

Today's Prelims Topics

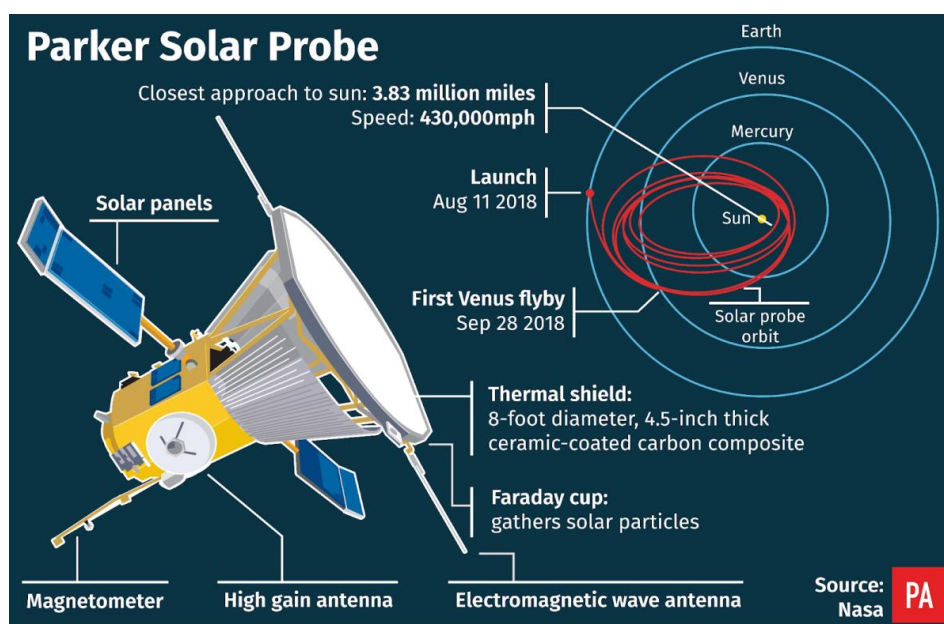
NASA probe flies closer to the sun than any spacecraft

Context

NASA's Parker Solar Probe has just made history by completing its closest pass to the Sun than any spacecraft ever before. On 24 December 2024, the Parker Solar probe made its closest approach to the Sun, coming to a distance of 6.1 million km (0.04 AU) from the surface.

About Parker Probe

- Parker Probe is part of **NASA's Living With a Star program**.
- **Scientific objectives of the Mission:** Uncovering Solar Mysteries
 - **Corona's Temperature:** Investigating why the Sun's corona is hotter (1–2 million °C) than its surface (~5,500 °C).
 - **Solar Wind Origins:** Understanding how the continuous flow of charged particles forms and evolves.
 - **Coronal Mass Ejections (CMEs):** Studying the formation of plasma clouds that influence space weather.
- **Mission Timeline:**
 - **Launched:** August 12, 2018, aboard a Delta IV Heavy rocket.
 - **Duration:** Seven years, with progressively closer orbits to the Sun.
- The spacecraft has become the **closest ever artificial object to the Sun**. It has circled gradually closer to the sun, flying past Venus in order to use the planet's gravity to move it into a tighter orbit.
- **Key Specifications:**
 - **Speed:** Up to 6,90,000 km/h (fast enough to travel from New Delhi to Chennai in about 10 seconds).
 - **Heat Shield:** A 4.5-inch-thick carbon-composite shield protects its instruments from temperatures exceeding **1,377°C, keeping them at a stable 29°C**. The solar shield is placed on the **Sun-facing side of the spacecraft**.
 - **Cooling System:** Circulates a gallon of water to absorb and radiate heat.



Source: [Indian Express - Parker Solar Probe completing closest-ever approach to Sun](#)

NCW begins probe into T.N. sexual assault

Context

National Commission for Women has constituted a two-member fact-finding committee to investigate the sexual assault on an engineering student in the Anna University campus (Chennai).

About National Commission or Women (NCW)

- NCW is an **autonomous and statutory body established in 1992** under the **National Commission for Women Act, 1990**, to protect and promote women's rights in India.
 - It is responsible for reviewing and addressing issues related to the rights of women and for making recommendations for the protection and promotion of these rights.
- **Composition;**
 - **Chairperson**
 - **5 Members** (At Least 1 member from SC/ST)
 - **Member Secretary**
- **Appointment and Removal** both by the Central Government.
- The Chairperson and every Member shall hold office for a period of **3 years**.
- NCW under Section 10(1) (f) of the National Commission for Women Act, 1990 takes **suo motu cognizance of matters** where there is:
 - Violation /deprivation of the rights of women.
 - Non-implementation of laws enacted to provide protection to women and also to achieve the objective of equality.
 - Non compliance of policy decisions, guidelines or instructions aimed at mitigating hardships and ensuring welfare and empowerment of women.
 - Suo Motu cognizance may be taken on the **basis of print, electronic and social media or any other information received by the Commission.**

Source:

- [The Hindu - NCW begins probe into T.N. sexual assault](#)

Private Members' Bills get short shrift in both Houses of Parliament

Context

According to PRS Legislative research, During the five-year term of the 17th Lok Sabha that ended in 2024, only 9.08 hours were spent on Private Members' Bills, while the Rajya Sabha spent 27.01 hours on them during the period.

About Private Member Bill

- It is a legislative proposal introduced in Parliament **by a member who is not part of the government**, differentiating it from government bills presented by ministers.
- A Private Member's Bill requires **one month's advance notice** to be introduced in the House.
 - In case of **Public Bill**, an **advance notice of only 7 days needs to be given before introduction**.
- Time for discussion on the Private member bill is fixed on **alternate Fridays and in afternoon sittings**.
- A private member can bring bills related to **Constitutional Amendments** but he cannot **initiate a Money Bill**.
- Private members can introduce a maximum of **3 notices for Private Members Bills during a Session**.
- Rejection of a private member bill by the House **has no implication on the parliamentary confidence in the government or its resignation**.
- Also **drafting of the bill** is the responsibility of the **concerned member**.

Facts

- Only **14 private members bills** have been passed by both Houses and become law in the history of Indian Parliament.
- **Muslim Wakf Bill, 1952** was the **1st private member bill to be passed in Parliament**.
- No Private Members' Bill has been passed by Parliament since **1970**.

UPSC PYQ

Q. With reference to the parliament of India, consider the following statements: **(2017)**

1. A private member's bill is a bill presented by a Member of Parliament who is not elected but only nominated by the President of India.
2. Recently, a private member's bill has been passed in the Parliament of India for the first time in its history.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Answer: D

Source:

- [The Hindu - Private Members' Bills get short shrift in both Houses of Parliament](#)

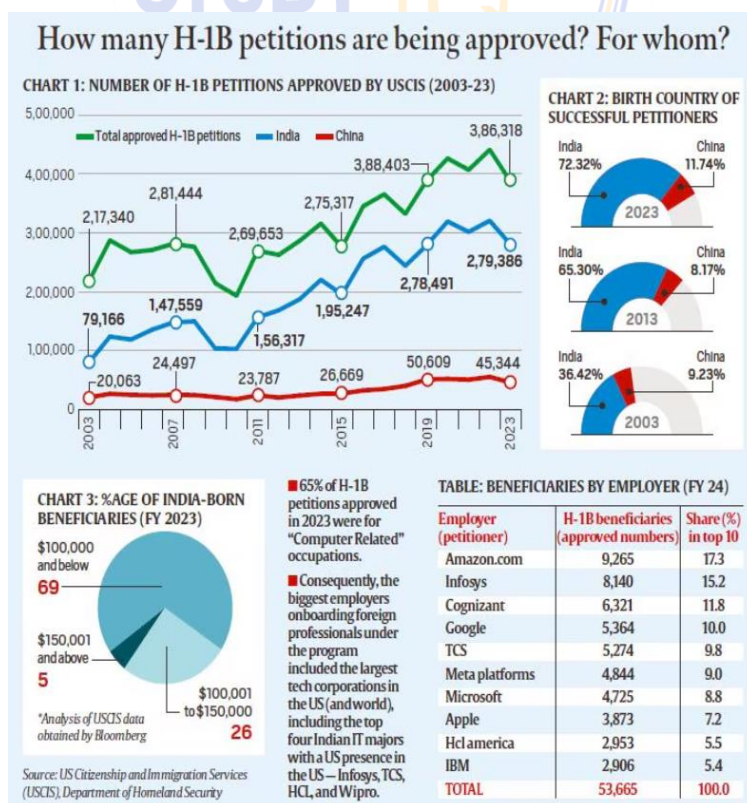
Indians & H1B Visa

Context

The H-1B visa program, critical for skilled migration to the United States, has become a point of contention among supporters of Donald Trump as he prepares to return as US President.

About H1B visa

- It is a Visa in the United States that allows the **US employers to employ high skilled foreign workers in specialised occupations.**
- It was **established in 1990** to help employers address skill shortages that cannot be filled by the domestic workforce.
- **Specialised Occupation:** It refers to a job that requires a specific set of specialised skills and educational qualifications.
 - **Educational Requirement:** At least a Bachelor's degree or higher in a specific field of study.
 - **Specialised Knowledge:** Expertise in a particular field like- IT specialists, engineers, scientists, healthcare professionals etc.
- **Eligibility and Limits:**
 - Valid for up to **6 years** (initially issued for 3 years and renewable for another three).
 - Workers must either leave the US after 6 years or apply for permanent residence (**Green Card**).
 - **Annual cap: 65,000 visas** under the regular cap. An additional **20,000 visas** for individuals with advanced degrees from US universities.
- **Beneficiaries by Country:**
 - **Indians dominate the H-1B program**, accounting for over **70%** of all approvals annually since 2015.
 - Chinese nationals **come 2nd**, representing **12-13% of approvals since 2018.**



Source: [Indian Express - Indians & H1B Visa](#)

30% jump in Gold NPA's

Context

According to data provided by RBI Non-Performing Assets in gold loans have increased significantly among banks and non-banking finance companies (NBFCs).

Key Statistics on Gold Loan NPAs

- **Total NPAs:** Rose 30% to ₹6,696 crore by June 2024, up from ₹5,149 crore in March 2024.
- **Commercial Banks:** NPAs increased **62%** to **₹2,445 crore** by June 2024 from ₹1,513 crore in March 2024.
- **NBFCs:** NPAs increased **24%** to **₹4,251 crore** by June 2024 from ₹3,636 crore in March 2024.
- **Gold Loan Growth:** Gold loan growth for FY 2022-23 stood at **14.6%**, reflecting slower growth compared to previous years.

Reasons behind Gold Loan Defaults

- **Rising Indebtedness:** A slowing economy has impacted income levels, reducing borrowers' repayment capacity.
- **High Gold Prices:**
 - Increased gold prices encouraged people to pledge gold to meet expenses like household needs, education fees and medical bills.
 - Borrowers often defaulted due to the loan amount exceeding the gold's purchase price, impacting their credit scores.
- **Deficiencies in Loan Segment flagged by RBI:**
 - Weak monitoring of loan-to-value (LTV) ratios.
 - Incorrect application of risk weights.
 - Lack of transparency in gold auctions.

Non-Performing Assets (NPA)

- It is a loan or advance for which the **principal or interest payment** remains **overdue** for a period of **90 days**.
- **Classification (as per the RBI guidelines):**
 - **Substandard assets:** Assets which have **remained NPA for a period less than or equal to 12 months**.
 - **Doubtful assets:** An asset that has remained in the **substandard category for a period of 12 months**.
 - **Loss assets:** It is considered **"uncollectible" or of such little value** that its continuance as a bankable asset is not warranted, although there may be some recovery value.
- **Metrics that help us to understand the NPA situation of any bank:**
 - **Gross NPA:** It refers to the total NPAs of the banks.
 - **Net NPA:** Net NPA is calculated as Gross NPA - Provisioning Amount.
 - **i.e.** Net NPA gives the exact value of NPAs after the bank has made specific provisions for it.

Source:

- [Indian Express - 30% jump in gold loan NPAs](#)

Good Governance Index

Context

The Union government has decided not to release the Good Governance Index 2023 (GGI) for this year, instead publishing the next edition in 2025.

About Good Governance Index (GGI)

- GGI is a comprehensive framework to assess the State of Governance in all the States and UTs which enables ranking of States/Districts and presents a comparative picture.
- It is a **biennial exercise** started in **2019**.
- **Prepared by:** Department of Administration Reforms and Public Grievances (DARPG), Ministry of Personnel, Public Grievances & Pensions.
- GGI assesses states and union territories across **10 sectors, including agriculture, commerce, human resource development, public health etc.**
- The last GGI index was released in **2021**, in which **Gujarat secured the top spot**.

Source:

- [Indian Express - Govt cancels release of Good Governance Index 2023](#)



Centre signs contracts for AIP and torpedoes for submarines

Context

The Ministry of Defence has signed two contracts to upgrade the capabilities of India's **Scorpene-class submarines**, on integrating advanced technologies like Air Independent Propulsion (AIP) modules and Electronic Heavy Weight Torpedoes (EHWT).

About Air Independent Propulsion (AIP) Module & EHWT

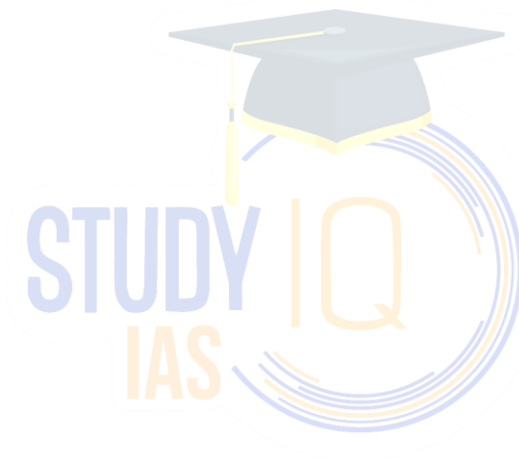
- AIP is a technology that allows non-nuclear submarines to operate without atmospheric oxygen. It Allows submarines to stay submerged for longer periods, improving stealth capabilities.
- It is developed by DRDO.
- **Working Mechanism:** AIP systems produce oxygen, which is then used to generate power.

Electronic Heavy Weight Torpedo (EHWT)

- It is designed by DRDO to provide advanced strike capabilities. It will address operational gaps in the Scorpene fleet, ensuring better offensive and defensive strategies.

Source:

- [The Hindu - Centre inks contracts for AIP, torpedoes for submarines](#)



Editorial Summary

India's obligations towards the Rohingya

Context

A joint study by The Azadi Project and Refugees International highlights severe violations of constitutional and human rights against Rohingya refugees detained in India.

Who are Rohingya Refugees?



- The Rohingya are a mostly Muslim ethnic group who have lived in Buddhist-majority Myanmar for centuries.
- Flee Myanmar due to **genocidal violence**.
- However, Myanmar does not recognise them as an official ethnic group, making them the largest identified stateless community in the world.
- **Rohingya population:** ~2.8 million globally.
 - ~22,500 in India (UNHCR estimate).

Refugee Rights Under International Law

- **1951 Refugee Convention and 1967 Protocol:** The principle of **non-refoulement** prohibits returning individuals to places where they face persecution or severe human rights violations.
 - Recognized as **customary international law**, binding even on non-signatory states.
 - Non-refoulement is **absolute**, as affirmed by the Office of the United Nations High Commissioner for Human Rights and the UNHCR.
- **Other Key Treaties:**
 - **International Covenant on Civil and Political Rights (ICCPR):** Article 7 implicitly upholds non-refoulement.
 - **Convention on the Rights of the Child (CRC)** and **International Convention on the Elimination of All Forms of Racial Discrimination (ICERD):** Ratified by India, these reinforce non-refoulement obligations.

India's Position on Rohingya Refugees

Domestic Legal Framework

- India is **not a signatory** to the Refugee Convention, its Protocol, or key treaties like the **Convention Against Torture**.

- Domestic laws such as the **Foreigners Act, 1946**, and the **Passport Act, 1967**, label Rohingya refugees as "illegal migrants."
- The government asserts no legal obligation to provide asylum, citing **national security concerns**.

Supreme Court Decisions

- **2021**: In *Mohammad Salimullah & Anr. vs. Union of India*, the Court allowed deportation of 170 Rohingya refugees citing national security.
- **2024**: Delhi High Court dismissed a plea to admit Rohingya children into local schools, noting the issue required government policy decisions.

India's International Obligations

- **Relevant Treaties:**
 - India is party to the ICCPR, CRC, and ICERD, which enforce non-refoulement.
 - Signed but not ratified the Convention Against Torture, making its provisions **non-binding** but indicative of India's commitment.
- **Judicial Interpretations:**
 - Supreme Court rulings (*Vishaka vs. State of Rajasthan, 1997*; *NALSA vs. Union of India, 2014*) affirm the application of international conventions in the absence of domestic legislation.
 - High Courts (e.g., *Ktaer Abbas Habib Al Qutaifi vs. Union of India, Gujarat HC, 1998*; *Dongh Lian Kham vs. Union of India, Delhi HC, 2015*) interpreted non-refoulement as part of **Article 21 (Right to Life)**.

Concerns and Challenges

- **Unequal Treatment of Refugees:** Refugee policy lacks standardisation, driven by **geopolitical interests**.
 - While Tibetan, Sri Lankan, and Afghan refugees receive legal aid and long-term visas, most Rohingya face **detention and criminal imprisonment** despite UNHCR registration.
- **Exclusionary Policies**
 - **Citizenship Amendment Act, 2019:** Excludes persecuted Muslim minorities like the Rohingya from its provisions.
- **Lack of Legal Representation:** Civil society groups face funding issues due to revoked **FCRA licences**, limiting their ability to support detained refugees.
 - Lawyers are hesitant to take up Rohingya cases fearing **government backlash**.
- **Dehumanising Living Conditions:** Recently, the Supreme Court directed Assam State Legal Services to inspect living conditions at detention facilities because detention centres, such as **Matia Transit Camp**, are overcrowded and unhygienic.
 - Pregnant women and children of Rohingya refugees are among those detained in substandard conditions.

Source: [The Hindu: On India's obligations towards the Rohingya](#)

Sheikh Hasina's Extradition Demand, India's Options

Context

Bangladesh formally requested India to extradite Bangladeshi Prime Minister Sheikh Hasina.

More in News

- Bangladesh has initiated domestic proceedings for Sheikh Hasina's alleged crimes including state-sponsored violence and killings during her regime..
- Bangladesh is a party to the Rome Statute of the ICC, which could potentially involve the ICC if there are concerns about fair trial rights

Legal Framework for Extradition

- **Bilateral Extradition Treaty (2013):** A treaty between India and Bangladesh provides the legal basis for extradition requests.
 - Outlines the terms and conditions under which an individual may be extradited between the two countries.
- **Indian Extradition Act, 1962:** Governs the process of extradition in India for nationals and non-nationals.
 - Establishes procedural and substantive requirements for extradition, including the defenses a requested state can use to deny extradition.
- **Articles 20 and 21 of the Indian Constitution:** Protect even non-citizens within Indian territory.
 - Article 21 ensures the right to life and personal liberty, which could be invoked to challenge extradition in cases involving risks of torture, unfair trial, or inhumane treatment.
 - In cases like **National Human Rights Commission vs State Of Arunachal Pradesh (1996)**, it was established that even non-citizens can claim rights under Indian law.
- **Customary International Law - Principle of *Aut Dedere Aut Judicare*:** Obligates states to either extradite or prosecute individuals accused of grave international crimes (e.g., genocide, war crimes, crimes against humanity).
 - Not legally binding for India in the absence of direct treaty obligations.
- **Section 339 B of the Code of Criminal Procedure, 1898 (Bangladesh):** Allows trials in absentia, which could be relevant if Sheikh Hasina is not extradited but participates remotely.

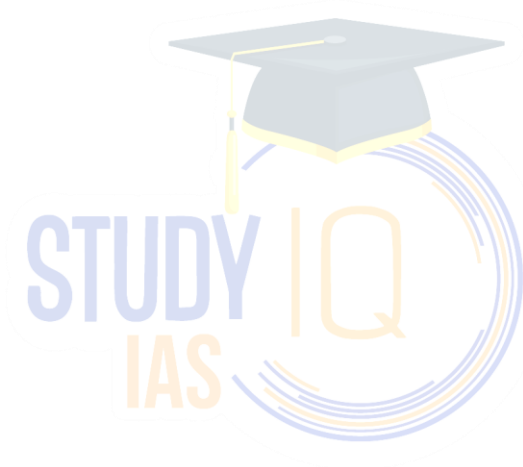
Role of the ICC and Complementary Jurisdiction

- **International Criminal Court (ICC):** The ICC is a court of last resort that prosecutes individuals for grave international crimes, such as genocide, war crimes, and crimes against humanity.
 - It supplements, rather than supplants, national jurisdictions by intervening only when a state is unwilling or unable to prosecute such crimes.
 - **Article 17:** States that the ICC will not exercise jurisdiction if the domestic legal system is actively and effectively investigating or prosecuting the case.
 - Ensures that national courts have the primary responsibility for conducting trials.
- **Potential ICC Intervention Scenarios:**
 - **Article 53:** If it appears that the domestic legal process is not independent, impartial, or aimed at justice, the ICC may intervene.
 - **Article 15:** Allows the ICC Prosecutor to initiate a *proprio motu* (on their own initiative) preliminary examination to assess whether a case falls within the ICC's jurisdiction.
 - **Article 14:** A state party (e.g., Bangladesh) can refer a case to the ICC if it believes it cannot fairly or effectively prosecute the case domestically.

Concerns and Recommendations

- **Risks of Extradition:** Bangladesh's record of **prison conditions and torture** raises concerns about Ms. Hasina's safety.
 - Emotional or vengeful actions could damage **India-Bangladesh relations** and harm regional stability.
- **In-House Arrest Proposal:** India could consider allowing Hasina to remain under in-house arrest while participating in her trial via video conferencing.
 - This approach would:
 - Ensure her rights are protected while addressing Bangladesh's judicial needs.
 - Allow Indian authorities to facilitate evidence gathering and cooperation with Bangladeshi agencies.

Source: [The Hindu: Sheikh Hasina extradition demand, India's options](#)



Addressing the Issue of Not of Standard Quality (NSQ) Drugs in India

Context

The recent incidents involving not of standard quality (NSQ) drugs in India have raised significant concerns regarding drug safety and regulatory practices.

What was the recent incident?

- Five young mothers in Ballari district, Karnataka, allegedly died due to contaminated drugs manufactured by a pharmaceutical company in West Bengal.

Challenges with the Current Regulatory Framework

- **Fragmented Regulatory Authority:** Under the Drugs and Cosmetics Act, 1940, pharmaceutical companies can sell their products across India based on state-level licenses. This means that:
 - A pharmaceutical company licensed in one state can distribute its drugs nationwide without undergoing inspections by other states' drug regulators.
 - States like Karnataka lack the authority to prevent the sale of substandard drugs manufactured in other states, leading to a flood of NSQ products in their markets.
 - **E.g.,** Data from Karnataka's drug laboratories shows that out of 894 samples tested over three years, 601 samples (approximately 67%) that failed quality tests originated from manufacturers outside Karnataka. This indicates a significant reliance on external states for drug quality assurance.
- **Inefficient Legal Recourse:** The primary legal recourse available to state authorities is criminal prosecution against manufacturers of NSQ drugs. However:
 - Criminal cases can take years to resolve, during which time the offending company may continue operations unimpeded.
 - Only the drug inspectors in the home state have the power to suspend or revoke manufacturing licenses, limiting immediate action against harmful products.
- **Lack of Information Sharing:** There is currently no centralized database for drug testing results or inspection reports, which hampers effective regulatory oversight. The absence of such a system leads to:
 - Difficulty for state inspectors and procurement agencies in verifying the quality and history of pharmaceutical manufacturers outside their jurisdiction.
 - Procurement decisions often rely solely on manufacturers' claims without independent verification.

Proposed Solutions

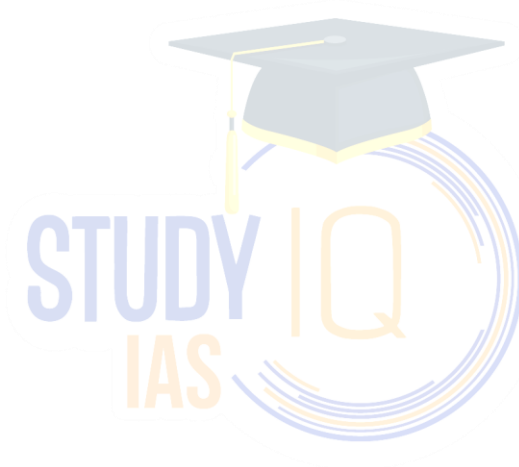
- **Promoting Information Sharing:** Establish a **centralised database** for:
 - Drug test results from all central and state drug testing laboratories.
 - Inspection reports and licensing details of manufacturers across states.
 - Benefits:
 - Helps drug inspectors and procurement officials track the history of pharmaceutical companies.
 - Enables risk-based enforcement and procurement decisions.
 - **Example:** Helps avoid scandals like the one in Maharashtra, where spurious antibiotics were sold to a public hospital.
 - Procurement agencies like the **Karnataka State Medical Supplies Corporation Ltd. (KSMSCCL)** could use this database to verify pharmaceutical companies' antecedents.
- **Creating a Blacklist Register:** Union Ministry of Health should create a central register of pharmaceutical companies blacklisted for supplying NSQ drugs.

- **Benefits:** Helps procurement agencies identify and avoid dealing with unreliable suppliers.
- **Empowering States with Regulatory Powers:** Allow states to block out-of-state manufacturers under investigation for serious adverse drug events.
 - Manufacturers should prove rectification before resuming sales.
- **Amendment:** Requires amendment of the **Drugs and Cosmetics Act, 1940**, which is central legislation.
 - Legislative reform must be initiated by the Union Health Ministry, with Karnataka supporting such measures.

Impact of the Proposed Reforms

- Enhanced public health safety through stricter enforcement.
- Improved decision-making for procurement agencies like KSMSCCL.
- Weeding out unreliable pharmaceutical players from the market.
- Ensuring a more robust and transparent regulatory framework for drug manufacturing and distribution in India.

Source: [The Hindu: States and the danger of poorly manufactured drugs](#)



The Rise of UPI and Challenges of a Market Duopoly

Context

The Unified Payments Interface (UPI) has experienced remarkable growth since its launch in 2016.

UPI's Growth and Success

- **Key Statistics:** UPI accounts for nearly 8 out of 10 digital transactions in India.
 - In August 2024 alone, UPI transactions totaled over ₹20.60 lakh crore.
- **Achievements:** UPI has significantly enhanced public trust in digital payments, especially in a cash-dependent country with low digital literacy.
 - UPI penetration stands at 30% of the population, leaving scope to include the remaining 70%.

Market Concentration in UPI

- **Dominant TPAPs (Third-Party App Providers):**
 - **PhonePe (owned by Walmart):** 48.36% market share.
 - **Google Pay:** 37.3% market share.
 - Combined, these two control over 85% of the UPI market.
 - **Paytm:** Third-largest with just 7.2% market share.
- **Implications:** The UPI ecosystem faces a significant duopoly, dominated by two foreign-owned players (PhonePe by Walmart and Google Pay by Google).

Risks Associated with Duopoly

- **Systemic Vulnerability:** Since most UPI transactions are handled by just two apps (PhonePe and Google Pay), any problem with either of them can disrupt the entire digital payment system.
- **Decreased Competition and Innovation:** These big players have so many users that smaller companies can't match their scale.
 - UPI doesn't charge users for transactions, so apps compete mainly by having more users.
 - Big apps then use this advantage to sell other financial products (like loans or insurance).
 - Since the big players already control the market, they don't have much motivation to improve or come up with new ideas, making the system stagnant.
- **Foreign Dominance:** Both top apps are owned by foreign companies.
 - There's a risk that sensitive information about Indian users could be misused or accessed by foreign entities.
 - Indian developers and companies don't have the massive funds needed to compete with these global giants. This makes it tough for India to have homegrown apps leading the market.

Regulatory Efforts and Delays

- **Market Share Cap Policy (2020):** The National Payments Corporation of India (NPCI) proposed a 30% cap on market share for TPAPs, with a two-year deadline for implementation.
 - This deadline has been repeatedly extended.
- **Current Market Reality (2024):** Dominant TPAPs retain overwhelming control, with PhonePe and Google Pay together holding 85% market share.
 - Reports suggest the NPCI may raise the cap from 30% to 40%, further entrenching the duopoly.

Recommendations for Addressing the Challenges

- **Enforce Market Share Caps:** Implement the 30% cap to foster a level playing field.
- **Support Indian Developers:** Create incentives and favorable conditions to encourage Indian TPAPs to compete and innovate.

- **Focus on Public Trust:** A balanced, competitive ecosystem is essential to maintain public trust and safeguard UPI's future potential.

Source: [The Hindu: UPI duopoly's rise and market vulnerabilities](#)

