



**NEXT IAS**

***DNA : DAILY NEWS ANALYSIS***



**01<sup>st</sup> JAN, 2026**



# **DAILY NEWS**

## **ANALYSIS**

### **Top News Articles:**

- ▶ **US firm & NTPC to team up, fuel India's thorium ambition- IE Pg 1 and Pg 2**
- ▶ **India's space programme, a people's space journey - TH Pg 10**
- ▶ **DRDO Carries Out Salvo Launch of Pralay Missiles- TH Pg 16**
- ▶ **National Drug Survey to Examine Indigenous Substance Use Patterns- TH Pg 16**
- ▶ **When FIIs Flew from Indian Stocks- TH Pg 17**

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## Quote of the Day

ॐ सर्वे भवन्तु सुखिनः ।  
सर्वे सन्तु निरामयाः ॥  
सर्वे भद्राणि पश्यन्तु ।  
मा कश्चिद्दुःखभागभवेत् ॥

सभी सुखी होवें, सभी रोगमुक्त रहें, सभी का जीवन मंगलमय बनें और कोई भी दुःख का भागी न बने। हे भगवन ! हमें ऐसा वर दो!

# NTPC–US Firm Collaboration to Advance India's Thorium Programme

## US firm & NTPC to team up, fuel India's thorium ambitions

Comes in the wake of SHANTI Act;  
NTPC may consider equity infusion

**Anil Sasi**  
*New Delhi, December 31*

CHICAGO-BASED Clean Core Thorium Energy (CCTE), only the second American company to have bagged an export licence from the US Department of Energy to sell nuclear technology to India in nearly two decades, will partner NPTCLtd, the country's largest power utility, in the development of thorium as an alternative to uranium for fuelling nuclear reactors.

The Board of state-owned NTPC is learnt to have cleared a minority equity investment in CCTE in a strategic early stage participation effort in this niche area, which could potentially mark another step toward closer cooperation between India and the US on atomic energy at a time when bilateral trade relations are still in a limbo.

The NTPC stake infusion proposal is subject to clearances from the Ministry of

»CONTINUED ON PAGE 2

**E.** EXPLAINED

### The alternative fuel

Indian policymakers have long considered thorium an alternative to uranium because it's more abundant, produces lesser amounts of long-lived radioactive waste and potentially lowers the proliferation risk. India has little uranium reserves but abundant deposits of thorium, mostly on the beaches of Kerala and Odisha.

India's proposed collaboration between **NTPC** and US-based **Clean Core Thorium Energy (CCTE)** marks a significant development in India's long-term nuclear energy strategy. Enabled by the **SHANTI Act, 2025**, the initiative aims to accelerate **thorium utilisation**, a core pillar of India's three-stage nuclear programme, to enhance **energy security and strategic autonomy**.

## BACKGROUND: THORIUM AND INDIA'S NUCLEAR VISION

India has pursued a **three-stage nuclear programme** since the 1950s to overcome its **limited uranium reserves** and leverage its **abundant thorium resources**.

Stage	Reactor Type	Fuel
Stage I	PHWRs	Natural Uranium
Stage II	Fast Breeder Reactors	Plutonium
Stage III	Advanced Reactors	Thorium → U-233

## INDIA'S THREE-STAGE NUCLEAR PROGRAMME

However, delays in scaling up **Stage II (FBRs)** have slowed India's transition to thorium-based energy.

## SIGNIFICANCE OF THE NTPC–CCTE COLLABORATION

### 1. Policy Shift under SHANTI Act, 2025

- **Why it matters:** For the **first time**, allows:
  - **Private sector participation** in nuclear power operations
  - **Private role in nuclear fuel management**
  - Creates scope for **foreign collaboration** in nuclear fuel and technology
- Breaks decades of **exclusive state control**, enabling technology inflows and innovation.

### 2. Early Deployment of Thorium

- CCTE's fuel (**ANEEL**) blends **thorium with HALEU (High-Assay Low-Enriched Uranium)**.
  - **HALEU (High-Assay Low-Enriched Uranium):**
    - Uranium enriched between **5–20% U-235**
    - Used to initiate and sustain reactions with thorium
- Can be deployed in **existing PHWRs**, bypassing dependence on full FBR capacity.
- Enables **earlier entry into the thorium phase**, advancing Stage III ahead of schedule.

### 3. Role of NTPC

- NTPC's minority equity investment aligns with its target of **30 GW nuclear capacity by 2047**.
- Signals diversification from:
  - Power generation → **nuclear fuel cycle and advanced technologies**
- Focus is on **retrofitting thorium fuel into existing reactors**, not building entirely new ones

# ADVANTAGES OF THORIUM-BASED NUCLEAR ENERGY

## Energy & Strategic Benefits

- **Resource Perspective**
  - India has:
    - Limited uranium reserves
    - Abundant thorium reserves
- Major thorium deposits: Coastal sands of **Kerala, Odisha**.
- Reduces dependence on **imported uranium**.
- Strengthens **long-term energy security** and strategic autonomy.

## Safety & Environmental Benefits

- Produces **less long-lived radioactive waste**.
- Lower **nuclear proliferation risk**.
- Thorium is a **fertile material** (not directly fissile)- Improved reactor safety margins.



## Economic Benefits

- Potential reduction in operating costs of existing reactors.
- Better utilisation of existing PHWR infrastructure.

## Used Fuel & Future Pathways

- Used fuel from **PHWRs** can be:
  - Reprocessed
  - Recycled for further power generation
- Opens pathway to:
  - **Molten Salt Reactors (MSRs)** in the future
  - Faster transition away from imported nuclear fuel

## CHALLENGES AND CONCERNS

### 1. Technological & Regulatory Challenges

- Thorium is **fertile, not fissile**, requiring complex fuel cycles.
- Large-scale commercial deployment remains **unproven globally**.

### 2. Nuclear Liability & Safety

- Private participation raises concerns over:
  - Nuclear liability
  - Safety oversight
  - Regulatory capacity of institutions like **AERB**

### 3. Strategic & Geopolitical Sensitivities

- Dependence on **foreign technology and HALEU supply**
- Need to balance cooperation with **strategic autonomy**

## WAY FORWARD

- **Strengthen indigenous R&D** in thorium fuel cycles alongside foreign collaboration.
- Gradually expand thorium use through **pilot projects** in PHWRs.
- Ensure robust **regulatory oversight** and clear liability frameworks.
- Integrate thorium strategy with:
  - Climate commitments
  - Clean energy transition
  - Atmanirbhar Bharat in nuclear technology



## PRACTICE QUESTION

**Q. With reference to India, consider the following statements:**

- 1. Monazite is a source of rare earths.**
- 2. Monazite contains thorium.**
- 3. Monazite occurs naturally in the entire Indian coastal sands in India.**
- 4. In India, Government bodies only can process or export monazite.**

**Which of the statements given above are correct?**

- (a) 1, 2 and 3 only**
- (b) 1, 2 and 4 only**
- (c) 3 and 4 only**
- (d) 1, 2, 3 and 4**

# India's space programme, a people's space journey

## India's space programme, a people's space journey

India's space journey has evolved beyond a string of spectacular missions. It has the national pulse and is a source of daily inspiration. In June 2025, when Group Captain Shubham Shukla displayed the Tricolour aboard the International Space Station (ISS) and spoke to Prime Minister Narendra Modi, it was a moment of pride for every Indian. The Prime Minister called it a "defining chapter" of *Amrit Kaal* ('era of nectar'), and for many, that moment felt like India's ascent was a part of their own heartbeat. It was not just science. It was identity being reshaped through vision and purposeful programmes.

That same spirit has been echoed earlier, on August 23, 2023, when Chandrayaan-3 made India the first nation to land near the lunar south pole. "India is now on the Moon," declared Mr. Modi – words which rippled through classrooms, villages and living rooms alike. India's lunar programme has been truly path breaking: Chandrayaan-1 (2008) confirmed the presence of water molecules; Chandrayaan-2 (2019) mapped the moon with high precision and prepared the ground for Chandrayaan-3 (2023), which achieved the world's first soft landing near the south pole. When the Vikram lander and Pragyan rover explored the lunar surface for a full moon day, this led children to draw depictions of lunar landscapes in notebooks, it left researchers feeling vindicated, and inspired citizens who saw India's story in space as also their own future.

India has become a trusted global partner in space. Over 400 foreign satellites have been launched aboard Indian rockets. In 2014, India became the first Asian nation and only the fourth in the world to reach Mars orbit – and on its maiden attempt, with the Mars Orbiter Mission (Mangalyaan). The Aditya-L1 mission (2023), built through multi-institutional collaboration, is providing unprecedented insights into the sun's corona and its impact on space weather. XPoSat (2024) is studying black holes, while SpaDAX (2024) has demonstrated in-orbit docking for future space stations and lunar missions.

### A new space vision

These milestones are reshaping policy, culture, and aspiration. The road map is bold: continuation of the Gaganyaan programme for human spaceflight, Chandrayaan-4 and 5 for deeper lunar exploration, a dedicated Venus mission, a Bharatya Antariksh Station (BAS) by 2035, and an Indian human landing on the Moon



**S. Somanath**  
was Secretary,  
Department of Space,  
and Chairman of the  
Indian Space  
Research  
Organisation (ISRO).  
He is a  
Distinguished Visiting  
Professor, Indian  
Institute of Space  
(IISc), Bengaluru, and  
Advisor (Space  
Technology),  
Government of  
Andhra Pradesh

by 2040. These are not distant dreams but national goals, aligned with the spirit of *Amrit Kaal*.

The Prime Minister has called for building a pool of 40 to 50 trained astronauts for future missions. On National Space Day 2025 (August 23), he urged young citizens to see themselves as participants in India's human space programme. Gaganyaan, with an approved outlay of over ₹20,000 crore, is advancing steadily. Four Indian Air Force test pilots are undergoing training, and a series of uncrewed and crewed flights will culminate in India's first indigenous human space mission, presently targeted for 2027.

Space technology today is woven into the fabric of governance and daily life. Satellites deliver disaster warnings, guide fishermen, assess crop yields and insurance claims, enhance railway safety, and power the geospatial backbone of the PM Gati Shakti programme. Space is no longer a distant luxury but a democratic utility – accessible to every citizen.

At the same time, space exploration fuels Science, Technology, Engineering and Mathematics (STEM) education, advanced research, and workforce development. Future-ready technologies in space operations, autonomy, robotics, in-space manufacturing, surveillance and interplanetary travel are being developed, ensuring that India retains leadership in this strategic frontier.

The transformation of India's space sector is deliberate and ambitious. The opening of the field to private players, creating a thriving ecosystem of more than 250 startups building satellites, launch vehicles, and ground systems. The space budget has nearly tripled – from ₹5,435 crore in 2013-14 to ₹13,486 crore in 2025-26 – and has been augmented by nearly ₹5,000 crore in user funds. India's space economy, currently valued at \$8 billion, is projected to grow to \$44 billion in the years ahead, creating jobs, industries and innovations that orbit around this sector.

### Inspiring the next generation

The Prime Minister has challenged the ecosystem to deliver five space unicorns within the next five years and to scale up annual launches, nearly ten-fold, to 50 a year. With private participation, India is advancing technologies related to semi-cryogenics, electric propulsion, quantum communication and in-orbit servicing.

Youth are at the heart of this vision. The

International Olympiad on Astronomy and Astrophysics hosted in India (August 2025) drew nearly 300 participants from over 60 countries, with Indian students winning medals. Initiatives such as the ISRO Robotics Challenge and Indian Space Hackathon/Bharatya Antariksh Hackathon are bringing school and college students into direct contact with rovers, satellites and rockets, building confidence that the laboratories and launchpads of tomorrow are theirs to claim.

At the policy level, the National Meet 2.0 held just before National Space Day produced 5,000-plus pages of documentation across 300 user interactions. This 15-year road map aligns every mission with the vision of *Viksit Bharat 2047*.

### Global collaborations and leadership

Space has been consistently projected as a global commons, where India's leadership translates into shared progress. The South Asia Satellite has provided neighbours with communication capacity, while during India's G20 presidency in 2023, India announced a "G20 satellite" for climate and environmental monitoring with data shared with all nations. Collaborative missions such as NASA-ISRO Synthetic Aperture Radar (NISAR) with the National Aeronautics and Space Administration (NASA), Thermal Infrared Imaging Satellite for High-resolution Natural Resource Assessment (TRISHNA) with CNES (French space agency), Lunar Polar Exploration (LLPEx) with Japan Aerospace Exploration Agency (JAXA), and India's participation in the European Space Agency (ESA)'s Proba-3 demonstrate India's rise as a global partner, guided by the ethos of *Visatvato Karmacharam* ('the world is one family').

India's space journey is more than rockets and satellites. It is about a nation discovering new ways to see itself. The salute of Shubham Shukla aboard the ISS, the landing of Chandrayaan-3, 250 startups from small towns designing space systems, young students competing in Olympiads, and satellites quietly serving national security and citizen services are all part of the same story.

In this *Amrit Kaal*, India is not simply participating in the space age. It is shaping it. With ambition, confidence, and purpose, Bharat looks to the stars knowing that the horizon belongs to it too.

*The views expressed are personal*

India is not  
only an active  
participant in  
the space age  
but is also  
shaping it

India's space programme has evolved from elite scientific missions to a people-centric national endeavour. Space is now:

- A tool of governance
- A driver of economic growth
- A source of national identity and inspiration

This transformation aligns with the vision of Amrit Kaal and Viksit Bharat @2047.

## EVOLUTION OF INDIA'S SPACE PROGRAMME

- India's space programme has evolved from **mission-centric achievements** to a **people-centric national movement** aligned with the spirit of **Amrit Kaal**, reflecting national aspiration and identity.
- **Recent Major Milestones**
  - **Chandrayaan missions:**
    - Chandrayaan-1 (2008): Confirmed presence of **water molecules on the Moon**.
    - Chandrayaan-2 (2019): High-resolution lunar mapping.
    - Chandrayaan-3 (2023): **First-ever soft landing near lunar south pole**.
  - **Mars Orbiter Mission (Mangalyaan, 2014):** India became the **first Asian nation** and **fourth globally** to reach Mars orbit.
  - **Aditya-L1 (2023):** Studying the Sun's corona and space weather.
  - **XPoSat (2024):** Research on black holes.
  - **SpaDeX (2024):** Demonstrated **in-orbit docking**, crucial for future space stations.
  - Over **400 foreign satellites** launched using Indian launch vehicles.

## HUMAN SPACEFLIGHT PROGRAMME (GAGANYAAN)

- Gaganyaan is progressing steadily with:
  - Approved outlay of **₹20,000+ crore**.
  - **Four Indian Air Force pilots** undergoing astronaut training.
- Planned **uncrewed and crewed missions**, targeting:
  - India's **first indigenous human space mission by 2027**.
- Vision to build a pool of **40–50 trained astronauts** for future missions.



## FUTURE SPACE VISION & ROADMAP



- **Upcoming missions:**
  - Gaganyaan continuation
  - Chandrayaan-4 & Chandrayaan-5 (deeper lunar exploration)
  - Dedicated **Venus mission**
  - **Bharatiya Antariksh Station (BAS)** by 2035
  - **Indian human landing on the Moon by 2040**
- These goals are framed as **national targets**, not distant ambitions.

## SPACE SECTOR REFORMS & PRIVATE PARTICIPATION



- Opening of the space sector to **private players** has:
  - Created a vibrant ecosystem of **350+ startups**
  - Enabled private development of satellites, launch vehicles, and ground systems
- Space budget growth:
  - From **₹5,615 crore (2013-14)** to **₹13,416 crore (2025-26)**.
- India's space economy:
  - Valued at **~\$8 billion**
  - Projected to grow to **\$44 billion**.
- Government aims to scale launches to **~50 per year**.

## GLOBAL COLLABORATION & LEADERSHIP

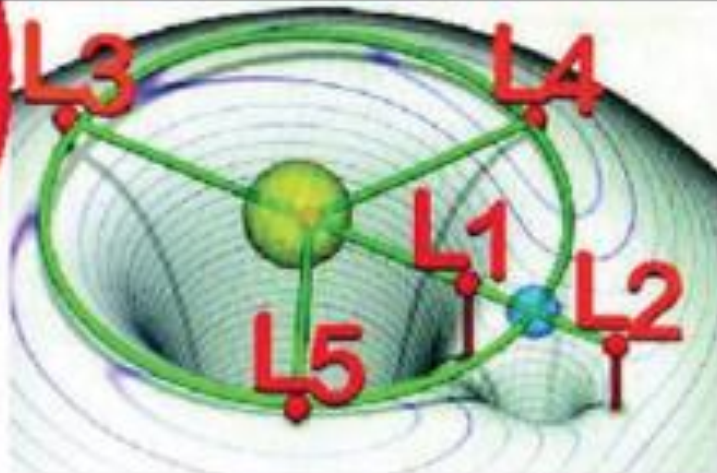
- India positions space as a **global commons**.
- **Key collaborations:**
  - **NISAR** with NASA
  - **TRISHNA** with CNES (France)
  - **LUPEX** with JAXA (Japan)
  - **Proba-3** with ESA
- Initiatives like:
  - **South Asia Satellite**
  - **G20 Climate Satellite** for environmental monitoring
- Guided by the ethos of **Vasudhaiva Kutumbakam**.

## ABOUT THE ADITYA L-1 MISSION

### All About Aditya-L1

Aditya is India's third big extra-terrestrial outing after Moon and Mars

400-kg  
spacecraft  
to study  
Sun



➤ To orbit 15 million km from Earth

➤ Launched on 2nd September 2023 on PSLV

➤ Its 7 instruments to focus on Sun's outer corona, magnetic field, solar winds

➤ Sanctioned in 2008 at a cost of Rs.127.5 crore.

- **India's First Dedicated Solar Mission**
  - Aditya-L1 marks ISRO's **first exclusive mission to study the Sun**, expanding India's space programme from planetary exploration to **heliophysics**.
- **Launch & Orbit**
  - The spacecraft is placed in a **halo orbit around the Sun–Earth Lagrange Point-1 (L1)**.
  - **L1 Distance: ~1.5 million km from Earth**, towards the Sun.
- **Why L1 Point is Important**
  - L1 allows **continuous, uninterrupted observation of the Sun**.
  - No **occultation or eclipse** by Earth or Moon.
  - Ideal for real-time monitoring of solar activity.
- **Scientific Objectives**
  - Study the **solar corona**, chromosphere, and photosphere.
  - Understand:
    - **Solar flares**
    - **Coronal Mass Ejections (CMEs)**
    - **Solar wind**
  - Examine the **impact of solar activity on Earth's space weather**.

- **Payloads**
  - Aditya-L1 carries **7 scientific payloads** (not additional six).
  - Designed to observe the Sun in **multiple wavelengths** (UV, X-ray, visible).
- **Space Weather Relevance**
  - Space weather affects:
    - Satellites
    - Communication & navigation systems
    - Power grids
  - Aditya-L1 improves **early warning capability** for geomagnetic storms.

## Important International Solar Missions

### 1. Parker Solar Probe – NASA (2018)

- Closest spacecraft ever to the Sun.
- Studies:
  - Solar corona
  - Solar wind
  - High-energy particles

### 2. Solar Orbiter – ESA & NASA (2020)

- Studies:
  - Sun's **polar regions**
  - Solar wind origins
- Captures **high-resolution images**.
- Helps understand the **11-year solar cycle**.

### 3. SOHO – NASA & ESA (1995)

- Full name: **Solar and Heliospheric Observatory**
- Studies:
  - Solar interior
  - Corona
  - Heliosphere
- One of the **longest-running solar missions**.

#### 4. Hinode – JAXA (2006)

- Studies:
  - Solar magnetic fields
  - Sunspots
  - Solar flares
- Focus on **magnetohydrodynamics of the Sun.**

#### 5. ASO-S (Kuaifu-1) – China (2022)

- Full name: **Advanced Space-based Solar Observatory**
- Focus:
  - Solar flares
  - CMEs
  - Solar magnetic fields
- Aims to understand **solar impacts on Earth's near-space environment.**



# DRDO Carries Out Salvo Launch of Pralay Missiles



## DRDO carries out salvo launch of Pralay missiles

The Defence Research & Development Organisation (DRDO) carried out a salvo launch of two indigenous Pralay missiles from the same launcher on Wednesday. The test was held at around 10.30 a.m. off the coast of Odisha. The flight-tests were conducted as part of user evaluation trials. According to the Ministry of Defence, both missiles followed the intended trajectory and met all mission objectives, as confirmed by tracking sensors deployed by the Integrated Test Range (ITR), Chandipur. Terminal events were validated through telemetry systems on ships positioned near the designated impact points.

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## Short Summary



The **Defence Research and Development Organisation (DRDO)** successfully conducted a **salvo launch** of two **indigenous Pralay missiles** from a single launcher off the Odisha coast as part of **user evaluation trials**.

## KEY FACTS

- **Missile Tested:** Pralay
- **Type:** An indigenously developed Surface-to-surface, short-range ballistic missile with a strike range of about 150 km to 500 km.
  - Can carry multiple types of warheads against various targets.
- **Launch Type: Salvo launch** (multiple missiles fired in quick succession from the same launcher)
- **Test Location:**
  - Off the coast of **Odisha**
  - Conducted at **Integrated Test Range (ITR), Chandipur**
- Conducted by DRDO as part of the User Evaluation Trials
- **Outcome:**
  - Both missiles followed **intended trajectory**
  - Met **all mission objectives**

## ABOUT PRALAY MISSILE

- **Category:** Tactical ballistic missile
- **Range:** ~150–500 km
- **Fuel Type:** Solid-fuel
- **Capability:**
  - High accuracy
  - Conventional warhead
  - Designed for **rapid deployment**
- **Role:** Strengthens India's **conventional deterrence capability**
- **Indigenous Development:** Developed by **DRDO**

## DEFENCE RESEARCH AND DEVELOPMENT ORGANISATION (DRDO)

- **Established:** 1958
- **Headquarters:** New Delhi
- **Administrative Control:** Ministry of Defence, Government of India
- **Mandate & Role:** DRDO is India's **premier defence R&D organisation**
  - Responsible for: Design and development of **missiles**, Combat aircraft, Naval systems, Electronic warfare systems, Radars, Unmanned systems
- **Key objective:** Achieve **self-reliance (Atmanirbhar Bharat)** in defence technology

## MISSILE DEVELOPMENT ROLE

- **Pralay** – Short-range ballistic missile
- **Agni series** – Ballistic missiles
- **Prithvi series** – Ballistic missiles
- **BrahMos** (with Russia) – Cruise missile
- **Akash** – Surface-to-air missile
- **Astra** – Air-to-air missile

# National Drug Survey to Examine Indigenous Substance Use Patterns

## National drug survey to examine indigenous substance use patterns

Abhinav Lakshman  
NEW DELHI

The upcoming round of the Union government's National Drug Use Survey (NDUS) will be conducted through 2026 and is expected to cover nearly 20 lakh individuals across the country to assess the extent and patterns of substance use and substance use disorders at the State and district levels, officials told *The Hindu* on Wednesday.

For the first time, the survey will seek to document "indigenous forms of substance use and associated socio-economic and health concerns". Officials said there are several instances of communities in India using locally grown or prepared substances "with social sanction and ritualistic acceptance".

They added that the question of whether such



**Awareness for peers:** Students in Bengaluru take out a rally against drug abuse and drug peddling. PTI

use is as harmful as contemporary patterns of substance use is "worth exploring", noting that these substances may include various forms of alcoholic beverages, opium, and cannabis.

The forthcoming survey will take place nearly a decade after the previous round conducted in 2017-18, which covered about five lakh individuals nationwide.

The 2025-26 survey will,

for the first time, attempt detailed analyses of substance use among specific populations such as prison inmates, school students and those enrolled in colleges and other higher education institutions.

The upcoming round will also include studies on the feasibility of wastewater testing to assess community-level drug use, and will examine emerging trends related to the use of "new and rarer" psychoac-

tive substances. Funded by the Union Ministry of Social Justice and Empowerment, the survey is being conducted by the National Drug Dependence Treatment Centre of the All India Institute of Medical Sciences.

### Sampling methods

The sample will be drawn through two methods: a household survey and a respondent-driven sampling survey.

The household survey will cover 400 districts across all States and Union Territories and include men and women aged 10 to 75, covering about 4.4 lakh households and 17.6 lakh individuals.

In addition, respondent-driven sampling will include around 2.1 lakh individuals drawn from drug-dependent populations in approximately 350 districts across the country.

?

## Short Summary

The Union government will conduct the next round of the **National Drug Use Survey (NDUS)** in **2025–26** to study substance use patterns, including **indigenous and locally prepared substances**, across India for the first time.



## KEY POINTS

- Next Round of **National Drug Use Survey (NDUS)** for 2025–26 will be conducted by Union Government
- **Coverage:**
  - Nearly **20 lakh individuals**
  - **All States and Union Territories**
  - **400 districts**
- **Objectives**
  - Assess **extent and patterns of substance use**
  - Study **substance use disorders** at **State and district levels**
  - Examine **socio-economic and health impacts**
  - Identify **emerging and new psychoactive substances**

## **New & Important Additions (First Time)**

- **Documentation of indigenous substance use**
  - Includes **locally grown or prepared substances**
  - Used with **social sanction and ritualistic acceptance**
- **Special Population Groups (New Focus)**
  - Prison inmates
  - School students
  - College and higher education students
- **Analysis of:**
  - **Socio-economic and health concerns**
  - Whether such use is viewed as **harmful or “worth exploring”** by communities

## METHODOLOGY

- Two sampling methods:
  - Household Survey
    - Covers ~4.4 lakh households
    - About 17.6 lakh individuals
    - Men and women aged 10–75 years
  - Respondent-Driven Sampling (RDS)
    - ~2.1 lakh individuals
    - From drug-dependent populations
    - Across ~350 districts
    - Used for hidden and hard-to-reach populations
- Additional Studies:
  - Feasibility of wastewater testing
    - To assess community-level drug use
  - Identification of emerging drug-use trends

## **IMPLEMENTING & FUNDING AGENCIES**

- **Funded by:**
  - Union Ministry of **Social Justice and Empowerment**
- **Conducted by:**
  - **National Drug Dependence Treatment Centre (NDDTC)**
  - **AIIMS, New Delhi**

## **HISTORICAL BACKGROUND OF NDUS**

- **First National Drug Use Survey**
  - **Year: 2017–18**
  - **India's first comprehensive nationwide survey on substance use**
- **Agencies Involved**
  - Commissioned by: **Ministry of Social Justice and Empowerment**
  - Implemented by: **NDDTC, AIIMS New Delhi**
- **Coverage (2017–18)**
  - **~5 lakh individuals & covered all States and Union Territories**
  - Focused on: Alcohol, Cannabis & Opioids
- **Significance:** Provided **baseline national data** on substance use
  - Used for:
    - Drug de-addiction policies
    - Rehabilitation programmes
  - State-level action plans

Aspect	NDUS 2017–18	NDUS 2025–26
Individuals Covered	~5 lakh	~20 lakh
Geographic Detail	National & State	State + District
Indigenous Substances	Not covered	Covered (first time)
Special Populations	Limited	Prisoners, students
Methodology	Household survey	Household + RDS + wastewater
Focus	Prevalence	Patterns & emerging trends

# When FIIs Flew from Indian Stocks

## When FIIs flew from Indian stocks

Ashokamithran T.  
MUMBAI

Foreign Institutional Investors (FII) sold Indian equities worth ₹1.6 lakh crore in calendar year 2025, the most in about two decades, according to data from National Securities Depository Ltd. (NSDL).

As of December 2025, FIIs sold ₹22,611 crore worth equities. They have been net sellers in eight of 12 months. The year started with the strongest selling as a continuation of the correction in September 2024, recording a net sale of more than ₹71,000 crore in January.

### Worst month

By March, foreign capital of about ₹1.16 lakh crore had exited the Indian stock markets. In February 2025, the benchmark NSE Nifty 50 returns dipped nearly 6%, making it the worst month of the year.

While markets did pick up after that in terms of monthly returns and negative returns moderated, foreign investor interest continued to stay weak barring a few weeks. This might probably be due to the big ticket IPOs like LG in the period post July 2025. However, the decline of over ₹1 lakh crore in the initial three months did not reverse in the rest of the year.

To be sure, FII's investment in Indian equity mutual funds increased, coming in at a net inflow of ₹2,345 crore. This was significantly better than 2024, when foreign capital withdrew ₹618 crore from Indian equity mutual funds. This may signify a slightly



Enthusiasm of global investors over AI pushed them to markets like Japan, Taiwan.

risk averse tendency of foreign capital when it comes to Indian market.

Experts said, the high price-to-earnings ratio with respect to quarterly earnings is one of the main reasons behind the capital exodus. Currently, a stock is priced 22 times the earnings per share in India, one of the most expensive in the world. The decline was exacerbated by a depreciating rupee, which made dollar returns on capital market investments much lower than expected.

Indian markets have given close to no returns in dollar terms. Exiting FIIs further sped up rupee depreciation bringing the exchange rate to ₹91 a dollar by the end of the year.

Apart from factors like earnings and rupee depreciation, enthusiasm of global investors over AI has pushed them to markets such as Japan and Taiwan.

Sustainability of the AI-driven rally and potential profitability improvement among Indian firms are factors that will decide on the quantum and speed of the return of FII interest in India, said experts.

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## Short Summary

Foreign Institutional Investors (FIIs) recorded their highest equity sell-off in over two decades in 2025, driven by high valuations, weak earnings growth, rupee depreciation, and better returns in other global markets.



## KEY POINTS

- **Record FII Outflows (2025):**
  - FIIs sold Indian equities worth **₹1.6 lakh crore** in calendar year 2025 (highest in ~20 years).
  - FIIs were **net sellers in 8 out of 12 months**.
- **Worst Phase:**
  - By **March 2025**, foreign capital outflow touched **₹1.16 lakh crore**.
  - **February 2025** was the worst month; **Nifty 50** fell ~6%.

## REASONS FOR FII EXODUS:

- **High valuation of Indian equities:** Price-to-earnings (P/E) ratio ~22x, among the highest globally.
- **Weak quarterly earnings growth.**
- **Rupee depreciation,** reducing dollar returns on Indian investments.
- **Global Capital Reallocation: Risk-averse behaviour** of global investors towards Indian markets.
  - Global investors preferred markets like **Japan and Taiwan**, driven by **AI-led rallies**.
  - Indian markets gave **near-zero returns in dollar terms**.
- **Currency Impact:**
  - FII outflows contributed to rupee depreciation, potentially reaching **₹91 per dollar** by year-end.
- **IPO Factor:**
  - Large IPOs (e.g., LG post-July 2025) expected but did not reverse overall FII selling trend.
- **Contrast with Mutual Funds:**
  - Foreign investment in **Indian equity mutual funds saw net inflow of ₹2,245 crore**.
  - Better than 2024, when ₹618 crore was withdrawn from such funds.

## BEYOND THE NEWS



- **Foreign Institutional Investor (FII)** refers to an investor or a group of investors **based outside India** who invest in Indian financial assets.
- FIIs bring **Foreign Portfolio Investment (FPI)** into India, primarily by participating in the **secondary market** (equity and debt markets).
- **Examples of FIIs include:**
  - Hedge funds
  - Pension funds
  - Insurance companies
  - Mutual funds
  - Asset management companies
- To participate in Indian financial markets, FIIs **must register with the Securities and Exchange Board of India (SEBI)**.
- Since **2014**, the term **FII** has been subsumed under **Foreign Portfolio Investor (FPI)**.
- **FPI** is the legally valid term used by **SEBI**, though *FII* is still commonly used in newspapers and exam questions.

Characteristic	FDI	FPI
<b>Definition</b>	Investments are made in foreign business with a lasting business presence	Investments are made in securities like stocks, bonds, and other financial assets abroad.
<b>Investment Type</b>	Direct	Indirect
<b>Nature of Investment</b>	Long-term investment	Short-term investment
<b>Risk</b>	Less Volatile	High Volatile
<b>Purpose</b>	Expand business in a foreign country	Diversify investment portfolio.
<b>Impact on Economy</b>	Positive impact on economic growth also contributes to employment	Impact on the financial market and liquidity with limited impact on the direct economy.
<b>Entry and Exit</b>	Difficult	Easy