DoT Order to Pre-Install Sanchar Saathi App

Why Is It in the News?

- The Department of Telecommunications (DoT) has issued a **binding directive** to all smartphone manufacturers that every device sold in India must come with the **Sanchar Saathi app pre-installed**.
- The move has triggered **sharp political criticism**, with Opposition leaders calling it arbitrary and undemocratic.
- **Digital rights groups** have flagged serious concerns around privacy, informed consent and the risk of expanding state surveillance.
- Technical experts caution that **pre-loaded, non-removable apps** often enjoy deep system permissions, potentially opening doors for malware, spying and security breaches.

Relevance

GS-II: Governance

- Debate around **executive overreach** versus citizen rights in the digital domain.
- Lack of clear **statutory basis** for forcing government apps on private devices.
- Concerns over **absence of public consultation** in key technology regulations.

GS-II: Polity (Fundamental Rights)

- Implications for the **Right to Privacy**, guided by the **Puttaswamy judgement** (tests of legality, necessity and proportionality).
- Issues of **surveillance, metadata collection and intrusive state presence** in personal devices.

GS-III: Cybersecurity

- Security risks arising from **system apps** with OS-level control.
- Expansion of the **attack surface** and new malware pathways.
- Stronger linking of **IMEI and personal identity** and its security implications.

What is Sanchar Saathi?

- Initially launched in 2023 by DoT as an online portal, later converted into a ***mobile app***.
- Primary aim: tackle **telecom-related fraud**, help track and block stolen phones, and verify genuine IMEI numbers.

Core features include:

- Reporting **fraudulent calls and misuse of mobile numbers**.

- Verifying IMEI authenticity through **CEIR (Central Equipment Identity Register)**.
- Filing requests to **block or unblock** lost/stolen devices.
- Checking all mobile numbers issued against one person's identity (via the **TAFCOP** module).

What Does the New DoT Mandate Require?

- Every **new smartphone** sold in India must have the Sanchar Saathi app **pre-installed by default**.
- In practice, such preloaded apps are usually **integrated into the operating system** and cannot be easily removed by users.
- The directive was issued **without a prior public consultation** process.
- There is **no specific law** passed by Parliament that clearly authorises compulsory installation of such apps.

Why Did the Government Push It? (Official Rationale)

- Escalating cases of **online fraud**, "digital arrest" scams, impersonation using government identities, and transnational cybercrime.
- Rising incidents of **IMEI cloning and selling of fake or grey-market devices**.
- Messaging apps like **WhatsApp and Telegram** can be used even when SIM details change, creating **traceability gaps**.
- The government claims the app will strengthen the **device–SIM–identity linkage** and enable quicker response to cybercrime.

Concerns Raised (Governance, Legal, Technical)

A. Governance Concerns

- No structured consultation with **industry, civil society or citizens** before rollout.
- Making installation compulsory undermines the core concept of **user consent**.
- Sets a precedent of **state-pushed software** on private devices becoming normal.

B. Legal and Constitutional Concerns

- The policy must withstand the **Puttaswamy (2017)** privacy framework:
    - **Legality:** No clear legislative backing for mandating apps that could enable surveillance.
    - **Necessity:** Less intrusive alternatives exist (web portal, SMS-based verification, operator-level tools).

  - **Proportionality:** The level of intrusion may far exceed what is required for fraud prevention.

- The move blurs the line between **regulation of telecom** and **mass digital surveillance**.

C. Technical & Cybersecurity Concerns

- Pre-installed apps are often treated as **system-level applications**, with deeper access to device functions.
- Users typically cannot uninstall them, meaning they have a **permanent presence** on the phone.
- Cybersecurity experts warn:
  - Once an app is part of the system layer, **over-the-air updates** can quietly expand its permissions.
  - If such an app is compromised, it becomes a **single point of failure** at national scale.
  - The state could unintentionally become a **distribution channel for malicious code**.

D. Risks of Abuse

- Potential for **continuous digital monitoring** of citizens' devices.
- Possibility of **mass metadata collection** from millions of users.
- Previous allegations around spyware like **Pegasus** heighten public distrust.
- Device makers may resist, as this could undermine carefully designed **secure OS architectures** (especially in the case of companies like Apple).

Broader Implications

- Enhances **executive power** without a parallel strengthening of legislative oversight.
- Opens the door for **future mandatory apps** on all devices.
- Could damage India's **reputation on digital rights and privacy protection**.
- If exploited by hackers, it could **weaken overall cybersecurity** instead of improving it.

International Practices

- Most democratic countries **do not force** pre-installed government apps on citizens' phones.
- Where public apps are used (e.g., **disaster alerts in South Korea**), they are usually **voluntary and not system apps**.

- COVID-19 contact-tracing apps in the UK, EU, Japan, etc., were **optional**, not hardwired into firmware.
- India's approach looks closer to **state-level firmware intervention** than standard regulatory practice.

Critical Overview

Strengths (Limited but Real)

- Can assist in **reducing telecom fraud**.
- Makes **IMEI tracking and blocking** more streamlined.
- Simplifies the process of **reporting stolen devices**.

Major Weaknesses

- Security benefits could be achieved **without deep device-level control**.
- Undermines **user autonomy and informed consent**.
- Introduces large **systemic cybersecurity risk** if the app or update channel is compromised.
- There is **no strong legal or institutional accountability** framework.
- May erode **public trust** in government-led digital initiatives.

Way Forward

- Move from a **mandatory** to an **opt-in** model for the app.
- Treat Sanchar Saathi as a **service accessible via app or web**, not as a firmware component.
- Enact a clear **legal framework** defining limits and safeguards for any digital surveillance capabilities.
- Subject the app to **independent security audits**, and consider making its code open to scrutiny.
- Maintain **IMEI–SIM–identity mapping** at the **telecom backend**, not through intrusive apps on user devices.
- Conduct **transparent public consultations** with industry, experts and citizens before enforcing such measures.

Conclusion

- The DoT's action is rooted in a genuine concern over **rising cybercrime**, but the method chosen is **legally fragile, technologically overreaching and poor in terms of governance design**.

- Making a pre-installed app compulsory risks turning personal smartphones into **potential tools of perpetual digital oversight**.
- The policy needs to be **redesigned** in line with principles of **proportionality, transparency and privacy-by-design**.

Why is there no peace in Ukraine?

Why Is It in the News?

- A new **U.S.-brokered peace proposal**, driven by the Trump administration, has been circulated regarding the ongoing **Russia–Ukraine conflict**.
- The plan is **less favourable to Ukraine** compared to the framework discussed in **Istanbul in 2022**.
- It comes at a time when:
  - Ukraine has suffered **military setbacks** (e.g. in Pokrovsk, Kupiansk),
  - Western support is showing signs of fatigue,
  - Kyiv faces **internal corruption scandals**, and
  - U.S. policy under Trump is shifting.
- The balance of power now tilts more clearly: **Russia is stronger**, Ukraine weaker, and Western unity fragmented.

Relevance

GS-II: International Relations

- Evolving **power dynamics** in the Russia–Ukraine war and breakdown of the 2022 Istanbul process.
- Implications of changing **U.S. foreign policy**, including a possible "Reverse Kissinger" approach (tilting Russia away from China).
- Questions over **Europe's strategic autonomy** and **NATO's credibility**.

GS-I: World History

- Issues of **territorial annexation**, erosion of post-1945 norms, and coercive peace settlements.

GS-II: Global Governance

- Weakening of **international law** if territorial conquest is effectively legitimised.
- Limitations of the UN system in resolving great-power conflicts.

Timeline of Peace Attempts (2022–2025)

A. Early 2022: Belarus and Turkey Talks

- Soon after the invasion in February 2022, **initial talks** began in Belarus.
- Russia advanced rapidly towards cities like **Kharkiv and Kherson**, hoping for a quick collapse of Ukrainian resistance.

B. March 2022: Istanbul Negotiations

- Turkey mediated the first serious **diplomatic engagement**.
- Ukraine signalled readiness to:
    - Abandon its **NATO membership** ambition.
    - Give Russian language official recognition.
    - Accept **neutrality** with multilateral security guarantees.
- Russia indicated willingness to:
    - Pull back to positions held before 24 February 2022.
    - Retain **Crimea** and parts of **Donetsk and Luhansk**.
- Analysts like Fiona Hill and Angela Stent observed that both sides had outlined a **tentative interim settlement**.

C. Collapse of the Istanbul Track

- Western capitals were reluctant to offer **strong security guarantees** to Ukraine.
- UK's then PM Boris Johnson reportedly encouraged Kyiv to **continue fighting** instead of settling.
- After Russian withdrawal from **Kyiv and Chernihiv**, Zelenskyy felt the military situation had improved.
- Ukraine resumed offensive operations and successfully pushed Russia out of parts of **Kharkiv and Kherson** by late 2022.
- Russia responded by:
    - **Annexing four additional regions** in September 2022.
    - Declaring partial mobilisation.
    - Shifting to a **long-war strategy**.

Shift in Strategic Landscape (2023–2025)

A. Military

- Ukraine's **2023 counter-offensive** failed to deliver major breakthroughs.
- Russia adjusted to sanctions, stabilised its economy, and strengthened defence lines.

- By 2024–25, Russia regained the **initiative**, with advances such as the capture of **Pokrovsk**.

B. Political

- Zelenskyy extended his presidency under **martial law**, but corruption scandals have dented his standing.
- Under Biden, the U.S. commitment was to support Ukraine "**as long as it takes**."
- Under Trump:
    - The conflict is seen as **unwinnable** for Ukraine.
    - Focus shifts to **burden-sharing with Europe**.
    - There is interest in a possible **reset with Russia**, including an attempt to weaken the Russia–China partnership ("Reverse Kissinger").

Trump's 28-Point Peace Plan: Main Features

A. Territorial Settlement (Favourable to Russia)

- Crimea, Luhansk and Donetsk are treated as **effectively Russian** territory.
- Ukraine is required to withdraw from all remaining parts of Donetsk (Russia currently holds about 80%).
- Frontlines in **Kherson and Zaporizhzhia** are largely frozen, giving Russia control over areas it currently occupies.
- Some territories captured outside formally annexed regions would be returned, but Russia's core gains remain.

B. Military Terms

- Ukraine's armed forces would be capped at **600,000 personnel**.
- Demilitarised buffer zones may be established along parts of the front.

C. NATO Question

- Ukraine would have to **conclusively renounce NATO membership** in its constitution.
- NATO would pledge **never** to admit Ukraine.
- Ukraine may still be allowed to join the **European Union**.

D. Security Guarantees

- A parallel 3-point proposal suggests **NATO-like security assurances** for a limited period (10 years, renewable).
- A large-scale Russian attack would be treated as a threat to transatlantic security, though the specifics are vague.

E. Sanctions & Reintegration of Russia

- Russia would be gradually **brought back into the global economic system**.
- Sanctions would be scaled back, and Russia might rejoin groups like the **G8**.
- Economic cooperation between the U.S. and Russia would be restored, conditional on certain commitments.

Why Is the Plan Seen as Pro-Russian?

- Ukraine would permanently lose around **one-fifth** of its pre-2014 territory.
- Its NATO aspirations would be **irreversibly blocked**.
- Russia's territorial gains are effectively **recognised**, while not all losses are undone.
- Security guarantees to Kyiv are **uncertain and time-limited**.
- Russia would secure economic reintegration **without full withdrawal** from occupied areas.
- The U.S. would shift from strong military backer to **mediator** between Kyiv and Moscow.

Zelenskyy's Dilemma

If He Accepts:

- It would symbolise **acknowledgement of defeat** and Russian victory.
- He risks a severe **political backlash** from the military and nationalist groups.
- His legitimacy—already questioned due to **extended term and corruption issues**—would be under even more strain.
- The territorial loss becomes effectively **permanent**.

If He Rejects:

- U.S. support may **decline sharply**, deepening Ukraine's isolation.
- Russia could continue to **advance militarily**, capturing more land.
- Europe alone may not be able to sustain Ukraine's **financial and military needs**.

Europe's Position

- Germany, France, the UK and others have pledged to continue support but **lack U.S.-level capacity**.
- European unity is under pressure from **economic costs, energy issues and defence gaps**.
- Many European leaders worry that the Trump plan **locks in Russian gains** and weakens deterrence.

Ground Reality (December 2025)

Russia

- Controls:
    - Entire **Crimea**.
    - All of **Luhansk**.
    - Around **80% of Donetsk**.
    - Large portions of **Kherson and Zaporizhzhia**.
    - Gradual advances in parts of **Kharkiv region**.
- The war economy is stabilised; defence production has ramped up.

Ukraine

- Struggling with **power outages** after repeated attacks on its energy grid.
- Economic survival depends largely on **Western financial aid**.
- Public morale is under strain, with **no realistic prospect of recapturing all lost territory** militarily.

Why the Istanbul Moment Cannot Return

- In **2022**, Russia had overreached and was more open to compromises.
- By **2025**, the balance has shifted: Russia holds more territory, has rebuilt its forces and leveraged global dynamics.
- Ukraine now negotiates from a **position of weakness**, not near-parity.
- The Trump plan reflects this **new reality** rather than a fresh diplomatic breakthrough.

Implications for Global Politics

A. U.S.–Russia–China Triangle

- Trump may aim for a **Reverse Kissinger** manoeuvre: pulling Russia away from China to weaken Beijing.
- Success is uncertain, given the depth of current **Russia–China strategic ties**.

B. NATO's Credibility

- Forcing Ukraine to give up NATO could damage NATO's **moral authority** and signal that aggression can extract concessions.

C. International Law

- Accepting Russia's territorial annexations risks **normalising conquest** and undermining post-World War II international norms.

Conclusion

- Peace efforts that began in 2022 fell apart due to **Western hesitation** and **Ukrainian belief** in battlefield victory.
- Between 2023 and 2025, the **strategic balance tilted decisively in Russia's favour**.
- The Trump plan formalises Ukraine's **territorial losses and enforced neutrality**, making it a **coercive peace** rather than a fair settlement.
- Ukraine today faces its harshest test: **military setbacks, political vulnerability and external pressure** to accept an unequal deal.

Why the SIR needs to be completely digitised

What is Special Intensive Revision (SIR)?

- A periodic exercise conducted by the **Election Commission of India (ECI)** to **update and cleanse electoral rolls**.
- Its purpose is to:
  - Remove names of deceased or migrated voters.
  - Enrol new voters.
  - Correct mistakes in existing entries.
- The overall reliability of SIR depends entirely on the **quality of the underlying data**.

Relevance

GS-II: Governance

- Integrity of electoral rolls and overall **administrative capacity**.
- Quality of citizen–state interface in elections.
- Digital governance challenges arising from **legacy data**.

GS-II: Polity – Elections

- Role of **ECI**, Booth Level Officers (BLOs) and other actors.
- Protecting **voter rights** through accurate and inclusive rolls.

GS-III: Technology in Governance

- Need for structured, searchable, interoperable databases.
- Integration with Aadhaar/PAN (with safeguards).

- Advantages of a **digital workflow** over paper-based systems.

Why This Issue Is in the News?

- SIR 2.0 depends heavily on **old voter rolls from 2002–04** that were created manually on paper.
- Modern digital tools like **ECINet**, Aadhaar-based verification and online forms are not being fully leveraged.
- The outcome is widespread:
    - **Errors in rolls**,
    - Non-searchable data formats,
    - Mass deletions,
    - Confusion and panic among voters, and
    - Operational delays.

Core Problem: Weak Foundation

- The principle of **"garbage in, garbage out"** applies: if the base data is flawed, no amount of processing can produce reliable rolls.
- The 2002–04 rolls suffer from:
    - **Handwritten entries** and inconsistent spellings.
    - No standard metadata fields for search (e.g. no proper indexing).
    - Missing EPIC numbers, incomplete addresses, irregular age/gender details.
    - Poor digitisation with no meaningful quality checks.

Evidence of Failure in Legacy Rolls

- Sample audits show bizarre anomalies:
    - Entries suggesting **polygamy** (two "wives" with same husband's name).
    - Vague or incomplete names such as just "Rakesh" or "Vir".
    - Different spellings like "Sahgal/Sangal" making searches unreliable.
- Many entries lack critical details like **house numbers or EPIC IDs**.
- Even long-time voters have been **unable to find their own names** when scanning thousands of entries.
- Since rolls are often published as **unsearchable PDFs**, locating a specific voter is extremely difficult.

Systemic Regression: Why SIR 2.0 Fails

- The process largely **reverts to paper-era methods**:
    - BLOs collect physical forms.
    - Data entry is done manually again later.
    - Verification and uploading are fragmented and delayed.
- This leads to:
    - Massive delays—e.g., a large share of forms in some states like UP remained undigitised even late in the schedule.
    - Multiple errors due to low digital capacity among frontline staff.
    - Voters having to repeatedly provide photos and documents and visit offices multiple times.

ECINet vs Legacy SIR: A Stark Contrast

ECINet – Modern Capability

- Can host and search **hundreds of millions of records**.
- Allows searching by **name, mobile number, EPIC, date of birth, address, relatives' names**.
- Supports duplicate detection, Aadhaar linking (with safeguards), and automated verification.
- Offers online submission of forms, constituency mapping and grievance redressal.

Legacy SIR Practice

- Relies on **static PDFs** and manual lists.
- Uses manual paper forms, manual corrections and offline workflows.
- Built-in search interfaces are either broken or inadequate, often returning "no details found".
- ECI distances itself by saying rolls are published "as received" from state CEOs.

Key Administrative Issues

- Expecting citizens to remember precisely **where they voted 20 years ago** is unrealistic.
- EPIC cards from earlier years are not archived systematically; voters often depended on **temporary slips**.

- BLOs frequently ask for **extra documentation** (such as birth certificates) beyond what ECI guidelines require.
- Deleted voters face:
    - Online Form 6 forcing them to declare themselves as **first-time voters**, distorting records.
    - Minor corrections via Form 8 needing multiple approvals, slowing the process.

Consequences

- A significant number of citizens cannot verify whether their names exist on the rolls.
- Errors in the foundational dataset keep cascading forward.
- Public anxiety and political mistrust grow, especially close to elections.
- Instead of delivering a clean roll, SIR 2.0 becomes a **disruptive, crisis-like exercise**.

What Should Have Been Done?

- Adopt a **fully digital workflow** from the start, eliminating paper forms.
- Deploy **mobile/digital kiosks** with trained staff for those lacking access or skills.
- First create **searchable, structured datasets** from old rolls before launching SIR.
- Integrate with **Aadhaar, PAN, driving licence and local records** through secure APIs for cross-verification.
- Standardise the fields and formats for names, addresses and family relationships.

Transformation Blueprint: Fully Digital SIR 2026

a) Complete Digitisation

- Convert all rolls (including 2002–04) into **clean, English-searchable database entries**.
- Regional language scripts remain for display, but search logic is based on standardised fields.

b) Data Integration

- Combine electoral data with other **trusted government databases**, with proper safeguards.
- Use automated consistency checks to flag suspicious or duplicate entries.

c) Voter Classification

- Categorise voters by:

- Stable address.
- Frequent movers.
- Cases where **citizenship or residency status** may be unclear.

d) Online EF Submission

- 100% **online filing** of electoral forms using web and mobile platforms.
- Provide **kiosks and assistance centres** for rural and elderly voters.
- Employ dedicated digital staff, not just part-time BLOs.

e) End-to-End Digital Workflow

- Verification, approval, objections and final publication should be managed **entirely within ECINet**.
- Allow **real-time tracking** of application status, corrections and deletions.

Benefits of a Fully Digital System

- Permanently corrects and cleans up **legacy errors**.
- Creates a **single, consistent and auditable national voter database**.
- Speeds up approvals and grievance redressal.
- Reduces workload and confusion for BLOs.
- Enhances **transparency, reliability and public trust** in electoral rolls.

The Way Ahead

- A **digital SIR** is a prerequisite for credible elections, not a luxury.
- Most of the reforms outlined can begin immediately, even if full integration takes time.
- Once the base is fully digitised, future revisions become **routine annual updates** rather than emergency operations.
- SIR 2026 should be seen as an opportunity for a **technology-driven trust reform**, not a repeat of past paper-based chaos.

Only 20% of candidates accepted PM Internship Scheme offers: data

What is the PM Internship Scheme?

- A **national internship initiative** announced in the 2024 Union Budget.
- Goal: provide **1 crore internships** over five years in leading Indian companies.
- Intended to:
  - Narrow the **industry–academia gap**.

  - Improve employability skills.
  - Give young people **early workplace exposure**.
- Implemented through the **Ministry of Corporate Affairs**, with internships posted on a central portal.

Relevance

GS-II: Governance

- Design and implementation of central schemes.
- Feedback mechanisms, utilisation of funds and coordination with industry.

GS-III: Economy

- Labour market challenges, youth unemployment and skilling deficits.
- Nature of demand for interns versus supply of qualified candidates.

GS-II: Social Sector Development

- Aspirations of young people and barriers in accessing quality internships.
- Importance of **stipend, role quality and duration** in making internships viable.

Why Is It in the News?

- Official data submitted in Parliament shows:
  - Very low **acceptance rates** despite a large number of offers.
  - Significant **mid-way dropout** among those who joined.
- While the pilot exceeded its offer target (1.25 lakh internships), only **about 20% of candidates actually accepted**, and around one-fifth of them exited early.

Pilot Scale & Targets

- Launched in **October 2024** with a target of **1.25 lakh internships** in the first year.
- Across Rounds 1 and 2, over **2.45 lakh internship opportunities** were posted.

Key Numbers (Two Rounds Combined)

- Offers made: **1.65 lakh**.
- Offers accepted: **33,300** → **Acceptance rate ~20.2%**.
- Premature exits: **6,618** → nearly **one in five interns** left mid-way.

Round-wise Performance

Round 1

- Opportunities posted: **1.27 lakh**.
- Applications received: **6.21 lakh**.
- Offers made: **82,000**.
- Offers accepted: **8,700** (~10.6% acceptance).
- Dropouts: **4,565**, meaning over **50% of interns left** before completion.

Round 2 (From January onwards)

- Opportunities posted: **1.18 lakh**.
- Applications: **4.55 lakh**.
- Offers made: **83,000+**.
- Offers accepted: **24,600** (~30% acceptance).
- Dropouts: **2,053** (~8.3% quit rate).

Youth Response: Why Only 20% Acceptance?

- Data suggests many candidates declined offers due to:
    - **Location issues** – positions in cities far from their homes, with stipends too low to sustain living expenses.
    - Roles perceived as **low-value**, involving basic or repetitive tasks with limited learning.
    - Internship durations clashing with **academic calendars and exam schedules**.
    - Misalignment between internships offered and **their career interests or field of study**.

High Dropout Rates: Key Reasons

- Lack of **clear role definitions** and meaningful work.
- Inadequate mentoring, long hours or irrelevant projects.
- Stipends not matching the **opportunity cost** of time for students.
- Interns expecting skill-building but encountering mostly **routine administrative tasks**.
- Better opportunities surfacing through college placements or private platforms.

Utilisation of Funds

- Original pilot budget: **₹840 crore**.
- Revised allocation for FY 2024–25: **₹380 crore**.
- Actual expenditure so far: around **₹73.72 crore**.
- Underutilisation mirrors the **low uptake and dropout issues**.

Structural Challenges in PMIS

- Internships concentrated in **metros and large cities**, excluding many students from smaller towns and rural areas.
- Sectoral imbalance, with plenty of roles in **sales, basic operations and admin**, but fewer in high-skill or emerging sectors.
- Limited engagement from **top-tier companies**.
- Lack of flexible schedules to fit into **academic timetables**.
- Portal functioning is largely transactional, offering little by way of **career counselling, role matching or screening**.

Implications

- Indicates a **disconnect between what the scheme offers and what young people want or can realistically accept**.
- Raises doubts about achieving the **1 crore internships** goal without major course correction.
- Poor-quality internships can actually **hurt employability** if they become a box-ticking exercise.
- Low acceptance and high dropout suggest structural issues in **role design, working conditions and incentives**.

Required Reforms

- Recalibrate stipends with **city tiers and living costs** to make internships viable.
- Promote **remote and hybrid internships** to reduce relocation barriers.
- Diversify into sectors like **technology, digital services, green economy, EVs, AI, logistics and MSMEs**.
- Integrate internships with **university credits**, making them part of the formal curriculum.
- Build a **quality assurance mechanism** with standardised learning outcomes, mentoring norms and feedback loops.

- Improve portal algorithms for **matching skills, preferences and locations**.
- Offer **performance-based incentives** to companies that deliver high-quality training and mentoring.

Conclusion

- The pilot succeeded in generating **offers**, but not in translating them into sustained participation.
- The core bottleneck lies in **acceptance and retention**, not just supply.
- For the scheme to deliver on its promise:
    - Internships must be **meaningful**,
    - Stipends **realistic**,
    - Durations **flexible**, and
    - Companies **accountable for quality**.
- Without addressing these structural shortcomings, the vision of **1 crore internships in five years** remains unlikely to be fulfilled.

GLP-1 drugs

Why Is It in the News?

- On **1 December 2025**, the **World Health Organization (WHO)** released its **first global guidelines** for using **GLP-1 (Glucagon-Like Peptide-1) drugs** to treat obesity in adults.
- WHO has acknowledged GLP-1 therapies as effective, but with **conditional recommendations**, due to:
    - Limited long-term evidence,
    - High costs, and
    - Deep inequities in access.
- This move has significant consequences for global **public health, obesity management and health equity**.

Relevance

GS-II: Health

- Global governance of obesity and non-communicable diseases.
- Combining **drugs with lifestyle interventions** in obesity care.

GS-III: Science & Technology

- Understanding **GLP-1 physiology** and mechanisms in metabolic diseases.
- Challenges of long-term safety, side effects and counterfeit risks.

GS-II: Equity & Public Policy

- Widening gap in access between rich and poor, especially in **low- and middle-income countries (LMICs)**.
- Need for **affordable generics, pricing regulation and policy oversight**.

What Are GLP-1 Drugs?

- GLP-1 is a **hormone produced in the intestine**.
- Its key actions:
  - Stimulates **insulin release**.
  - Slows down **gastric emptying**.
  - Reduces **hunger and food cravings**.
  - Improves metabolic indicators like blood sugar and lipid levels.
- Initially developed for **type-2 diabetes**, these drugs were later found to cause **significant weight loss**.

Examples of GLP-1 Drugs

- **Semaglutide** – marketed as Ozempic (diabetes) and Wegovy (obesity).
- **Liraglutide** – branded as Saxenda for weight management.
- **Tirzepatide** – a dual GLP-1/GIP agonist (e.g., Mounjaro), showing even greater efficacy.

Why GLP-1 Matters Globally

- Obesity is now recognised as a **chronic metabolic disease**, not just a lifestyle choice.
- GLP-1 drugs are the **biggest pharmacological advance** since bariatric surgery.

Impact:

- Weight loss in the range of **15–22%**, depending on the molecule and regimen.
- Reduced risk of:
  - Type-2 diabetes,
  - Cardiovascular disease,
  - Some cancers, and

  - Severe outcomes from infections.
- Economically, obesity is projected to cost around **$3 trillion annually by 2030**.
- If made accessible, GLP-1 therapies could lower healthcare burdens substantially.

Key Elements of WHO's New Guidelines

Conditional Recommendation

- WHO recommends GLP-1 drugs for adults with obesity **under specific conditions**, excluding pregnant women.
- The recommendation is **conditional** because:
  - Long-term safety data is still emerging.
  - Effects after stopping the drug are uncertain (weight regain is common).
  - Prices are extremely high and access uneven.

Must Be Combined With Lifestyle Measures

- GLP-1 drugs cannot substitute **diet, physical activity and counselling**.
- They are to be used **alongside behavioural interventions**, particularly where lifestyle alone has not worked or obesity is severe.

Equity is Central

- WHO emphasises:
  - Use in systems supported by **public health insurance or tax-based financing**.
  - Avoiding a scenario where only wealthy individuals can benefit.
  - Promoting affordable generics and fair pricing for LMICs.

Why WHO Issued Guidelines Now?

- Rapid spike in global demand for drugs like **Ozempic/Wegovy**.
- Widespread **off-label use** and medical tourism.
- Drug shortages in several countries as supply struggles to meet demand.
- Need for unified guidance on:
  - Who should receive these medications.
  - How to integrate them into national strategies against obesity.
  - How to ensure safe and monitored usage.

Concerns Acknowledged by WHO

High Cost

- In India, imported GLP-1 injections can cost **₹20,000–₹30,000 per month or more**.
- This makes them inaccessible to the vast majority.
- Health insurance coverage is minimal.

Limited Long-Term Data

- Many patients regain weight after stopping the drug.
- Safety beyond **5–10 years** is not well established.
- Known side effects include **nausea, vomiting and possible inflammation** of digestive organs.

Supply-Demand Mismatch

- Demand in high-income countries is so high that even diabetics may face **shortages**.
- LMICs risk being left behind in access.

India-Specific Issues

Cost and Access

- Affordability is the single biggest barrier.
- Solutions may require:
    - **Generic production**,
    - Price regulation, and
    - Expanded insurance coverage.

Misuse and Counterfeits

- Growing trend of **cosmetic or non-medical use** for minor weight loss.
- Risks of **unregulated consumption**, black-market products and fake injectables.

Expert Opinions

- Indian endocrinologists and diabetologists stress that:
    - GLP-1 drugs are powerful but **not magic bullets**.
    - Sustainable results still depend on **dietary and lifestyle changes**.
    - Policy must focus on both **treatment and prevention**.

Why GLP-1 Is a Turning Point in Public Health

- One in eight people globally is living with obesity.

- Conventional lifestyle-only approaches succeed long-term in only a **small fraction** of cases.
- GLP-1 drugs represent a **transformative tool** in managing obesity and related metabolic disorders.
- But their impact will depend on whether they are made **safely and equitably accessible**.

GLP-1 and Equity: Key Challenge

- Without deliberate policy action:
  - High-income groups and rich countries will **monopolise access**.
  - LMICs will remain on the margins due to cost and supply constraints.
- WHO insists these drugs must **not evolve into luxury treatments** for a global epidemic.

Policies Needed Globally

- Broader **insurance coverage** or public funding.
- Regulation of pricing and **support for local manufacturing**.
- Incorporation into national **clinical guidelines** for obesity and diabetes.
- Continued investment in **prevention programmes**, not just drugs.

Conclusion

- WHO's endorsement marks a major milestone in **global obesity care**.
- GLP-1-based therapies are **effective and game-changing**, but:
  - They are not stand-alone solutions,
  - They are far from universally accessible, and
  - Their very long-term impact is still unknown.
- The guidelines place emphasis on **safety, fairness and integrated treatment**.
- For India and similar countries, the real test will be whether **cost and insurance barriers** can be overcome.

How the river Kosi's shifting course exposes the perils of embankments

Why Is It in the News?

- New analyses of recent and past **Kosi embankment breaches** (including a major one in 2024) have revived debate on whether embankments **control floods or worsen them**.
- Studies and commission reports show that the Kosi has drifted **about 120 km westward** over 250 years due to heavy silt load and human interventions.
- The government's **"Flood to Fortune"** narrative and large projects such as the **Kosi–Mechi river-linking scheme** have pushed embankment policy into the political and ecological spotlight again.

Relevance

GS-I: Geography

- River behaviour, meandering, sediment deposition, avulsion and channel migration.
- Hydrology of **Himalayan rivers** and their inherently unstable courses.

GS-III: Disaster Management

- How embankment failures amplify flood risks.
- Evaluating **structural vs non-structural** approaches to flood mitigation.

GS-III: Environment

- Impact of human engineering on natural river systems.
- Siltation, upstream land-use changes and climate variability.

Understanding the Kosi River

- Originates in **Tibet and Nepal**, then flows into **Bihar** to join the Ganga.
- Known as **Sapta Kosi** because of its seven contributing tributaries.
- Among the **most sediment-laden rivers** on Earth.
- Called the **"River of Sorrow"** for its devastating floods and dramatic course changes.
- Over the last 250 years, it has **shifted its main channel westwards by about 120 km**.

Why Kosi Is Extremely Flood-Prone

- Carries a **huge volume of silt**, which raises the riverbed.
- Frequently shifts channels, making the surrounding plains **highly vulnerable**.
- Flows over low-gradient plains where water spreads widely.

- Monsoon-driven flow can spike abruptly, with peak discharges touching **around 6 lakh cusecs** (as in 2024).

Embankments: Intended Role

- Built along riverbanks as **artificial levees** to confine floodwaters.
- Aim to protect **settlements, farms and infrastructure**.
- Massive construction of embankments has taken place in **Bihar and Assam** since the 1950s.

Issues with Embankments

Increased Siltation

- Embankments prevent the river from spreading over its natural floodplain, causing silt to be dumped **within the narrowed channel**.
- Over time, the riverbed rises higher than adjacent land, making any breach far more destructive.
- Early committees like G.R. Garg (1951) had warned that embankments are **dangerous for silt-heavy rivers**.

Frequent Breaches

- Kosi has breached its embankments multiple times—in **1963, 1968, 1971, 1980, 1984, 1987, 1991, 2008, 2024**.
- Breaches lead to sudden, **uncontrolled flooding** over vast areas outside the embanked corridor.

Waterlogging Outside Embankments

- Embankments obstruct natural drainage channels.
- Rain and local runoff get trapped, causing **persistent waterlogging** in areas between the river and its embankment.

Loss of Ecological Functions

- Rivers lose their capacity to:
    - Replenish wetlands and groundwater.
    - Recharge floodplains.
    - Distribute fertile silt across agricultural land.
- This leads to **biodiversity decline and falling water tables**.

Short-Term Protection, Long-Term Risk

- As silt raises the riverbed, embankments must be continuously elevated, **raising costs and risks**.

- The apparent sense of safety encourages dense **settlement in floodplains**, which becomes dangerous when embankments fail.

Impact on Agriculture

- Breaches deposit **coarse sand and thick silt** over fields, as seen in the Kosi belt and parts of Assam.
- This often **destroys fertile topsoil**, pushing farmers into distress.

Himalayan Context: Why the East Is More Vulnerable

- **Eastern Himalayan rivers** (like Kosi, Brahmaputra):
  - High rainfall and sediment downstream.
  - Greater channel instability and breach likelihood.
  - Weak geology and frequent landslides.
- **Western Himalayan rivers**:
  - Less rainfall downstream and relatively **more stable channels**, making embankments somewhat less risky.

Key Expert Views

- **E. Somanathan**: Embankments can help initially but later become more dangerous as the riverbed rises; advocates shifting to **floodplain-based resilience** and removing embankments where possible.
- **Rahul Yaduka**: Notes that embankments serve development interests but worsen **waterlogging**; suggests restoring **palaeochannels** to spread and slow floodwaters.
- **Bindhy W. Pandey**: Argues that embankments are largely unsuitable for **Eastern Himalayan rivers** and need strict monitoring and rehabilitation if used.
- **Mahendra Yadav (Kosi Nav Nirman Manch)**: Calls for living with floods and **resettling people outside embankment zones**.

Case Study: 2008 Kosi Disaster

- Major breach at **Kusha (Nepal)**.
- Over **400 deaths** and around **33 lakh people** affected.
- Cause: combined effect of **siltation, ageing embankments and altered flow patterns** due to a barrage.

Kosi–Mechi River-Linking Debate

Government's Position

- Claims project will:
    - Provide irrigation to the **Mahananda basin**.
    - Support fisheries and agriculture.
    - Convert "floods into fortune" by harnessing excess water.

Expert Critique

- Kosi's peak discharge (~6 lakh cusecs) dwarfs the **5,247 cusecs** planned to be diverted.
- Such diversion will not significantly reduce flood peaks.
- May worsen **silt problems** and create new flood risks in the receiving basin.

Economic Concerns

- Embankments and related works absorb a large share of flood-control budgets.
- Spending keeps rising, yet **overall resilience remains low**.

Global Lessons

- In countries like the **United States**, many embankments and levees are being **removed** deliberately.
- Rivers are being reconnected to their floodplains, allowing **controlled flooding** that:
    - Reduces catastrophic peaks.
    - Restores **wetlands and ecosystems**.
    - Improves long-term resilience.

Alternatives & Way Forward

1. **Living with Floods**
    - Restore and protect **natural floodplains**.
    - Promote **zoned habitation** and safer settlement planning.
    - Use **seasonal cropping patterns** compatible with predictable flooding.
2. **Reviving Palaeochannels**
    - Reopen abandoned channels to **redistribute water**.
    - Reduce pressure on the main embankment.
3. **River Basin Governance**
    - Adopt **basin-level planning**, including coordination with **Nepal**.

- Develop a comprehensive **sediment management strategy**.

4. **Early Warning & Evacuation**
    - Strengthen community-based **forecasting and evacuation systems**.
    - Train local populations within embankment belts.
5. **Scientific Desiltation**
    - Carry out targeted, ecologically sensitive **desiltation** where necessary.
    - Avoid indiscriminate sand mining that damages river morphology.

04th December 2025: Daily MCQs

1. With reference to the Department of Telecommunications' Sanchar Saathi initiative, consider the following statements:

1. It enables citizens to check how many mobile connections have been issued in their name.
2. It allows blocking and tracking of stolen or lost mobile devices using IMEI-based mechanisms.
3. Its mandatory pre-installation on smartphones is explicitly authorised under a specific Act of Parliament.

Which of the statements given above is/are correct?

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

Answer: A

Explanation:

- (1) Correct – The TAFCOP component lets users see all numbers issued against their identity.
- (2) Correct – It uses CEIR to block/trace stolen phones based on IMEI.
- (3) Incorrect – The current mandate is by DoT order; there is no dedicated statute passed by Parliament specifically authorising compulsory pre-installation.

Q2. With reference to GLP-1 (Glucagon-Like Peptide-1) drugs mentioned in recent WHO guidelines, which of the following statements is/are correct?

1. GLP-1 drugs were originally developed as anti-obesity medication and later repurposed for diabetes.
2. They act partly by slowing gastric emptying and reducing appetite.
3. WHO recommends their use only in combination with lifestyle interventions such as diet and physical activity.

Select the correct answer using the code below:

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

Answer: B

Explanation:

- (1) Incorrect – They were first developed for type-2 diabetes, and later used for obesity.
- (2) Correct – They delay gastric emptying and suppress appetite.
- (3) Correct – WHO says they must be used alongside lifestyle measures, not alone.

Q3. In the context of Special Intensive Revision (SIR) of electoral rolls, which of the following best describes the core problem highlighted in recent debates?

A. Lack of EVMs in rural polling stations.
B. Dependence on legacy, poorly digitised voter rolls from the early 2000s.
C. Absence of voter ID cards across most States.
D. Non-availability of online grievance redressal mechanisms.

Answer: B

Explanation:
The central issue is that SIR 2.0 relies on **manually prepared rolls from 2002–04**, with inconsistent spellings, missing metadata and non-searchable PDFs. This "weak foundation" persists despite modern systems like ECINet.

Q4. Consider the following statements about the Kosi River and embankments:

1. The Kosi has shifted its course westward by about 120 km over the last few centuries.
2. Embankments along such highly silt-laden rivers tend to raise the riverbed over time, increasing the severity of breaches.
3. Embankments completely eliminate the need for floodplain management and early warning systems.

Which of the statements given above is/are correct?

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

Answer: A

Explanation:

- (1) Correct – Studies indicate ~120 km westward shift over ~250 years.
- (2) Correct – Silt gets trapped inside embanked channels, raising bed levels and making breaches catastrophic.
- (3) Incorrect – Embankments do **not** remove the need for floodplain planning or warnings; they often increase long-term vulnerability.

Q5. With reference to the PM Internship Scheme (PMIS), which of the following can be inferred from the available data?

1. The primary constraint is lack of internship offers from companies.
2. Low acceptance and high dropout rates suggest a mismatch between internship design and youth expectations.
3. Underutilisation of allocated funds is consistent with low participation and retention.

Select the correct answer using the code below:

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

Answer: B

Explanation:

- (1) Incorrect – Offers exceeded targets; the bottleneck is acceptance (≈20%) and retention, not supply.
- (2) Correct – Youth cited role quality, stipend, location and timing as reasons for declining/quitting.
- (3) Correct – Very low fund utilisation reflects poor uptake and operational delays.

Mains: Special Intensive Revision (SIR) of electoral rolls still depends heavily on legacy, error-prone data and paper-era workflows. **Critically analyse why a fully digital, ECINet-centric SIR is essential for electoral integrity in India. What key reforms are needed to transform SIR 2026 into a technology-led trust-building exercise?**