awards** are among India's highest **civilian honours**. They are announced annually on **Republic Day**. They are administered by the **Ministry of Home Affairs**.

Categories

- **Padma Vibhushan:** India's second-highest civilian award, given for exceptional and distinguished service.

- **Padma Bhushan:** India's third-highest civilian award, given for distinguished service of a high order.
- **Padma Shri:** India's fourth-highest civilian award, given for distinguished service in any field.



- In 2026, awards included 5 Padma Vibhushan, 13 Padma Bhushan, and 113 Padma Shri.
- **Fields:** These awards cover fields such as art, literature, education, medicine, science, engineering, sports, social work, trade, industry, civil service, and public affairs.

Selection Process

- Nominations are invited from **State Governments, Central Ministries, previous awardees, and the public**.
- They are examined by the **Padma Awards Committee**, constituted annually by the **Prime Minister**.
- The recommendations are sent to the **Prime Minister** and finally approved by the **President of India**.

Key Features

- They are open to all persons regardless of **race, occupation, position, or gender**.
- They may also be awarded **posthumously**.

Order of Precedence

- **Bharat Ratna** remains India's highest civilian honour, placed above all Padma Awards.

THUNDERSTORMS

Severe thunderstorms and dust storms during the pre-monsoon season caused over 100 deaths in Uttar Pradesh, highlighting the growing vulnerability to rapidly developing local weather events.

About

- A thunderstorm is a short-duration, high-intensity weather phenomenon associated with lightning, thunder, strong gusty winds, heavy rainfall and sometimes hail.
- It is common during April and May, it may generate dust storms in arid and semi-arid regions.

Formation

- Intense surface heating, with temperatures above 45°C in northern India, rapidly warms the lower atmosphere.
  - Moist southeasterly winds from the Bay of Bengal supply moisture, while Western Disturbances bring cooler, dry air aloft.
- Warm, moist air rises rapidly through convection, condenses into cumulonimbus clouds and releases latent heat. This strengthens vertical air movement and atmospheric instability, producing thunderstorms.

Types and Regional Names

- Single-cell thunderstorms are small and short-lived, while multi-cell storms contain clustered cells and produce prolonged rain and strong winds. Squall lines are organised lines of storms causing severe wind damage, whereas rotating supercells are rare in India but may produce extreme winds and hail.
- The Uttar Pradesh storms resembled organised multi-cell systems with squall-line characteristics.
- These are locally called **Andhi in Uttar Pradesh** and northern India, **Kalbaisakhi or Nor'wester in West Bengal** and **Assam**, **Mango Showers** in **Karnataka**, and **Blossom Showers** in **Kerala**.

Impacts and Forecasting Challenges

- Severe storms cause deaths through lightning, falling trees, wall collapses and flying debris. They damage houses, electricity infrastructure, hoardings and crops such as wheat, vegetables and mango orchards, while disrupting power, communications and transport.
- Rapid urbanisation, weak structures and poor awareness increase disaster vulnerability. Forecasting and evacuation remain difficult because thunderstorms are highly localised, rapidly intensifying and dispersed, with multiple storm cells developing simultaneously.

Disaster Management

- Thunderstorms and lightning are not among the 12 nationally notified disasters for automatic assistance under the State Disaster Response Fund **(SDRF)** or National Disaster Response Fund **(NDRF)**. The notified disasters are cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloudburst, pest attack, and frost and cold wave. States may use up to 10% of SDRF allocations for local disasters.
- The India Meteorological Department **(IMD)** provides bulletins, alerts and nowcasts using Doppler Weather Radars, mobile alerts and nearly 2,400 weather stations in Uttar Pradesh.
- The **NDMA** promotes preparedness and lightning safety. Its Sachet Portal, based on the Common Alerting Protocol, uses geo-intelligence for near real-time warnings.
- The **Lightning Resilient India Campaign** promotes awareness and scientific forecasting, while States provide compensation, relief, rehabilitation and power restoration. Safety measures include staying indoors, avoiding open fields, securing loose objects and strengthening local disaster response systems.

DATA RECAP

- Government estimates show that India's multidimensional poverty declined from **29.17 per cent in 2013–14 to 11.28 per cent in 2022–23**, helping nearly 25 crore people move out of poverty.
- Under the **Jal Jeevan Mission**, rural tap-water coverage increased from 3.23 crore households in 2019 to 15.84 crore households by May 2026.
- Under the **Pradhan Mantri Awas Yojana**, more than 98.10 lakh urban houses and 3.03 crore rural houses were completed, with a large share registered in women's names.
- The **Foreign Contribution Regulation Act, 2010** requires foreign contributions to be received through the State Bank of India's New Delhi Main Branch and limits administrative expenditure to 20 per cent.
- The India–Oman **Comprehensive Economic Partnership Agreement** came into force on 1 June 2026 and grants zero-duty access to 98.08 per cent of Oman's tariff lines.
- Oman's ports at Salalah, Duqm, and Sohar lie outside the Strait of Hormuz, giving them strategic importance for uninterrupted maritime trade.
- A **passport, Aadhaar card, voter identity card**, or **PAN** card is not by itself conclusive proof of Indian citizenship.
- The **National Population Register** covers all usual residents, whereas the **National Register of Citizens** is intended to include only persons who can legally prove Indian citizenship.
- The India–France Strategic Partnership, launched in 1998, was elevated to a **Special Global Strategic Partnership** in 2026.
- The **Ninety-first Constitutional Amendment Act** limits the total number of ministers, including the Prime Minister or Chief Minister, to 15% of the strength of the respective legislature.
- The **Tenth Schedule** does not govern anti-defection at the Panchayat and municipal levels, where disqualification depends on individual state laws.
- Fire services are a State subject and are also included as a municipal function under **Article 243W** and the **Twelfth Schedule** of the Constitution.
- The **National Building Code, 2016** is India's principal technical document for fire and life safety in buildings.
- State Finance Commissions are constitutional bodies established under Article 243-I and must be constituted by every State once every five years.
- Election symbols are regulated by the **Election Symbols (Reservation and Allotment) Order, 1968**, which is administered by the Election Commission of India.
- The **Telecommunications Act, 2023** replaced the Indian Telegraph Act, 1885 and created a modern framework for telecommunications regulation.
- The **Sexual Harassment electronic Box 2.0** functions as a single-window platform for filing and tracking workplace sexual-harassment complaints.
- **Mission Shakti has two sub-schemes: Sambal**, which focuses on women's safety, and **Samarthya**, which focuses on women's empowerment.
- The **Abhigyan application** can match fingerprints with the National Automated Fingerprint Identification System database within about 35 seconds.
- India's share of global ship recycling increased to **35.4 per cent in 2025**, while the Alang–Sosiya cluster in Gujarat accounted for about 97 per cent of India's ship-recycling activity.
- The North Eastern Region comprises eight States and shares a total international boundary of **5,484 kms** with five countries.
- The North Eastern Region contains more than 40 per cent of India's exploitable hydropower potential, estimated at about 60 gigawatts.
- The Caspian Sea is the world's largest inland water body and forms an important segment of the International North–South Transport Corridor.
- Estonia is the northernmost of the three Baltic States and joined both the European Union and the North Atlantic Treaty Organization in 2004.
- Victoria Falls lies on the border between Zimbabwe and Zambia and is described as the world's largest sheet of falling water.
- The indigenous **RudraM-II** is an **air-to-surface anti-radiation** missile designed to target enemy radar and communication systems.
- The Mission for Cotton Productivity has an outlay of Rs. 5,659 crore and seeks to raise cotton lint productivity from 441 kilograms per hectare to 755 kilograms per hectare by 2031.
- **Bacillus thuringiensis** cotton is the only genetically modified crop approved for commercial cultivation in India.
- The Ramsar Convention on Wetlands was signed in 1971, entered into force in 1975, and was joined by India on 1 February 1982.
- Ground-level ozone is a secondary pollutant formed when nitrogen oxides and volatile organic compounds react in the presence of strong sunlight.
- **Shigellosis** is a highly contagious bacterial infection caused by Shigella, and humans are its only natural reservoir.
- The **International Agency for Research on Cancer** classifies epichlorohydrin, formerly used to strengthen tea-bag paper, as probably carcinogenic to humans.
- **Quantum randomness amplification** uses entanglement and Bell tests to convert weakly random data into certifiably unbiased and unpredictable random numbers.

TEST YOURSELF

Objective Questions

Visit: www.nextias.com for monthly compilation of Current based MCQs

SUBJECTIVE QUESTIONS

1. India has no single conclusive proof of citizenship, yet the burden of proving it increasingly falls on the individual. Examine the legal framework of Indian citizenship and the challenges it poses during Special Intensive Revision (SIR) of electoral rolls.
2. The Anti-Defection Law has stabilised governments but reduced legislators to numbers bound by the whip. Critically evaluate and suggest reforms to balance party discipline with deliberative democracy.
3. Rising pedestrian deaths reflect urban planning that privileges vehicles over people. Examine the structural causes of poor pedestrian infrastructure in Indian cities and suggest a framework for walkable urban design using global best practices.
4. "India's welfare architecture has shifted from welfare distribution to human development-led empowerment." Examine in the context of declining multidimensional poverty and saturation-based delivery of basic services.
5. The FCRA Amendment Rules, 2026 shift NGO regulation from entity-based to function-based. Critically examine how the new framework balances sovereignty and transparency with the freedom of association and the developmental role of civil society.
6. "Public trust takes decades to build but can be lost quickly." In the context of recurring examination paper leaks, examine the governance deficit in India's examination ecosystem. What lessons do international models of examination security offer?
7. "India's food challenge has shifted from availability to hidden hunger." Discuss why calorie security has not ensured nutritional security, and suggest measures to make the PDS nutrition-sensitive.
8. "The India–Nepal boundary question is less about territory and more about treaty interpretation and nationalist politics." Comment. Discuss the institutional mechanisms available for peaceful resolution of boundary disputes.
9. The India–Oman CEPA marks a shift from energy interdependence to strategic economic interdependence. Discuss its key features and significance for India's trade architecture in West Asia.
10. "The global crisis is not only a shortage of resources but a deficit of trust between nations." In light of the G7 Summit 2026, discuss India's positioning as a bridge between the developed world and the Global South.
11. "Signed MoUs do not automatically become strategic outcomes." With reference to India's defence, technology and mobility cooperation with partners like Slovakia, examine the challenges of converting diplomatic momentum into durable bilateral gains.
12. "A Security Council excluding the world's most populous nation has drifted from its founding purpose of universal legitimacy." Critically examine India's case for permanent UNSC membership and the structural barriers frustrating it.
13. "Iran is not merely an energy supplier; it is a civilisational partner, a continental gateway and a strategic hedge for India." Discuss in the context of India's tightrope diplomacy in West Asia amid great-power rivalry.
14. "Small island states carry strategic weight far exceeding their size." Examine how India–Seychelles cooperation in maritime security, Blue Economy and climate resilience strengthens India's leadership among SIDS and counters extra-regional influence in the Indian Ocean.
15. Over a decade after the Gadgil and Kasturirangan reports, ESA notification for the Western Ghats remains unfinished. Critically examine the reasons for this impasse and how the conservation–development conflict can be reconciled.
16. Microfinance has widened financial inclusion but limits the graduation of micro-enterprises into growing businesses. Examine the limitations of the microfinance model and the challenges in transitioning towards meso-finance.
17. Examine how India's regulatory framework for ship recycling aligns with the Hong Kong Convention. How can the Ship-breaking Credit Note Scheme create synergy between ship recycling and domestic shipbuilding?
18. "The North East is the land bridge of India's Act East Policy, yet the bridge remains under construction." Examine the region's potential as a gateway to ASEAN and the connectivity constraints holding it back.
19. SIPRI Yearbook 2026 notes India's quiet shift towards longer-range, survivable nuclear systems despite an unchanged declared doctrine. Critically examine whether No First Use and Credible Minimum Deterrence are undergoing silent evolution.
20. "Sovereignty now extends to code, chips, cables and clouds." Examine India's vulnerabilities across the hardware, software, data and AI layers of its digital ecosystem, and evaluate government responses in building digital sovereignty.