

UPSC with SAURABH KAUSHIK

Current Affairs Notes · 20 June 2026

The Hindu · Indian Express · PIB | 27 Topics | GS 1 · 2 · 3 + Prelims + Mapping

[TH] The Hindu

[IE] Indian Express

[PIB] Press Info Bureau

INDEX OF TOPICS

#	Topic	GS Syllabus	Src
1	India Elected FATF Vice-President — Vivek Aggarwal (1994 IAS, MP cadre)	GS2 – IR; FATF; AML/CFT	[TH]
2	Pakistan Is a 'Frankenstein State': India at UN	GS2 – IR; Counter-Terrorism	[TH]
3	Iran Deal Under Strain — Israel Attacks Lebanon, Talks Suspended	GS2 – IR; West Asia	[IE]
4	India's Russian Oil Imports at Record High — 42% of Total Crude	GS2/GS3 – IR/Economy	[IE]
5	Walking on Footpaths Is a Fundamental Right: SC (Article 21)	GS2 – Governance; Polity	[TH]
6	Delhi HC Upholds Telegram Block Until NEET Re-Exam (June 21)	GS2 – Governance; IT Act	[TH/IE]
7	Three-Language Policy Not Viable in Nagaland: CBSE Schools	GS2 – Governance; Language Policy	[TH]
8	Defection as Merger: What the Tenth Schedule Allows	GS2 – Polity; Anti-Defection	[TH]
9	Police Get App to Scan Fingerprints On the Go (SCAN — NCRB)	GS2/GS3 – Governance; Technology	[TH]
10	Amit Shah Sets 3-Year Justice Delivery Target — Justice by 2029	GS2 – Governance; Judicial Reform	[IE]
11	SC Flags 'Brain Drain' in Legal Profession; Calls for Young Lawyers Fund	GS2 – Governance	[TH]
12	PM-VBRY: 70 Lakh Jobs Created — PM Modi (June 19 Disbursement)	GS3 – Economy; Employment	[IE]
13	Sickle Cell Anaemia to Be Eradicated by 2047: President Murmu	GS2 – Health; Tribal Issues	[TH]
14	3 Indigenous Naval Vessels Commissioned — INS Nilgiri, Surat, Vaghsheer	GS3 – Defence; Indigenisation	[TH/IE]
15	Drone Purchases to Drone Partnerships: India's New Defence Policy	GS2/GS3 – Defence/Technology	[TH]
16	Defence Self-Reliance: Nation Can Move Forward Confidently — Rajnath	GS3 – Defence; Atmanirbhar	[TH]
17	Navy to Get 12 Indigenous 1.25 MW Gas Turbine Generators (BHEL)	GS3 – Defence; Make in India	[IE]
18	India's Cheapest Power Is Here — But the Grid Must Catch Up	GS3 – Environment; Energy	[TH]
19	Heatwaves Increasing Ground-Level Ozone — Compounding Health Risks	GS3 – Environment; Health	[IE]
20	Key Hurdle to Climate Targets: Electrification of Industry and Transport	GS3 – Environment; Climate	[IE]
21	Four Glacial Lakes in Arunachal Pradesh Have Expanded in a Decade	GS1 – Geography; GS3 – Environment	[TH]
22	Government Swears by 'Nari Shakti' but Keeps Failing Women	GS1 – Social Issues; Gender	[IE]

23	BCON — Bharat Climate Observation Network (PIB)	GS3 – Environment; Climate	[PIB]
24	Naxal-Free India: LWE Update — Securing the Nation (PIB)	GS3 – Internal Security; LWE	[PIB]

PIB HIGHLIGHTS — 20 JUNE 2026

1. Bharat Climate Observation Network (BCON) — India's Unified Weather Grid

- ✓ Ministry of Earth Sciences launched BCON — a centralised data fusion platform integrating India's entire climate observation infrastructure.
- ✓ BCON integrates: 4,500+ Automatic Weather Stations (AWS, IMD); 85+ Doppler weather radars; 40+ upper-air observatories; 25+ ocean weather buoys (INCOIS); agro-meteorological stations (170+); high-altitude research stations (ARIES Nainital, IAO Hanle, Ladakh).
- ✓ Open access: Real-time data feeds shared with NDMA, state disaster management authorities, ISRO, and research institutions; linkage with SACHET early warning system.
- ✓ Why needed: India's observation station density is far below WMO (World Meteorological Organisation) standards, particularly in the Himalayas, tribal belts, and deep ocean zones; BCON is designed to close this gap with a unified digital platform.
- ✓ GS 3 Angle: Climate change adaptation; Disaster Risk Reduction; Sendai Framework; IMD; Mission LiFE; early warning systems for floods, cyclones, droughts.

2. Naxal-Free India: Securing the Nation — LWE Update (Ministry of Home Affairs)

- ✓ PIB release marking the dramatic decline of Left Wing Extremism (LWE/Naxalism) in India under the Modi government's SAMADHAN doctrine.
- ✓ Data: LWE-affected districts reduced from 126 (2014) to 38 (2026); violence incidents down from 1,091 (2013) to 374 (2025) — lowest since records began; deaths (security forces + civilians) down from 1,020 (2013) to 176 (2025).
- ✓ Key operations: Operation Kagaar (2025-26) in Bastar, Chhattisgarh; intensified COBRA (Commando Battalion for Resolute Action, CRPF) operations in the Chhattisgarh-Jharkhand-Odisha tri-junction.
- ✓ Development prong: PM Vikas roadmap for 35 most LWE-affected districts — road connectivity (5,411 km of roads built), mobile towers (3,500+ installed), banking access, healthcare (Ayushman Bharat coverage).
- ✓ SAMADHAN doctrine: Smart and Aggressive Leadership; Motivation and training; Actionable Intelligence; Dashboard-based key performance indicators; Harnessing Technology; Action on financing of LWE; No access to recruitment; Zero tolerance for LWE.
- ✓ GS 3 Angle: LWE; Red Corridor; CRPF COBRA; SAMADHAN; development-security nexus; Article 355 (Centre's duty to protect states from internal disturbance).

GS PAPER 2 — International Relations

1. India Elected FATF Vice-President — Culture Secretary Vivek Aggarwal

[TH] Page 10

GS 2: IR: FATF; Money Laundering; Terror Financing; India's Global Institutional Leadership; Financial Intelligence.

- June 19, 2026 (FATF Plenary, Paris): Vivek Aggarwal, Secretary, Ministry of Culture (GoI), elected FATF Vice-President for 2026-27 term. Assumes office July 1, 2026.

- ▶ Profile: 1994-batch IAS officer, Madhya Pradesh cadre; formerly Additional Secretary (Revenue) + Director FIU-IND; also served as PM-KISAN CEO.
- ▶ Succession: Succeeds UK's Giles Thomson as VP; outgoing Mexican President Elisa de Anda Madrazo hands over to UK Presidency from July 2026.
- ▶ MEA: 'Major win for India in FATF — reflects India's growing role in combating global terrorist financing and dismantling illicit financial systems.'

FATF: Full Profile

- FATF (Financial Action Task Force): An inter-governmental body established in 1989 by the G7 Paris Summit to combat money laundering. Post-9/11, its mandate expanded to cover terrorist financing (TF) and proliferation financing (PF — financing WMD). Headquartered in Paris. 39 members (37 jurisdictions + EC + GCC). Observers include UN, IMF, World Bank, INTERPOL.
- FATF's 40 Recommendations: The international AML/CFT/PF standards that all member countries must implement. Non-compliance leads to listing.
- Two key lists: (1) Jurisdictions under 'Call for Action' (Black List) — high risk, deficient AML/CFT: Cuba, Myanmar, North Korea; (2) Jurisdictions under 'Increased Monitoring' (Grey List) — working with FATF to address deficiencies: currently ~20 countries.
- India's status: India joined FATF in 2010. India's Mutual Evaluation Report (MER, 2024): placed in 'Regular Follow-up' — the best possible category (only India, France, Italy, UK among major economies). This reflects a largely effective AML/CFT framework.

Why Aggarwal? Why Now?

- Aggarwal's core competence is financial intelligence — FIU-IND Director, Revenue Department — despite his current Ministry of Culture posting. The appointment reflects India's long-term strategy to deepen engagement with FATF on issues including: virtual assets/crypto regulation; digital payment security (India's UPI ecosystem); trade-based money laundering (India is a top 5 global trader); terror financing by Pakistan-linked networks (post-Operation Sindoor context).
- Pakistan-FATF nexus: Pakistan has been on the FATF Grey List twice (2018-22 and 2024-25); India has consistently provided dossiers on Pakistan-based terror financing; India's VP role enhances its institutional capacity to accelerate FATF scrutiny of Pakistani networks.

★ UPSC ANGLE

- FATF and India's geopolitics: FATF VP gives India a seat at the table when FATF standards on crypto, digital money, and cross-border payments are being set — directly relevant to India's digital financial system and export competitiveness.
- FIU-IND: India's national intelligence unit for financial crimes; receives Suspicious Transaction Reports from banks, insurance, stock brokers; shares intelligence with ED, CBI, Income Tax; India's FATF primary contact point.
- Prelims: FATF established 1989; 40 Recommendations; 39 members; Black List = Call for Action; Grey List = Increased Monitoring; India: Regular Follow-up (best category); VP = Vivek Aggarwal (IAS 1994 batch, MP cadre, Culture Secretary, FIU-IND former Director).

- **FATF** — Financial Action Task Force — intergovernmental body (G7, 1989); sets global AML/CFT/PF standards; 40 Recommendations; 39 members; Grey and Black lists; India joined 2010; Vivek Aggarwal VP July 2026.
- **FIU-IND (Financial Intelligence Unit-India)** — India's national centre for Suspicious Transaction Reports (STRs); analyses financial crime intelligence; coordinates with ED, CBI, Income Tax; India's FATF liaison; under Department of Revenue.

2. Pakistan Is a 'Frankenstein State': India at UN Security Council

[TH] Page 8

GS 2: IR: India–Pakistan; UN Security Council; Counter-Terrorism; Cross-Border Terrorism; India's Foreign Policy.

- ▶ India's Permanent Representative at the UNSC (Parvathaneni Harish), during an open debate on counter-terrorism: 'Pakistan is a classic example of a Frankenstein state — one that created, nurtured, and financed terrorist groups as strategic tools, only to find them turning against their own creators.'
- ▶ Specific references: Pakistan's support for Taliban (Haqqani network), Lashkar-e-Taiba (26/11 Mumbai attacks), Jaish-e-Mohammed (Pulwama 2019, Pahalgam 2025); now these groups (TTP — Tehreek-e-Taliban Pakistan) are destabilising Pakistan's own territory.
- ▶ Context: Statement made post-BRICS NSA Delhi meeting (June 22-23) preparations; also following the FATF VP appointment which gives India more leverage in the counter-terror financing space.
- ▶ Pakistan's rebuttal: Pakistan's UN Mission called India's statement 'irresponsible propaganda'; denied state links to listed terrorist organisations.

- The 'Frankenstein' framing is strategically effective: It is not merely accusatory (India has been accusing Pakistan at the UN for decades) but analytically persuasive — it argues that Pakistan's strategy of using terrorist proxies was self-defeating and that Pakistan is now a security challenge even for its own people. This framing resonates with non-SAARC countries whose primary concern is regional stability, not the India-Pakistan bilateral.
- India's UNSC strategy (2026): India is systematically building a legal and diplomatic case linking Pakistan's state apparatus to designated terror organisations — relevant for: future UNSC sanctions listings; FATF grey-listing actions; bilateral BTA negotiations with the US (where counter-terrorism cooperation is a key US ask); and India's UNSC permanent membership campaign.

★ UPSC ANGLE

- Listing of Pakistan-based groups: Masood Azhar (JeM) and Hafiz Saeed (LeT) are designated by the UN 1267 Committee; both continue to operate from Pakistan with impunity. India regularly pushes for UNSC sanctions enforcement against Pakistan for non-compliance.
- Operation Sindoor aftermath: India's May 2025 cross-border military operations against terror infrastructure in Pakistan — referenced in the UNSC statement as demonstrating the real-world consequences of Pakistan's state support for terrorism.
- ✦ **Frankenstein State (India's term)** — India's characterisation of Pakistan — a state that created terrorist organisations as strategic assets that have now turned against it; reference to Mary Shelley's Frankenstein (1818).
- ✦ **UN 1267 Committee** — The UN Security Council committee that administers sanctions against Al-Qaeda, ISIS, and associated individuals and entities; JeM's Masood Azhar and LeT's Hafiz Saeed are listed; Pakistan's compliance with travel bans and asset freezes is widely questioned.

3. Iran Deal Under Strain: Israel Attacks Lebanon, Iran Suspends Nuclear Talks

[IE] Page 1

GS 2: IR: US-Iran Muscat Accord; West Asia; Israel-Lebanon; Hezbollah; Nuclear Non-Proliferation; India's Energy Security.

- ▶ June 19, 2026: Iran's Foreign Ministry announced suspension of Phase 2 nuclear talks following Israeli air strikes on Hezbollah military infrastructure in southern Lebanon.
- ▶ Iran's statement: 'We cannot continue negotiations while Israel, with impunity, destroys our allies in Lebanon. The US must demonstrate it can restrain Israel or we will reassert our strategic options.'
- ▶ Israel's framing: Netanyahu government called the strikes 'legitimate self-defence' against rocket launchers targeting Israeli cities; explicitly rejected any obligation under the Muscat Accord (to which Israel is not a party).
- ▶ Oil markets: Brent crude rose from \$88 to \$96/barrel within hours; INR weakened from Rs 91.5 to Rs 93.8/USD; market fear that the Accord could collapse.

- The structural problem: The Muscat Accord is a US-Iran bilateral deal; Israel is NOT a party and made no commitments to restrain its Lebanon operations. The Accord implicitly assumed Israeli restraint — which was never formally agreed. This is the fundamental design flaw.

- US response: Secretary Rubio called Iran's Abbas Araghchi and Netanyahu within hours; proposed a '72-hour operational pause' in Lebanon — Israel declined. Trump's Truth Social post: 'The deal is still on track. Both sides will come back to the table.' Markets were unconvinced.
- India's exposure: Post-Accord, India had begun planning based on \$88–92/barrel scenario; the sudden spike to \$96 means the Rs 5/litre fuel rollback (announced June 18) is under threat of reversal; Finance Ministry directed OMCs to hold prices pending Accord stabilisation.
- The August 13 deadline: If talks remain suspended for 2+ weeks due to Lebanon escalation, there is insufficient time to negotiate the complex nuclear terms before the August 13 deadline. A failed Phase 2 would likely trigger US blockade reimposition and oil price spike above \$115.

★ UPSC ANGLE

- India's contingency planning: India's Energy Ministry has a 3-scenario plan: (a) Accord holds → oil \$85-95; (b) Lebanon escalation delays Phase 2 but doesn't collapse → oil \$95-110; (c) Full collapse → oil \$115-125. Government's fuel price policy is adjusted scenario by scenario.
- The Spoiler Problem: Israel has incentives to prevent a US-Iran deal that retains enrichment capability — Israel's 'red line' is any deal allowing Iran to maintain 60%+ enrichment. US is caught between Israel (key ally) and Iran (deal partner).

- ✂ **Muscat Accord (June 14, 2026)** — US-Iran MoU signed in Muscat; Phase 1: Hormuz reopened, blockade lifted, IAEA inspections resumed, enrichment frozen at 60%; 60-day Phase 2 nuclear negotiations (deadline August 13, 2026); Pakistan and Oman as guarantors.
- ✂ **Lebanon-Hezbollah Ceasefire** — Part of Muscat Accord's implicit framework; but Hezbollah's military operations are not directly controlled by Tehran's Foreign Ministry; Israeli strikes on Hezbollah therefore create an Iran-US tension that is structurally difficult to resolve.

4. India's Russian Oil Imports at Record High — 42% of Total Crude, Set to Remain

[IE] Page 1



GS 2 / GS 3: IR: India-Russia relations; Oil diplomacy; Sanctions avoidance; GS3: Energy security; Trade deficit; Foreign exchange.

- ▶ May 2026: India imported 2.35 million barrels per day (mbd) of Russian crude — a new record; Russia's share of India's crude imports reached 42%.
- ▶ Comparison: Russia's share was <1% before February 2022 (Russia-Ukraine war); rose to 35% in 2025; now 42% — making Russia by far India's largest single crude supplier.
- ▶ Price factor: Russian Urals crude trading at \$8-12 discount to Brent during Hormuz crisis; Indian refineries (configured for high-sulphur crude) are optimally placed to process Urals.
- ▶ Structural embed: Indian refineries (Reliance Jamnagar, BPCL, IOC) have now reconfigured downstream processing units for Urals — reverting to Gulf crude would require capital-intensive reconversion; Russian crude is now 'locked in' for at least 5-7 years.

- SREP (Special Rupee-Rouble Exchange Mechanism): India and Russia are settling oil trade in rupees deposited in Russian banks' Vostro accounts in India (as Russia cannot receive USD under SWIFT sanctions); Russia has accumulated ~Rs 1.5 lakh crore in Vostro balances — creating a bilateral clearing problem (Russia needs to buy rupee-denominated Indian goods to spend these funds).
- US pressure vs. India's interests: US has been pressing India to reduce Russian imports; India's position — 'we are not party to the G7 price cap, we purchase at commercially competitive prices in our national interest.' India-US BTA negotiations include tacit US acceptance of India-Russia energy trade, as long as India doesn't facilitate Russian sanctions evasion.
- Post-Hormuz trajectory: Even with Hormuz reopening, Middle Eastern crude at \$90+/barrel is more expensive than Russian Urals at ~\$78-80/barrel; Indian PSU refiners will continue prioritising Russian crude for commercial reasons; private refiners (Reliance) will balance with Gulf crude for product mix optimisation.

★ UPSC ANGLE

- G7 Price Cap (\$60/barrel): The G7+Australia mechanism capping Russian oil at \$60/barrel using shipping, insurance, and financing controls; India has NOT joined the mechanism; India pays above \$60 and uses Indian shipping and insurance for some Russian crude — bypassing the cap entirely.
- India-Russia trade imbalance: India's trade deficit with Russia (~\$45 billion in FY26, up from \$7 billion in FY22) is almost entirely oil-driven; bilateral efforts to expand Russian purchases of Indian goods (pharma, textiles, electronics) are proceeding slowly.

-  **Urals crude** — Russia's benchmark export crude grade; heavier and sourer than Brent; priced at a discount; suitable for Indian refineries configured for high-sulphur crude processing.
-  **Vostro Account** — A bank account held in India in Indian Rupees on behalf of a foreign bank; Russian state banks have accumulated large Vostro balances from Indian oil payments; a key India-Russia bilateral management issue.

GS PAPER 2 — Governance · Polity · Health

5. Walking on Footpaths Is a Fundamental Right: SC Issues Landmark Direction

[TH] Page 1

GS 2: Governance: Article 21; Urban Infrastructure; ULBs; Road Safety; PIL; Expanding Fundamental Rights.

- SC bench (Justices JB Pardiwala and R Mahadevan): 'The right of a citizen to walk safely on a footpath is a fundamental right under Article 21. Encroachment of footpaths — by vendors, vehicles, or structures — deprives citizens of life and personal liberty.'
- PIL basis: Footpaths in Delhi, Mumbai, Kolkata, and Chennai are extensively encroached by hawkers, parked vehicles, construction material, and utility installations — forcing pedestrians onto roads.
- SC's direction: All states/UTs must file status reports on footpath conditions within 6 weeks; Municipal Corporations to submit 'Footpath Action Plans' for encroachment clearance.
- Data: ~1.5 lakh pedestrian deaths annually in India; 15-17% of all road fatalities; pedestrian fatality rate among highest globally.

Article 21 — Expanding Interpretation

- Article 21 history of expansion: The SC has progressively expanded 'right to life and personal liberty' beyond physical survival — Maneka Gandhi (1978): procedure must be 'right, just and fair'; Francis Coralie Mullin (1981): right to live with basic human dignity; Olga Tellis (1985): pavement dwellers' right to livelihood; Paschim Banga (1996): right to emergency healthcare; now footpath safety (2026).
- The positive obligation dimension: The state is not only prohibited from taking life (negative obligation under Article 21) but must positively create conditions for safe living. The footpath judgment extends positive obligation to urban infrastructure.

Urban Governance Framework

- 74th Constitutional Amendment (1992): Gave constitutional recognition to Urban Local Bodies; 12th Schedule lists 18 ULB functions including urban planning, regulation of land use, public health, sanitation, and urban forestry. Footpath management falls under ULB's general urban infrastructure mandate.
- Street Vendors Act 2014: Protects vendors' livelihood rights with 'vending zones'; prohibits removal without due process; but does NOT permit vending on pedestrian footpaths — the Act's vending zone provisions are widely ignored in practice.
- SDG 3.6: Halve road traffic deaths and injuries by 2030; India is far off-track; SC's footpath ruling creates a constitutional obligation for ULBs, transforming road safety from a policy choice to a rights obligation.

- Urban local governance is a perennial UPSC topic: 74th Amendment, 12th Schedule, ULB elections, Ward Committees, Metropolitan Planning Committees — the footpath ruling adds a new constitutional dimension to urban governance accountability.
- Vendor rights vs. pedestrian rights: Two groups of poor/vulnerable citizens in conflict over shared urban space; Street Vendors Act 2014 and the SC's Article 21 extension on footpaths create a legal tension that municipal governance must resolve through proper vending zone planning.

- ✨ **Article 21 (Right to Life)** — No person shall be deprived of his life or personal liberty except according to procedure established by law; SC has expanded this to include: dignity, health, education, livelihood, clean environment, emergency medical care, and now safe pedestrian infrastructure.
- ✨ **74th Constitutional Amendment (1992)** — Gave constitutional recognition to Urban Local Bodies; mandatory elections; 12th Schedule with 18 functions; created Ward Committees; empowered ULBs for urban self-governance.

6. Delhi HC Upholds Telegram Block Until NEET Re-Exam (June 21)

[TH/IE] Page 1

GS 2 / GS 3: Governance: Section 69A IT Act; Platform Regulation; Intermediary Liability; NEET Security; Freedom of Expression vs. Public Order.

- Delhi High Court upheld the Central Government's Section 69A order blocking Telegram from June 16-22, 2026.
- HC's proportionality test: (1) Time-limited block (4 days, not permanent); (2) Compelling state interest (examination integrity for 25 lakh candidates); (3) Grounds met (prevention of cognizable offence under Section 69A); (4) Judicial review available — all proportionality criteria satisfied.
- The 'dark web' framing: Government's affidavit called Telegram 'the new dark web' — large anonymous channels; encrypted communications; bot networks; limited law enforcement cooperation; analogous to Tor-based dark web in operational characteristics.
- Post-exam direction: HC directed MeitY to justify any continued blocking after June 21; directed Telegram to submit SSMI compliance plan (IT Rules 2021) within 30 days — India-based Nodal Officer, Grievance Officer, Chief Compliance Officer.

- Hybrid paper delivery for NEET retest (June 21): To prevent another leak, NTA delivered question papers digitally (encrypted) to district-level printing centres for local printing — eliminating the city-to-city physical paper transit chain that caused the May 3 leak. Metal detectors, signal jammers, CCTV at all centres.
- The SSMI compliance issue (structural): Telegram qualifies as a Significant Social Media Intermediary (SSMI) — 5 million+ India users; must comply with IT Rules 2021 including India-based officers, monthly compliance reports, and takedown within 24 hours for certain categories. Telegram has not complied — this ongoing non-compliance is the basis for potential longer-term regulatory action.

★ UPSC ANGLE

- Section 69A vs. Article 19(1)(a): Every blocking order involves a tension between the government's security/order interests and citizens' freedom of speech/expression; the HC's proportionality test is the constitutional standard for this balance — time-limited, necessity-driven blocks are generally upheld.
- International perspective: EU's Digital Services Act (DSA, 2023) requires large platforms to remove illegal content within 24 hours; CSAM (Child Sexual Abuse Material) and exam paper leaks are 'illegal content'; Telegram has increased moderation post-Durov arrest (France, August 2024) but remains inadequate by India's standards.

- ✨ **Section 69A (IT Act 2000)** — Empowers Central Government to block online content/platforms; grounds: sovereignty, security, public order, prevention of cognisable offence; executive action (no prior judicial approval required); used for Telegram block June 2026.
- ✨ **SSMI (Significant Social Media Intermediary)** — Social media platforms with 5 million+ India users; must appoint India-based Nodal Officer, Resident Grievance Officer, Chief Compliance Officer; publish monthly transparency reports; Telegram qualifies but has not complied.

7. Three-Language Policy Not Viable in Nagaland: CBSE Schools' Stand

[TH] Page 4



GS 2: Governance: Language Policy; NEP 2020; Federalism; Tribal Education; Article 29; Centre-State Relations.

- ▶ CBSE-affiliated schools in Nagaland submitted a formal representation to MoE: NEP 2020's 3-language formula is 'educationally unviable and culturally inappropriate' for Nagaland's unique linguistic situation.
- ▶ Nagaland has 16+ tribal language groups (Angami, Ao, Konyak, Lotha, Sumi, Chakhesang, etc.); no single 'Nagaland language'; English is the official language and medium of instruction.
- ▶ Schools' argument: Adding a third language (implicitly Hindi) displaces time for tribal language preservation and adds burden without employment benefit in the state's economy.
- ▶ NEP 2020 actual text: The policy says 'no language will be imposed on any State' and the third language can be 'any Indian language' — including tribal languages. The issue is implementation pressure that treats Hindi as de facto compulsory.

- Constitutional basis for schools' concern: Article 29 guarantees minorities the right to conserve their language, script, and culture. For Naga communities, tribal languages are integral to cultural identity — any educational policy that crowds them out can be challenged under Article 29.
- Article 371A (Nagaland's special provision): Protects Naga customary law, practices, and social arrangements; any act of Parliament affecting these requires prior approval of Nagaland's Legislative Assembly. Language policy affecting Naga tribal education may fall within the 371A protection's spirit.
- The NEP flexibility gap: While NEP explicitly prohibits language imposition, curriculum design and examination pressure in practice create implicit Hindi requirements; the representation reflects fear of future curriculum lock-in, not just current practice.

★ UPSC ANGLE

- Language policy is a constitutional minefield: Centre and States share jurisdiction over education (Concurrent List Entry 25); official language is Union subject (List I Entry 1) but medium of instruction in state schools is State subject; NEP as a policy document has no legal force — only specific legislation would make 3-language formula binding.
- Northeast India and language: The 8th Schedule has 22 recognised languages; northeast state languages (Bodo, Meitei/Manipuri, Khasi, Santhali) are in the schedule; Naga tribal languages are not — another dimension of the 3-language policy tension in northeast India.

-  **Article 371A** — Special provision for Nagaland; Acts of Parliament affecting Naga customary law, practices, social/religious affairs, and ownership of land require prior approval of Nagaland's Legislative Assembly; protects tribal autonomy.
-  **Concurrent List Entry 25** — Education including technical education, medical education, and universities — both Parliament and State Legislatures can legislate; Union law prevails in case of inconsistency; NEP operates in this framework.

8. Defection as Merger: What the Tenth Schedule Allows (and Doesn't)

[TH] Page 6

GS 2: Polity: Anti-Defection Law; Tenth Schedule; 52nd and 91st Constitutional Amendments; Party Mergers; Speaker's Role.

- ▶ Context: A group of Maharashtra Assembly members from a smaller party are attempting to 'merge' with a larger ruling party — prompting The Hindu's legal analysis of the Tenth Schedule merger provision.
- ▶ The only surviving Tenth Schedule exception: Since the 91st Amendment (2003) removed the 'split' exemption (which required 1/3 of the legislative party to split), only 'merger' remains — requiring at least 2/3 of the original legislative party to agree AND the parent political party to also formally merge.

- ▶ Key Supreme Court ruling (Maharashtra Shiv Sena case, 2023): The floor of the legislature cannot determine who the 'real' party is — that is a question for the Election Commission under the Symbols Order. A legislative group decision alone does not constitute a 'merger' under the Tenth Schedule.
- ▶ Disqualification authority: Speaker/Chairman decides; but their decision is judicially reviewable (Kihoto Hollohan, 1992); unreasonable delay in deciding disqualification petitions is also reviewable.

- Two separate processes that people confuse: (1) Anti-defection disqualification — decided by Speaker under Tenth Schedule; (2) Party recognition/symbol — decided by ECI under Election Symbols (Reservation and Allotment) Order, 1968. A faction that 'wins' the ECI battle for party name/symbol has not automatically won the Tenth Schedule battle.
- The 2/3 requirement: If a party has 10 MLAs, at least 7 must agree for a valid merger. The parent political party (its national/state executive) must also pass a formal resolution merging with the other party. Both conditions are essential.

★ UPSC ANGLE

- Tenth Schedule UPSC summary: 52nd Amendment (1985) inserted it; grounds for disqualification: (a) voluntarily giving up party membership; (b) voting against party whip; Exception: Merger (2/3 consent + party-level merger); 91st Amendment (2003) removed 'split' (1/3) exemption; Speaker decides; Kihoto Hollohan (1992) = Speaker's decision is final but judicially reviewable.
- 91st Amendment (2003): Also capped Council of Ministers at 15% of the strength of the House (or 12 ministers, whichever is higher) — a separate but important constitutional provision.
- ✂ **Tenth Schedule (Anti-Defection)** — Inserted by 52nd Amendment (1985); two grounds for disqualification; one exception: merger (2/3 of legislative party + party-level merger); 91st Amendment (2003) removed split exemption; Speaker/Chairman is the deciding authority (judicially reviewable).
- ✂ **91st Constitutional Amendment (2003)** — Two key changes: (1) Removed 'split' (1/3) exemption from Tenth Schedule — only 'merger' (2/3) remains; (2) Capped Council of Ministers at 15% of House strength (minimum 12).

9. Police Get App to Scan Fingerprints On the Go — NCRB's SCAN App

[TH] Page 8

GS 2 / GS 3: Governance: Criminal Justice; Technology in Policing; NCRB; Biometrics; Privacy; AFIS.

- ▶ NCRB launched 'SCAN' (Systematic Criminal Analysis Network) — a mobile app allowing field police officers to scan fingerprints using a smartphone + portable biometric scanner and instantly match against India's national AFIS database (500+ million fingerprints).
- ▶ Response time: Under 30 seconds for identification; integrated with AFIS (Automated Fingerprint Identification System) criminal database; also linked to NATGRID (intelligence) and CCTNS (Crime and Criminal Tracking Network and Systems).
- ▶ Use cases: Unknown persons at crime scenes; verifying identity at checkpoints; checking arrested persons' prior criminal history; immigration control at land borders.
- ▶ Privacy concern: Any potential linkage to Aadhaar's biometric database for law enforcement purposes must be under specific legal authority (Aadhaar Act + court order); the SCAN app must clearly delineate its legal basis for each data source it accesses.

- CCTNS (Crime and Criminal Tracking Network and Systems): India's centralised digital platform linking all police stations; 16,000+ police stations connected; databases include FIR records, chargesheet history, arrest records; SCAN app adds real-time biometric identification to this network.
- AFIS vs. Aadhaar: The AFIS criminal database contains fingerprints of arrested and convicted persons (lawfully collected during criminal process); Aadhaar database contains voluntary biometric enrollment of residents. Mixing these without specific legal authority violates privacy rights — the SC's Puttaswamy judgment (2018 follow-up) and Aadhaar Act 2016 both restrict Aadhaar data sharing to specific lawful purposes.

★ UPSC ANGLE

- Technology + policing: Facial recognition (Automated Facial Recognition System, AFRS, under development by NCRB), fingerprint scanning (SCAN), vehicle recognition (VAHAN integration) — India is building a comprehensive law enforcement biometric infrastructure without a comprehensive surveillance law.
- DPDP Act 2023 and law enforcement: The Digital Personal Data Protection Act has a broad exemption for 'state instrumentalities' for national security and law enforcement; but it also requires purpose limitation and data minimisation — the SCAN app's data retention and sharing policies need scrutiny.

- ✂ **AFIS (Automated Fingerprint Identification System)** — NCRB's database of fingerprints from arrested and convicted persons; 500+ million fingerprints; backbone of SCAN app's criminal identification function.
- ✂ **CCTNS (Crime and Criminal Tracking Network)** — MHA's digital platform linking 16,000+ police stations nationally; integrates FIR records, arrest history, chargesheet data; enables cross-state criminal tracking.

10. Amit Shah Sets 3-Year Justice Delivery Target — 'Justice by 2029'

[IE] Page 11

GS 2: Governance: Judicial Pendency; Criminal Justice Reform; Fast Track Courts; BNS/BNSS; Legal Aid.

- ▶ Union Home Minister Amit Shah: Target to significantly reduce judicial pendency and deliver justice in 5 crore pending criminal cases within 3 years under the 'Justice by 2029' initiative.
- ▶ Key measures: (1) 1,000 new Fast-Track Special Courts (FTSCs) for rape, POCSO, corruption, terror; (2) Mandatory video conferencing for remand hearings; (3) NIC's e-Courts Phase III expansion; (4) 90-day trial completion target for BNS/BNSS cases.
- ▶ BNS/BNSS new timelines: Bharatiya Nyaya Sanhita (replaced IPC, July 2024) mandates 90-day chargesheets, 30-day trials for specified categories — Justice by 2029 enforces these timelines.
- ▶ Data: 5.38 crore cases pending (4.37 crore district courts; 62 lakh High Courts; 92,000 SC); 71% pending for more than 1 year; 5 lakh undertrials in prisons (many for minor offences).

- The vacancy crisis as the root cause: India has 25,000+ judicial vacancies (district courts + HCs + SC); judge-to-population ratio is 21 judges per 10 lakh people (Law Commission recommended 50); filling vacancies is as critical as creating FTSCs; Shah's initiative focuses on process reform + technology, but the vacancy crisis is structural.
- NALSA expansion: Universal free legal aid in criminal trials (not just first appearance) — this is critical; 50%+ of undertrials in Indian prisons cannot afford lawyers; without legal representation, the right to speedy trial (Article 21) is meaningless.
- Undertrial crisis: 77% of India's prison population are undertrials (pre-trial detainees) — the highest proportion globally; many have been in jail longer than the maximum sentence for their alleged offence; Shah's initiative includes a directive to district magistrates to review and release eligible undertrials within 90 days.

★ UPSC ANGLE

- Hussainara Khatoun case (1979): SC held that free legal aid for poor accused is part of Article 21; the right to speedy trial is also implicit in Article 21 — Shah's Justice by 2029 initiative has strong constitutional foundations.
- New Criminal Laws (BNS/BNSS/BSA, July 2024): Bharatiya Nyaya Sanhita (BNS) replaced IPC; Bharatiya Nagarik Suraksha Sanhita (BNSS) replaced CrPC; Bharatiya Sakshya Adhinyam (BSA) replaced Indian Evidence Act; introduced timeline mandates, victim rights, and technology provisions.

- ✂ **Fast Track Special Courts (FTSCs)** — Dedicated trial courts for rape, POCSO, corruption; introduced 2019; 402 operational; Shah's target: 1,000; 90-day trial completion; funded 60:40 by Centre:State.
- ✂ **BNSS (Bharatiya Nagarik Suraksha Sanhita)** — Replaced CrPC (July 2024); mandates 90-day chargesheets after arrest; provisions for video conferencing; strengthened victim rights; timeline mandates for trials.

11. SC Flags 'Brain Drain' in Legal Profession; Calls for Young Lawyers Welfare Fund

[TH] Page 10

GS 2: Governance: Access to Justice; Legal Education; NLU graduates; Brain Drain; Bar Council of India.

- ▶ CJI Surya Kant (at Bar Council of India Annual Conference): 'There is a serious brain drain from the legal profession — talented NLU graduates choose corporate law, investment banking, or foreign jurisdictions over district court litigation.'
- ▶ Proposed: 'Young Lawyers Welfare and Development Fund' — contributions from senior advocates, law firms, High Courts; supports juniors in first 3-5 years of independent practice.
- ▶ Data: 1.7 million+ enrolled advocates in India; 60,000+ new advocates per year; but <20% sustain long-term litigation practice; district courts face shortage of quality advocates.
- ▶ District court vs. corporate law pay: Junior district court advocate earns Rs 5,000-30,000/month in first 3 years; junior corporate lawyer at a Tier-1 firm earns Rs 80,000-1,50,000/month from day one.

- The 23 NLUs (National Law Universities — CLAT-based) have produced a generation of highly skilled legal professionals — but their skills (corporate transactions, arbitration, academic research) are poorly matched to district court litigation needs (oral advocacy, client management, local procedure). The 'brain drain' is actually a 'skills mismatch' where NLU graduates find corporate law a better fit for their training.
- Access to justice implication: India's poor and marginalised primarily access justice through district courts (not High Courts or SC); if quality lawyers don't practice there, the Dalits, tribal communities, women, and workers most in need of legal protection are under-served — undermining Article 39A (free legal aid) in practice.

★ UPSC ANGLE

- Article 39A (DPSP): Directs the State to ensure equal justice and free legal aid; to ensure no citizen is denied access to justice for economic reasons. The legal brain drain undermines the constitutional vision of Article 39A.
- Bar Council of India reform proposals: (1) Mandatory 1-year mentored apprenticeship (like the CA articleship model); (2) District court practitioner specialisation (separate from corporate law specialism); (3) Government-funded 'Legal Corps' for rural district courts (similar to medical officers in PHCs).
- ✂ **CLAT (Common Law Admission Test)** — Centralised entrance test for the 23 National Law Universities; highly competitive; top NLU graduates increasingly choose corporate law over litigation.
- ✂ **Article 39A** — DPSP — directs the State to ensure equal justice and free legal aid; basis for NALSA and state legal services authorities; the legal brain drain problem directly impacts implementation of this directive.

12. PM-VBRY: 70 Lakh Jobs Created Since Inception — PM Modi Announces

[IE] Page 10

GS 3: Economy: Employment; Formal Sector; EPFO; DBT; PM Viksit Bharat Rozgar Yojana.

- ▶ At the June 19 disbursement event (Rs 2,400 crore to 35 lakh employees), PM Modi announced that PM-VBRY (PM Viksit Bharat Rozgar Yojana) has generated 70 lakh (7 million) new formal sector jobs since its launch.
- ▶ PM-VBRY recap: Announced in Union Budget 2024-25; 3 components — (A) first-time formal employee EPFO incentive (1-month salary DBT); (B) EPFO contribution support for manufacturing; (C) employer incentive for bulk hiring. Annual target: 3 crore new jobs over 2 years.
- ▶ 70 lakh verification: Jobs counted are verified EPFO new member registrations — indicating formal sector employment; EPFO membership is growing at ~20 lakh/month in FY26.
- ▶ Sectors: Manufacturing (28%), IT/BPO (19%), retail and logistics (17%), healthcare (12%), construction (11%) — the diversification from IT-heavy employment patterns is positive.

- Formalisation trend: EPFO active member count grew from 6.8 crore (2019) to 8.2 crore (2026) — a 20% increase; PM-VBRY's incentives are accelerating this formalisation; more formal employment means: better social protection (PF, ESI), higher tax base, better credit access.
- The 70 lakh vs. employment data challenge: India's PLFS (Periodic Labour Force Survey) shows youth unemployment at 15.2% (15-29 age group); the PM-VBRY 70 lakh count measures new EPFO registrations — which includes job switches from informal to formal (not just net new jobs); the actual 'new jobs' created is likely a subset of the 70 lakh figure.

★ UPSC ANGLE

- EPFO as formal employment barometer: Monthly EPFO payroll data (new subscribers) is India's most reliable formal employment indicator; MoSPI publishes it monthly; the PM-VBRY programme's success should be measured by EPFO net subscriber growth in targeted sectors.
- ✂ **PM-VBRY (PM Viksit Bharat Rozgar Yojana)** — Employment-linked incentive scheme (Budget 2024-25); 3-component DBT; targets 3 crore new formal sector jobs over 2 years; Rs 2,400 crore disbursed June 19, 2026; 70 lakh jobs claimed.
- ✂ **EPFO (Employees' Provident Fund Organisation)** — Statutory body under Ministry of Labour; manages PF and pension for formal sector employees; membership = proxy for formal employment; 6.8 crore active members (2026).

13. Defence Self-Reliance: A Nation Meeting Its Defence Needs Can Move Forward — Rajnath

[TH] Page 8

GS 3: Defence: Atmanirbhar Bharat in Defence; Defence Production; Make in India; DRDO; Defence Exports.

- ▶ Defence Minister Rajnath Singh (at the commissioning of INS Nilgiri, Surat, and Vaghsheer): 'A nation that is capable of meeting its own defence needs can move forward confidently. India today is that nation.'
- ▶ Rs 1.78 lakh crore record defence production in FY2025-26 (announced June 18 PIB); defence exports Rs 23,500 crore to 100+ countries.
- ▶ Context: The simultaneous commissioning of three major indigenous vessels — a frigate, a destroyer, and a submarine — on a single day is unprecedented in India's naval history.
- ▶ Rajnath's political framing: Explicitly linked to Operation Sindoor (May 2025) — where indigenously developed systems (DRDO missiles, ISRO satellite imagery, HAL Tejas) played a significant role in India's retaliatory strikes on Pakistani terror infrastructure.

- The 'defence autonomy = strategic autonomy' argument: Rajnath's statement reflects a doctrine — that a country dependent on foreign weapons faces inherent constraints on its strategic decision-making (pressure from weapons-supplying countries not to take certain military actions). India's growing indigenisation reduces this dependence.
- Defence PLI results: Production Linked Incentive for defence manufacturing has attracted Rs 12,000 crore in private investment; key beneficiaries — L&T Defence, Tata Advanced Systems, Adani Defence, Bharat Forge, Mahindra Defence.
- iDEX (Innovations for Defence Excellence): 350+ startups supported; 80+ are in drone technology; Rs 750 crore disbursed; iDEX's innovations from Operation Sindoor context accelerated procurement of loitering munitions and counter-drone systems.
- ✂ **DPP (Defence Procurement Procedure)** — India's regulatory framework for defence acquisitions; 'Make in India' categories (Make-I: 70% indigenisation, Make-II: 50%) are priorities; ensures ToT (technology transfer) and indigenous content mandates.

14. 3 Indigenous Naval Vessels Commissioned — INS Nilgiri, Surat, Vaghsheer

[TH/IE] Page 10

- ▶ June 20, 2026: PM Modi commissioned three vessels at Mazagon Dock Shipbuilders Ltd (MDL), Mumbai — a historic simultaneous commissioning of a frigate, a destroyer, and a submarine.
- ▶ INS Nilgiri: Lead ship of Project 17A (Alpha-class stealth frigates); 6,670 tonnes; BrahMos + LRSAM; SRGM; 75% indigenisation; MDL-built.
- ▶ INS Surat: 4th P15B guided missile destroyer; 7,400 tonnes; BrahMos + Barak-8 MRSAM; 56 sensor systems; 85% indigenisation; MDL-built.
- ▶ INS Vaghsheer: 6th Kalvari-class (Project 75, Scorpène-type) conventional submarine; 1,565 tonnes; diesel-electric; AIP-compatible; DRDO weapons suite including SHYENA torpedo.

- Project 17A (7 ships): 4 from MDL, 3 from GRSE Kolkata; indigenisation grew from <50% in Project 17 frigates to 75% now; equipped with active electronically scanned array (AESA) radar, advanced sonar, BrahMos SSM, Barak-8 SAM, and stealth hull design.
- Project 75 completion: INS Vaghsheer is the last of 6 Kalvari-class submarines; the follow-on Project 75I (6 more advanced submarines with AIP) is in advanced procurement stages; will incorporate indigenous AIP, enhanced weapons, and data link.
- MDL's significance: Only Indian shipyard that builds both surface warships and submarines; a strategic national asset; 52 naval vessels delivered to Indian Navy; also builds frigates for Mauritius and Bangladesh.

★ UPSC ANGLE

- India's submarine inventory: 1 SSBN (INS Arihant, nuclear ballistic missile submarine); 1 SSGN (INS Chakra 3, nuclear attack submarine — leased from Russia); 6 Kalvari-class (conventional); 4 Sindhughosh-class (Kilo-class, Russian origin); 4 Shishumar-class (HDW Type 209, German origin). Project 75I will add 6 more advanced conventional submarines.
- AIP (Air Independent Propulsion): Technology allowing conventional submarines to operate submerged for longer periods without surfacing to run diesel engines; critical for stealth in the Indian Ocean; DRDO's indigenous AIP module (based on PEM fuel cell) is in advanced testing.

- **Project 17A (Alpha Class)** — India's 3rd generation stealth frigates; 7 ships; 75% indigenisation; equipped with BrahMos, LRSAM, advanced sensors; INS Nilgiri is the lead ship.
- **Project 15B (Guided Missile Destroyer)** — India's most capable surface combatants; 7,400 tonnes; 85% indigenisation; INS Visakhapatnam (2021), Mormugao (2022), Imphal (2023), Surat (2026) — 4 ships in total.

15. India Moving From Drone Purchases to Drone Partnerships: New Policy

[TH] Page 6

- ▶ MoD's new Drone Partnership Framework (DPF): Foreign drone OEMs can form JVs in India with 51%+ Indian ownership; mandatory technology transfer; India gets export rights.
- ▶ Trigger: Operation Sindoor (May 2025) demonstrated Pakistan's effective use of Turkish Bayraktar TB2-type drones against Indian positions; India needs to rapidly scale strike drone capability.
- ▶ India's domestic drone ecosystem: iDEX has 80+ drone startups; ideaForge (reconnaissance), Garuda Aerospace (agriculture, surveillance), Alpha Designs Technologies (military), Throttle Aerospace (anti-drone) — growing but not yet at military-grade production scale.
- ▶ International partnerships: Israel (Elbit's Hermes 900; IAI's Heron); USA (General Atomics MQ-9B SkyGuardian — 30 units approved); India-Israel JV for Loitering Munitions (Harop-type) under DPF.

- The shift from 'buyer' to 'partner' rationale: Historical 'buyer' model (India buys finished Israeli or US drones) creates: (a) dependence for spares and software updates; (b) technology denial risk (US/Israel may impose conditions on use); (c) no domestic industrial development. The partnership model addresses all three gaps.

- Counter-drone priority: Pakistan, China (at LAC), and non-state actors have demonstrated drone swarm capabilities; India's C-UAS (Counter Unmanned Aircraft Systems) requirement is urgent — the DPF fast-tracks acquisition of Drone Dome (Israel) and Coyote systems (USA) with ToT.

★ UPSC ANGLE

- Drone Rules 2021: India liberalised its drone regulatory framework — reduced registration burden, created Digital Sky Platform for flight planning; enabled India to become a drone manufacturing hub; PLI scheme for drones (Rs 120 crore) supports this.
- Military drone classification: MALE (Medium Altitude Long Endurance — Heron, Predator), HALE (High Altitude Long Endurance — Global Hawk type), UCAS (Unmanned Combat Aircraft), Loitering Munitions (kamikaze drones), and mini/micro drones for reconnaissance.

- ✂ **Drone Partnership Framework (DPF)** — India's new policy for defence drone procurement; requires foreign OEMs to form JVs (51%+ Indian ownership) with mandatory ToT and India export rights; shifts from buyer to partner model.
- ✂ **Loitering Munition** — A 'kamikaze drone' that circles a target area until a target is identified, then dives and detonates; used in Ukraine-Russia war and Operation Sindoor context; DRDO is developing NAGASTRA-1 (indigenous loitering munition).

16. Sickle Cell Anaemia to Be Eradicated by 2047: President Murmu (World Sickle Cell Day)

[TH] Page 10

GS 2: Health: Genetic Disorders; Tribal Health; Sickle Cell Mission; Hydroxyurea; Gene Therapy.

- World Sickle Cell Day (June 19): President Droupadi Murmu reiterated India's National Sickle Cell Anaemia Elimination Mission target — eradicate SCA from India by 2047.
- India's burden: ~50,000 babies born with SCA annually; highest prevalence in tribal communities of Odisha, Chhattisgarh, Jharkhand, Maharashtra, Gujarat, Rajasthan, MP.
- Mission progress (2026): 1.8 crore persons screened in tribal areas; 1.2 lakh SCA patients identified; 28,000+ on Hydroxyurea; 312 Comprehensive SCA Management Centres established.
- Eradication strategy: NOT removing the gene (impossible) but eliminating NEW BIRTHS — through carrier screening → genetic counselling for 'trait×trait' couples → pre-natal diagnosis for at-risk pregnancies.

- What is Sickle Cell Anaemia (SCA): Autosomal recessive genetic disorder; person must inherit 2 copies of defective HBB gene to develop SCA (one copy = sickle cell trait — asymptomatic carrier, protective against malaria); the defective gene produces haemoglobin-S which deforms RBCs into a sickle shape, blocking small vessels and causing vaso-occlusive crises (extreme pain episodes), organ damage, stroke, infections.
- Treatment options: Hydroxyurea (disease-modifying — increases fetal Hb, reduces crises by ~50%; on NLEM); blood transfusions; bone marrow transplant (curative, expensive, requires matched donor); Gene therapy (Casgevy/Lyfgenia — US FDA approved December 2023, not yet in India).
- Ethical dimension: Identifying carrier couples and offering prenatal diagnosis involves sensitive counselling; the MTP Act allows termination for 'substantial risk of physical or mental abnormalities'; the mission must ensure informed consent and autonomy — not coercive 'elimination.'

★ UPSC ANGLE

- SCA + Tribals: The disease's concentration in tribal communities reflects historical exclusion from healthcare and genetic isolation; connecting to Article 47 (public health) and Article 46 (welfare of SC/ST) — one of India's largest targeted tribal health interventions.
- National Health Mission + SCA: SCA screening is integrated into NHM's tribal health sub-plans; ASHA workers are trained for basic SCA awareness; HWCs (Health and Wellness Centres) serve as first contact for SCA patients.

- **Sickle Cell Anaemia** — Autosomal recessive genetic disorder; HBB gene mutation; haemoglobin-S causes sickled RBCs; 50,000 new births/year in India; highest in tribal communities; National Mission targets elimination by 2047.
- **Hydroxyurea** — Primary disease-modifying drug for SCA; increases fetal haemoglobin (Hb-F); reduces vaso-occlusive crises by ~50%; included in India's National List of Essential Medicines (NLEM).

GS PAPER 3 — Environment · Economy · Science

17. India's Cheapest Power Is Here — But the Grid Must Catch Up

[TH] Page 6

GS 3: Environment: Solar Energy; Grid Integration; Battery Storage; 500 GW Target; DISCOM Reform; Green Energy Transition.

- ▶ Solar power is now India's cheapest electricity: Utility-scale solar tariff = Rs 2.12/kWh (2026 average); coal-based power = Rs 4.5–6/kWh; even solar + battery storage (FDRE) = Rs 4.76–4.77/kWh — cheaper than new coal plants.
- ▶ India's solar capacity: 150+ GW installed (March 2026); overall RE capacity: 274+ GW; total installed: 524+ GW; India is the world's 3rd largest solar market.
- ▶ But: India is 'curtailing' (wasting) solar power in Rajasthan, Tamil Nadu, Gujarat during midday peaks because transmission lines cannot carry all the generated power to demand centres.
- ▶ Grid reality: For solar to replace coal at scale, India needs: 200+ GW of battery storage (has ~5 GW today); upgraded inter-state transmission corridors; grid-forming inverters; flexible DISCOM procurement.

- **Curtailment:** Deliberately stopping renewable generation because the grid cannot absorb it; India curtailed ~4 TWh of solar generation in 2025-26 — equivalent to wasting Rs 850 crore in electricity value; happens when local demand is low and transmission export capacity is full.
- **Transmission bottleneck:** Solar is concentrated in Rajasthan, Gujarat, Tamil Nadu; demand is in Maharashtra, Delhi, UP, Andhra Pradesh; inter-regional transmission corridors are saturated; PGCIL's Green Energy Corridors (Phase I and II) address this but take years.
- **BESS gap:** Battery Energy Storage Systems: India has ~5 GW against a requirement of 200+ GW for 500 GW RE integration; SECI (Solar Energy Corporation of India) has issued tenders for 4 GWh standalone BESS; Battery PLI (Rs 18,100 crore) will help but manufacturing takes time.
- **DISCOM stress:** India's distribution companies have cumulative losses of ~Rs 6 lakh crore; many are reluctant to sign 25-year solar PPAs; without healthy DISCOMs, India cannot absorb solar power even when generation capacity exists.
- Solutions being implemented: PM KUSUM (solar agriculture pumps, rooftop solar for farmers); RDSS (Revamped Distribution Sector Scheme, Rs 3.3 lakh crore) for DISCOM smart metering and feeder separation; PM Surya Ghar (rooftop solar for homes); National Electricity Plan 2032 (Rs 3.4 lakh crore grid expansion).

★ UPSC ANGLE

- 500 GW NDC target (2030): India committed to 500 GW non-fossil fuel capacity by 2030 in its updated Nationally Determined Contribution; currently at ~274 GW RE; needs to add ~225 GW in 4 years. Grid integration is the binding constraint — solar capacity is growing faster than grid capacity.
- Merit order dispatch: India's power system dispatches cheapest source first; solar at Rs 2.12/kWh is always at the top; this reduces coal plants' utilisation (PLF); coal plants' fixed costs need to be recovered over fewer units — creating a 'death spiral' for coal unless handled carefully through transition planning.

- **FDRE (Firm and Dispatchable Renewable Energy)** — Solar/wind combined with storage to provide scheduled firm power round-the-clock; India's SECI has tendered FDRE at Rs 4.76-4.77/kWh — now cheaper than new coal; transformative for baseload coal replacement.

- **PGCIL (Power Grid Corporation of India)** — Central PSU; owns and operates India's national high-voltage transmission network; building Green Energy Corridors (Phase I: 3,200 km, Rs 8,400 crore; Phase II underway) to connect renewable energy zones to demand centres.

18. Heatwaves Leading to Increased Ground-Level Ozone — Compounding Health Risks

[IE] Page 14

GS 3: Environment: Air Quality; Ozone; Climate Change-Health Nexus; Photochemistry; Urban Pollution.

- ▶ IIT Bombay + NEERI study (June 2026): India's heatwave episodes (2024-26) are correlated with 15-25% higher ground-level ozone concentrations in major cities compared to non-heatwave periods.
- ▶ Ground-level ozone (tropospheric O₃): Formed by photochemical reactions between NO_x (vehicular, industrial) + VOCs (volatile organic compounds) in sunlight and heat; higher temperatures accelerate formation.
- ▶ Health impact: Respiratory irritation; reduced lung function; triggers asthma attacks; long-term cardiovascular disease; WHO annual limit: 100 µg/m³; Delhi summers regularly exceed 120-150 µg/m³.
- ▶ The double burden: Heat stress + ozone pollution simultaneously affects urban populations; unlike PM2.5 (masks help), ozone is a gas — N95 masks don't protect; no easy personal protective measure.

- The heatwave-ozone feedback: Higher temperatures → faster ozone formation → ozone stays elevated longer (slower nocturnal decomposition in hot nights) → prolonged respiratory exposure → compounded health burden. Climate change is creating a new 'compound hazard' combining thermal stress and air quality degradation.
- Cities most affected: Delhi (NO_x from 12 million vehicles + industrial emissions); Mumbai (port + industrial + vehicular); Ahmedabad (industrial + vehicular; the city had India's first Heat Action Plan in 2013 but lacks ozone monitoring). Hyderabad (growing vehicle fleet + petrochemical industry proximity).
- Policy implication: India's CPCB (Central Pollution Control Board) must expand ozone monitoring networks; integrate ozone forecasting into IMD's daily pollution forecasts; cities' Heat Action Plans must incorporate ozone health advisories.

★ UPSC ANGLE

- Stratospheric ozone vs. ground-level ozone: Stratospheric ozone (15-35 km) protects Earth from UV — its depletion (ozone hole) is harmful; ground-level ozone (tropospheric, <2 km) is a pollutant that harms respiratory health — formed by photochemical reactions. These are opposite in their environmental effects.
- EV transition as solution: Electric vehicles eliminate NO_x tailpipe emissions — a key precursor to ground-level ozone; India's EV transition (PM E-DRIVE, FAME) is therefore not just a climate solution but also an urban air quality solution.

- **Ground-Level Ozone (Tropospheric O₃)** — Air pollutant; not directly emitted; formed by photochemical reactions of NO_x + VOCs in sunlight and heat; worsened by higher temperatures; causes respiratory irritation and long-term lung damage.
- **VOCs (Volatile Organic Compounds)** — Carbon-based gases emitted by vehicles, paints, solvents, and industrial processes; a key precursor (along with NO_x) to ozone formation; regulated under India's ambient air quality standards.

19. The Key Hurdle to India's Climate Targets: Electrification of Industry and Transport

[IE] Page 16

GS 3: Environment: Climate Change; Decarbonisation; Net-Zero 2070; Industrial Electrification; EV Policy; Green Hydrogen.

- ▶ India's 500 GW clean electricity target addresses only ~25% of total final energy demand; the critical missing piece is electrifying the other 75% — heat for industry (45%) and transport (27%).
- ▶ EV progress: India EV sales 2.2 million units in FY26 (+35% YoY); but overall penetration <3% of total vehicles; 4-wheeler EV penetration <1.5%.
- ▶ Hard-to-abate sectors: Steel, cement, chemicals, glass, aviation — need 800-1500°C heat that current electric systems cannot efficiently provide; green hydrogen is the solution but hydrogen production costs remain high (Rs 350-400/kg, needs to fall to Rs 150/kg for viability).
- ▶ 3 gaps holding back electrification: Technology gap (EV battery energy density, industrial heat pumps); Infrastructure gap (charging network — India has 3,700 fast chargers vs. China's 700,000+); Finance gap (EV upfront cost premium unaffordable for most Indians).

- The 'green premium' problem: Green alternatives (EV vs. petrol car; green hydrogen vs. natural gas; electric induction furnace vs. coal blast furnace) cost more upfront; for India's low-income economy, consumers and small industries cannot absorb the green premium without government support or carbon pricing.
- India's carbon pricing dilemma: India has not implemented a broad carbon price (unlike EU's ETS); the Carbon Credit Trading Scheme (CCTS, 2023) is a voluntary market — it will be made mandatory in the energy-intensive sector from 2026; a meaningful carbon price would close the green premium gap but raises inflation concerns.
- PM E-DRIVE (2024, Rs 10,900 crore): Replaces FAME-II; focuses on 2W, 3W EVs, electric buses, and charging infrastructure; manufacturer and consumer subsidies being phased out — replaced by technology mandates (EV fleet standards).

★ UPSC ANGLE

- India's net-zero 2070 pathway: Carbon neutral by 2070 requires: clean electricity (target 2045), transport electrification (target 2040 for new car sales), industrial green hydrogen transition (target 2050), nature-based carbon sinks (forest carbon sequestration). Electrification is the single largest lever — responsible for ~60% of required emissions reduction.
- CCUS (Carbon Capture, Utilisation and Storage): For hard-to-abate sectors where electrification is impossible, CCUS captures CO₂ and stores it underground or uses it (in concrete, fuels, chemicals); India's DRDO and DST are piloting CCUS at Tuticorin power plant (Tamil Nadu) — India's first CCUS demonstration.
- ✦ **Green Premium** — The additional cost of a clean technology alternative vs. its fossil fuel equivalent; the gap must be closed through technology scale (learning curves), subsidies, or carbon pricing for widespread adoption.
- ✦ **CCTS (Carbon Credit Trading Scheme)** — India's domestic carbon market (2023); initially voluntary; becoming mandatory for energy-intensive industries (steel, cement, fertilisers, aluminium, pulp) from 2026; aligns with CBAM compliance preparations.

20. Four Glacial Lakes in Arunachal Pradesh Have Expanded Significantly in a Decade

[TH] Page 10

GS 1 / GS 3: Geography: Himalayan glaciers; Glacial Lakes; GLOF; Climate Change; Cryosphere; Arunachal Pradesh (strategic area).

- ▶ SAC (Space Applications Centre, ISRO) study (June 2026): 4 glacial lakes in Arunachal Pradesh's Tawang and West Kameng districts expanded by 25-40% in area over 2015-2025.
- ▶ Lakes: Mukthang Lake (Tawang), Potala Lake (West Kameng), and two unnamed lakes in the Gorichen massif — all proglacial lakes (formed at retreating glacier snouts).
- ▶ GLOF (Glacial Lake Outburst Flood) risk: As these lakes expand with glacier retreat, the moraine/ice dams become less stable; catastrophic dam failure can release millions of cubic metres of water within hours, devastating downstream valleys.
- ▶ Arunachal strategic context: Tawang and West Kameng border China (LAC); glacial lake expansion threatens Indian Army infrastructure in the region.

- Why Himalayas are warming faster: The Third Pole (Tibetan Plateau + Himalayas) is warming 3x the global average; India's Himalayan glaciers losing 0.4-0.6% of volume per year; the accelerated melt is forming new glacial lakes and expanding existing ones across the HKH (Hindu Kush-Himalaya) region.
- India's glacial lake monitoring: ISRO's SAC monitors 628 glacial lakes in Indian Himalayas via satellite imagery (Sentinel-2, Landsat-8); 65+ are classified 'high GLOF risk'; however, real-time ground-based monitoring (sensors + telemetry) exists at very few; a national GLOF Early Warning System is under development by NDMA.
- Chamoli 2021 precedent: The February 7, 2021 Chamoli, Uttarakhand disaster — glacier/rock avalanche triggered a rapid ice-melt flood that destroyed Rishiganga (13 MW) and damaged Tapovan Vishnugad (520 MW) hydro plants; 204 deaths — the most devastating Himalayan hydro-hazard event in recent years.

★ UPSC ANGLE

- GLOF and infrastructure planning: India has 220+ hydro projects in the Himalayas; many are in GLOF-risk zones; Chamoli showed that infrastructure location and design must incorporate GLOF risk assessments; NDMA guidelines (updated 2023) require GLOF risk assessment for all Himalayan projects.
- Climate + Security: Glacial lake expansion in Tawang (contested with China) affects Indian Army's logistics and operational infrastructure; climate change is increasingly a national security issue in Himalayan border regions.
- ❖ **GLOF (Glacial Lake Outburst Flood)** — Sudden catastrophic release of water from a glacial lake; caused by ice/moraine dam failure; can release millions of cubic metres within hours; occurred at Chamoli (2021); 628 glacial lakes monitored by ISRO in India.
- ❖ **Cryosphere** — All components of Earth's system frozen water — glaciers, ice sheets, permafrost, sea ice, snow cover; the Himalayan cryosphere is the world's 3rd largest (after Antarctica and Arctic); provides freshwater to 1.9 billion people.

21. Government That Swears by Nari Shakti Keeps Failing Women

[IE] Page 12

GS 1: Social Issues: Women; Gender Equality; FLFPR; Pay Gap; Political Representation; Violence; Women's Reservation Act.

- ▶ Column argues: Despite the 'Nari Shakti' (Women's Power) political branding, structural indicators for Indian women remain poor.
- ▶ FLFPR: 35% (PLFS 2025) — improved from 23% (2018) but largely rural distress employment in agriculture; urban formal sector FLFPR <20%.
- ▶ Gender pay gap: Women earn 28% less for similar work; concentrated in lower-paid formal sector roles.
- ▶ Women's Reservation Act (2023): 33% seats in Lok Sabha and State Assemblies — but implementation delayed until after delimitation (post-2031 Census); current representation ~15%.

- The welfare vs. structural change distinction: India's government schemes for women (PM Matru Vandana — maternity benefit; Sukanya Samridhi — girl child savings; Beti Bachao Beti Padhao; Lakhpati Didi — SHG income enhancement) improve individual economic outcomes at the margins but do not address the structural economic and social subordination of women.
- POSH Act 2013 (Prevention of Sexual Harassment at Workplace): 79% of firms with 10+ employees are non-compliant (no Internal Committees); less than 5% of estimated harassment cases are formally reported; India's workplace harassment framework exists on paper but not in practice.
- The pronatalism trap: Multiple state governments (Andhra Pradesh, Karnataka, Tamil Nadu) are incentivising having more children — which, as covered earlier, will disproportionately burden poor women and reduce their labour force participation.

★ UPSC ANGLE

- Women's Reservation Act 2023 (106th Constitutional Amendment): 33% reservation in Lok Sabha and State Assemblies; effective post-delimitation (earliest 2031); includes sub-reservation for SC/ST women. This is a landmark — but the delay means no elected parliament will have 33% women until 2034 at earliest.

- India's CEDAW obligations: India ratified the Convention on Elimination of All Forms of Discrimination Against Women (CEDAW) in 1993; CEDAW requires concrete state action to eliminate structural gender inequality; India's periodic CEDAW reports acknowledge progress but gaps in implementation.

- **FLFPR (Female Labour Force Participation Rate)** — % of working-age women employed or actively seeking work; India: 35% (PLFS 2025); improved but driven by rural agriculture; urban formal sector FLFPR much lower at ~18-20%.
- **POSH Act 2013 (Prevention of Sexual Harassment at Workplace)** — Mandatory Internal Committees in workplaces with 10+ employees; Local Committees for informal sector workers; 79% non-compliance; sexual harassment must be reported within 3 months; penalty: Rs 50,000 fine for non-compliance by employer.

PRELIMS IN FOCUS

FATF — Full Profile

Financial Action Task Force. Established: 1989 (G7 Paris Summit). HQ: Paris. Members: 39 (37 jurisdictions + European Commission + Gulf Cooperation Council). 40 Recommendations (global AML/CFT/PF standards). Two lists: (1) Black List = 'Call for Action' — high risk: Cuba, Myanmar, North Korea; (2) Grey List = 'Increased Monitoring': ~20 countries. India joined: 2010. India's MER (2024): 'Regular Follow-up' category (best possible; 5 countries globally). India's VP (2026-27): Vivek Aggarwal (IAS 1994, MP cadre; Culture Secretary; former FIU-IND Director).

INS Nilgiri / Surat / Vaghsheer — Key Facts

INS Nilgiri: Lead ship, Project 17A (Alpha-class stealth frigates); 6,670 tonnes; MDL, Mumbai; BrahMos + LRSAM; 75% indigenisation. INS Surat: 4th ship, Project 15B (guided missile destroyers); 7,400 tonnes; MDL; BrahMos + Barak-8; 85% indigenisation. INS Vaghsheer: 6th Kalvari-class (Project 75, Scorpène-type) submarine; 1,565 tonnes; diesel-electric; DRDO weapons suite. MDL (Mazagon Dock Shipbuilders Ltd): Only Indian yard that builds both warships and submarines; Mumbai; 52 naval vessels delivered. All 3 commissioned simultaneously by PM Modi on June 20, 2026.

SAMADHAN Doctrine (Anti-LWE)

S — Smart and Aggressive Leadership; A — Motivation and Training; M — Actionable Intelligence; A — Dashboard-based KPIs; D — Harnessing Technology; H — Action on Financing of LWE; A — No access to recruitment; N — Zero Tolerance. Results: LWE districts: 126 (2014) → 38 (2026); violence incidents: 1,091 (2013) → 374 (2025); deaths: 1,020 (2013) → 176 (2025). CRPF COBRA (Commando Battalion for Resolute Action): 10 battalions; specialised anti-Naxal force. Operation Kagaar: 2025-26 intensified operations in Bastar.

Sickle Cell Anaemia — Elimination Mission

Disease: Autosomal recessive; HBB gene mutation; haemoglobin-S causes sickled RBCs; vaso-occlusive crises, organ damage, stroke. India's burden: ~50,000 new births/year; highest in tribal communities of Odisha, Chhattisgarh, Jharkhand, Maharashtra, Gujarat. Treatment: Hydroxyurea (disease-modifying, NLEM); bone marrow transplant (curative, expensive); Gene therapy (Casgevy — US FDA approved Dec 2023; not yet available in India). Mission: Launched by PM Modi, National Tribal Health Conclave, 2023; target: eliminate by 2047; screening 7 crore tribal persons; 312 Management Centres established. Progress: 1.8 crore screened; 1.2 lakh patients identified; 28,000+ on Hydroxyurea.

BCON — Bharat Climate Observation Network

Launched by: Ministry of Earth Sciences. Purpose: Unified national climate observation platform integrating all weather, atmospheric, and ocean monitoring infrastructure. Integrates: 4,500+ AWS (IMD); 85+ Doppler weather radars; 25+ ocean buoys (INCOIS); 40+ upper-air observatories; 170+ agro-met stations; high-altitude research stations (ARIES Nainital, IAO Hanle). Open data platform: Real-time feeds to NDMA, state governments, researchers. Linkage: SACHET (multi-hazard early warning system). Why: India's observation density below WMO standards, especially in Himalayan and tribal belt regions.

Ground-Level Ozone vs. Stratospheric Ozone

STRATOSPHERIC OZONE (Good ozone, 15-35 km altitude): Protects Earth from UV radiation; depletion by CFCs caused 'ozone hole'; Montreal Protocol (1987) addressed depletion; Kigali Amendment (2016) added HFCs. GROUND-LEVEL OZONE / Tropospheric O₃ (Bad ozone, <2 km): Air pollutant; NOT directly emitted; formed by photochemical reactions between NO_x (from vehicles, industry) + VOCs in sunlight + heat; higher temperatures accelerate formation; health impacts: respiratory irritation, reduced lung function, cardiovascular disease; WHO limit: 100 µg/m³; India's CPCB standard: 100 µg/m³ (8-hour mean); Delhi summers: 120-150 µg/m³ during heatwaves.

MAPPING — PLACES IN NEWS

Place	Why in News / Location / Key Facts
Tawang, Arunachal Pradesh	4 glacial lakes expanded in Tawang and West Kameng districts (2015-25, ISRO SAC study); on the disputed India-China border (LAC); China claims Tawang as part of 'South Tibet'; strategic significance — India-China Tawang clash occurred here in December 2022.
Kozhikode (Calicut), Kerala	5th Nipah outbreak (June 2026); also relevant for 3-language policy debate in South India; historically Kerala is the strongest state opposing Hindi imposition; also famous as the landing point of Vasco da Gama (1498), start of European contact with India.
Mumbai (Mazagon Dock)	INS Nilgiri, Surat, and Vaghsheer commissioned here by PM Modi on June 20, 2026; MDL (Mazagon Dock Shipbuilders Ltd) is located in Mumbai Harbour; India's premier warship and submarine building facility.
Paris, France	FATF Plenary (June 17-19, 2026) — Vivek Aggarwal elected VP; FATF headquartered in Paris since its founding in 1989; the OECD compound in Paris houses FATF's secretariat.
Bastar, Chhattisgarh	Operation Kagaar — India's intensified anti-Naxal campaign; Bastar is the geographic centre of the remaining LWE stronghold; Abujmad forest area in Bastar is the last major Maoist-controlled zone; on the Chhattisgarh-Odisha-Telangana border.
Rajbari, Bangladesh	Padma Barrage construction site (ECNEC-approved May 2026); on the Padma River (= Ganga in Bangladesh); 180 km downstream from India's Farakka Barrage; 1996 Ganges Water Sharing Treaty expires December 2026.
Fordow, Qom, Iran	Iran's key uranium enrichment facility (underground, hardened); IAEA inspectors reinstated under Muscat Accord (June 14); Iran suspended Phase 2 nuclear talks (June 19) after Israeli strikes on Hezbollah in Lebanon — putting Fordow negotiations on hold.
Rajasthan (Solar)	India's largest solar power state — 25+ GW installed; maximum solar curtailment due to transmission congestion; PGCIL's Green Energy Corridors Phase II is designed to export Rajasthan solar surplus to UP, Delhi, Haryana; key battleground for grid integration challenge.