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Trump's crypto U-turn

World Liberty Financial

Investments from a top UAE official into U.S. President's crypto enterprise attract criticisms of conflict of interest and foreign influence

Nivedita Varadarajan

REUTERS

U.S. President Donald Trump has built a business empire spanning real estate, casinos and entertainment. His family's growing crypto dealings are now facing mounting criticism over conflicts of interest and foreign influence.

A top United Arab Emirates official holds a stake in the family's latest venture: a planned crypto bank now drawing scrutiny over foreign ties to a sitting President. The *Wall Street Journal* has reported that Sheikh Tahnoon bin Zayed al Nahyan, the UAE's national security adviser, and his co-investors own a major stake in the company behind that bank.

Earlier this month, Office of the Comptroller of the Currency gave conditional approval to World Liberty Financial, backed by Mr. Trump's family and close allies, to set up a federally chartered U.S. trust bank to issue, redeem and safeguard a dollar-backed stablecoin, USD1.

Mr. Tahnoon and his co-investors own 49% stake in bank's holding company, the *Journal* reported. "The shareholder structure of the bank's holding company, called WLTC Holdings, is the same as World Liberty's, though Tahnoon and his co-investors used a different entity – called StringZ Holding RSC – for the stake in WLTC. An entity affiliated with the Trump family holds a 38% stake," the *Journal* said, quoting a source.

Mr. Tahnoon and others had invested $500 million in World Liberty Financial in January 2025. "The deal, signed four days before President Trump's inauguration, steered $263 million to Trump family entities, according to the President's most recent financial disclosure," the *Journal* noted.

A stablecoin is designed to maintain a stable value and reduce volatility. It is pegged to a currency, commodity or other asset, which may be held in reserve to back its value.

"USD1 now has a market value of $4 billion. World Liberty says the dollars backing USD1 are invested in U.S. Treasury and other cash equivalents, generating an estimated $150 million a year in interest," the *Journal* reported.

Mr. Trump was not always fond of cryptocurrencies. During his first term, he bashed Facebook's plans to create a digital currency. He dismissed Bitcoin and its peers as "not money," calling their value "highly volatile and based on thin air". In 2021, he told *Fox Business* that Bitcoin was a "scam". "I think they should regulate them very, very high," he said, adding, "It takes the edge off of the dollar and the importance of the dollar."

Policy shift

That changed as the 2024 election approached. Crypto companies funnelled more than $119 million into a non-partisan super PAC to elect pro-crypto candidates in that cycle, and Mr. Trump vowed to make the United States the "crypto capital of the planet".

In March 2025, Mr. Trump created the U.S. Strategic Bitcoin Reserve by executive order, treating Bitcoin as a long-term reserve asset on par with gold. That July, he signed the GENIUS (Guiding and Establishing National Innovation for U.S. Stablecoins) Act, laying out regulatory guidelines for stablecoins.

Financial disclosures filed in June show he earned more than $1.4 billion from his crypto ventures. Over $500 million of it from World Liberty Financial, and another $635 million from sales of his $TRUMP meme coin. His reported income for the year was over $2.2 billion, much higher than his 2024 income of $600 million.

Founded in 2024, World Liberty Financial is at the heart of the Trump's crypto empire. Its CEO Zach Witkoff, is the son of Mr. Trump's West Asia envoy, Steve Witkoff. Other co-founders include Donald Trump Jr., Eric Trump, Barron Trump, Steve Witkoff, and the President himself. This arrangement could blur the line that separates governance and private financial interests. The Trump administration sets policy, and the President's family and allies benefit financially.

Mr. Tahnoon's investment is especially notable given the UAE's position as a key U.S. partner in West Asia. Since the beginning of the U.S.-Israeli strikes on Iran on February 28, Gulf countries have borne a significant share of Iran's retaliatory attacks, with the war also disrupting maritime traffic in the region.

These relationships raise fundamental questions: Can a sitting President accept investments from a foreign government official in his companies?

(b) निम्नलिखित में से प्रत्येक पर 30 शब्दों में संक्षिप्त टिप्पणी लिखिए :
Write short notes on the following in 30 words each :

(i) सांविधानिक नैतिकता
Constitutional morality

(ii) हितों का संघर्ष
Conflict of interest

(iii) सार्वजनिक जीवन में सत्यनिष्ठा
Probity in public life

(iv) डिजिटिकरण की चुनौतियाँ
Challenges of digitalization

(v) कर्तव्यनिष्ठा
Devotion to duty

1. Trump's Crypto U-Turn: Conflict of Interest and Probity in Public Office

Source: The Hindu
GS: GS-IV — Ethics | Conflict of Interest | Probity

Context: The convergence of **Trump-linked cryptocurrency businesses, foreign-linked investments and favourable U.S. crypto policies** raises concerns about the separation of **public duty from private financial interests**.

1. Conflict of Interest — Public Office & Private Business

● **World Liberty Financial (WLF):** A Trump-family-linked cryptocurrency venture in which the President and his family have significant financial interests.

● **Foreign-linked investment:** UAE National Security Adviser **Sheikh Tahnoon bin Zayed Al Nahyan** and co-investors reportedly invested **$500 million** in WLF in January 2025, shortly before Trump assumed office.

● **Ethical concern:** The overlap creates a situation where decisions taken by a public office-holder may affect businesses in which his family has substantial financial interests.

2. Crypto Policy Shift — From Scepticism to Promotion

● **Earlier stance:** Trump had expressed scepticism about cryptocurrencies and their implications for the U.S. dollar.

● **Post-election shift:** His administration adopted a strongly **crypto-friendly policy orientation**.

● **Major measures:**
 ● **Strategic Bitcoin Reserve (2025):** Established Bitcoin as a strategic reserve asset.
 ● **GENIUS Act:** Created a regulatory framework for **stablecoins**.

● **Concern:** The policy shift becomes ethically significant because it occurred alongside the expansion of **Trump-linked crypto interests**.

3. Scale of Financial Interests

● Trump's reported crypto-related income exceeded **$1.4 billion**.

● Major sources included approximately **$500 million from World Liberty Financial** and **$635 million from $TRUMP meme-coin sales**.

● Such large financial exposure increases the importance of **institutional safeguards against preferential policymaking**.

4. Ethical & Governance Implications

● **Impartiality:** Public decisions must be based on **public interest**, not private financial considerations.

● **Foreign influence:** Foreign-government-linked financial relationships can create concerns about **external influence on public decision-making**.

● **Public trust:** Even without proven wrongdoing, the **appearance of undue influence** can undermine confidence in institutions.

● **Probity:** Holders of public office must maintain **integrity, transparency, accountability and separation of personal interests from official responsibilities**.

5. Way Forward

● **Financial transparency:** Complete disclosure of relevant assets, ownership structures and foreign-linked investments.

● **Recusal:** Exclude the office-holder from decisions directly affecting businesses in which they have significant interests.

● **Asset separation:** Use genuine **divestment or independent asset-management mechanisms** to minimise conflicts.

● **Independent oversight:** Strengthen ethics rules and institutional scrutiny to address both **actual conflicts and perceived conflicts of interest**.

Can an accused be denied a copy of the FIR?

Does the law require the police to give an accused a copy of the FIR? What have courts said about an accused's right to access an FIR? Can the police withhold an FIR from the accused in certain cases? Why does timely access to an FIR matter for an accused?

Aaratrika Bhaumik

The story so far:

The Supreme Court on August 25 ordered the Ghaziabad Police to provide independent journalist Abhishek Upadhyay with a copy of the FIR and CCTV footage in a road-rage case registered against him. Mr. Upadhyay, who had reported on alleged irregularities in donations to the Ram Mandir in Ayodhya, claimed that he was being falsely implicated over his reportage and that the police had failed to provide him with the FIR despite repeated requests.

Why did the court have to intervene?

On August 20, Mr. Upadhyay alleged that a police team arrived at his residence and informed him that a case had been registered at the Indirapuram police station over road rage and abusive behaviour. In a post on X, he claimed that despite repeatedly seeking a copy of the FIR, the police initially sent him a page containing neither the sections invoked nor details of the alleged offence, and later shared an older FIR registered against him in Lucknow.

Mr. Upadhyay then approached the Supreme Court, alleging that the case was based on concocted allegations and intended to harass him for his journalism. He sought a copy of the FIR and quashing of the proceedings or, alternatively, transfer of the probe to an independent agency.

> The Supreme directed that FIRs be uploaded on police websites within 24 hours of registration or, where no such website exists, on the official website of the State government

A three-judge Bench headed by Chief Justice of India Surya Kant directed the Ghaziabad Police Commissioner to provide him with the FIR and CCTV footage and file a compliance report by September 7. It also protected him from arrest and allowed him to approach the jurisdictional High Court for further relief.

Abhishek Upadhyay, who had reported on alleged irregularities in donations to the Ram Mandir in Ayodhya. SPECIAL ARRANGEMENT

What do statutory provisions stipulate?

The Bharatiya Nagarik Suraksha Sanhita, 2023 (BNSS), does not require the police to furnish the accused with an FIR immediately upon registration. Section 173(2) requires a copy to be given "forthwith" and free of cost to the informant or victim, but does not mention the accused. The statute provides for the accused to receive the FIR only at a later stage, after the investigation culminates in the filing of a chargesheet before the magistrate. Section 230 requires the magistrate to furnish the accused with copies of documents relied upon by the prosecution, including the FIR and chargesheet, within 14 days of their appearance or production before the court. The BNSS does not address an accused person's right to access the FIR before this stage, including during the investigation. Judicial precedents have, however, recognised the right of an accused to obtain the FIR soon after its registration.

What have courts held on access to FIRs?

In *Court on its Own Motion through Mr. Ajay Choudhary v. State* (2010), the Delhi High Court laid down a mechanism for an accused to obtain an FIR during the investigation, before the stage contemplated under Section 230 of the BNSS. The court also directed the Delhi Police to upload FIRs on its website within 24 hours of registration. FIRs involving sensitive offences can, however, be withheld through a reasoned decision by an officer not below the rank of DCP.

In *Rama Nand Rathore v. State of Himachal Pradesh* (2014), the Himachal Pradesh High Court held that a person who suspects that they have been named in an FIR can seek a certified copy from the police, which must supply it within 24 hours. It also directed FIRs to be uploaded online within the same period, barring sensitive cases.

In *Youth Bar Association of India v. Union of India* (2016), the Supreme Court gave these directives pan-India effect and reiterated that an accused is entitled to access the FIR before the stage prescribed under Section 207 of the CrPC (now Section 230 of the BNSS). The Court directed that FIRs be uploaded on police websites within 24 hours of registration or, where no such website exists, on the official website of the State government. Where unavoidable difficulties delay publication, the 24-hour deadline may be extended to 48, or up to 72 hours for geographical connectivity issues.

The court, however, carved out an exception to the online publication requirement for FIRs involving offences "sensitive in nature".

What is the 'sensitive offence' exemption?

The apex court identified sexual offences, cases under the Protection of Children from Sexual Offences Act, 2012, and terror offences as examples of "sensitive" offences, while clarifying that the list was not exhaustive.

The decision cannot be taken by a police officer below the rank of Deputy Superintendent of Police or its equivalent. A person aggrieved by it can approach the Superintendent of Police or an equivalent officer, who must constitute a three-member committee to decide the grievance within three days.

Even where an FIR is withheld on grounds of sensitivity, the accused or an authorised representative can apply for a certified copy to the magistrate to whom the FIR has been forwarded, who must provide it in three days.

What are the implications?

Delhi-based advocate Nipun Saxena says police officials routinely fail to comply with the Supreme Court's directive to upload FIRs through the Crime and Criminal Tracking Network and Systems. "Once an FIR is registered and the criminal law is set in motion, the accused is entitled to seek pre-trial remedies such as quashing of the FIR or anticipatory bail. Without access to the FIR, these remedies cannot be effectively pursued," he says.

Mr. Saxena adds that the Supreme Court's ruling recognised that an accused cannot be made to wait until the framing of charges to know the offences alleged against them, as this would undermine the right to a fair trial and the principles of natural justice.

Which of the following statements about a Zero First Information Report (Zero FIR) under the Bharatiya Nagarik Suraksha Sanhita (BNSS), 2023 is/are correct ?

1. A Zero FIR can be lodged at a police station, even though the place of commission of a cognizable/non-cognizable offence is outside the territorial jurisdiction of that police station.
2. The Officer-in-Charge of the police station where a Zero FIR has been lodged may, with the permission of the competent authority, initiate a preliminary enquiry.
3. Under Zero FIR, it is obligatory for the informant to furnish information electronically.

Select the answer using the code given below :

(a) 1, 2 and 3

(b) 2 and 3 only

(c) 1 only

(d) 2 only

2. Right of an Accused to Access the First Information Report

Source: The Hindu
GS: GS-II — Polity & Governance | Judiciary | Criminal Justice

Context

● The **Supreme Court** directed the Ghaziabad Police to provide an accused with a copy of the **First Information Report (FIR)**, highlighting the importance of timely access to the FIR for a fair trial and effective legal remedies.

1. First Information Report — Legal Position

● **FIR:** The formal record of information relating to a **cognizable offence**, which initiates the criminal investigation.

● **Bharatiya Nagarik Suraksha Sanhita (BNSS), 2023:** It does not expressly require the police to immediately furnish the FIR to the accused.

● **Section 173(2):** A copy of the recorded information must be given **forthwith and free of cost to the informant or victim**.

● **Section 230:** The Magistrate is required to furnish the accused with copies of the **FIR, police report and other relevant documents** at the prescribed stage.

2. Judicial Position — Timely Access to FIR

● **Youth Bar Association of India v. Union of India (2016):** The Supreme Court recognised the accused's right to access the FIR **before the stage prescribed for supply of documents under criminal procedure law**.

● **Online publication:** FIRs should ordinarily be uploaded on police/State Government websites **within 24 hours of registration**.

● **Delay:** The period may extend to **48 hours** where there are genuine difficulties and up to **72 hours** in areas facing geographical connectivity problems.

3. Sensitive Offences — Exception

● FIRs relating to **sensitive offences** need not be uploaded online.

● Examples include **sexual offences, offences under the Protection of Children from Sexual Offences Act, 2012, and terrorism-related offences**.

● However, withholding online publication does not completely deny access: the accused or authorised representative may seek a **certified copy from the Magistrate** after the FIR is forwarded.

4. Importance for Criminal Justice

● **Fair trial:** Enables the accused to know the allegations forming the basis of the criminal case.

● **Effective defence:** Helps the accused understand the **sections invoked and factual allegations** and prepare a legal response.

● **Pre-trial remedies:** Timely access is important for seeking **anticipatory bail and quashing of proceedings**.

● **Natural justice:** Prevents an accused from being kept unaware of the case against them until a later stage.

● **Police accountability:** Timely disclosure promotes **transparency and procedural fairness** in criminal investigation.

Blaming climate change for extreme weather has limits

Short-duration, sub-daily extreme events are harder to link to climate change than heatwaves; attribution of localised events is hampered by limited weather records, insufficient computing power, and what 'extreme' weather really entails

Harsh Kabra
PUNE

After an intense heatwave struck South Asia earlier this year, World Weather Attribution (WWA) said climate change had made the event about three-times likelier and up to 1° C warmer than it would have been in a world without climate change.

WWA is an international research group that assesses the impact of climate change on extreme weather. At the heart of these assessments is the science of extreme event attribution, whose goal is to trace the human fingerprint in extreme weather. However, many experts have raised questions about how well extreme weather can be pinned on climate change.

"Using a combination of computer modelling, long-term weather data, and physical understanding of climate systems, climate model simulations are run first for a counterfactual world with pre-industrial conditions, when carbon dioxide levels [in the atmosphere] were 280 ppm, and then for present-day conditions when they are over 420 ppm," J. Srinivasan, professor emeritus at the Indian Institute of Science, Bengaluru, said.

"The difference in the magnitude or likelihood of the extreme weather event can then be attributed to human influence, including higher carbon dioxide. To ensure this has not occurred by chance, many simulations and rigorous statistical tests are required." Attribution science draws on detection and attribution. "Detection involves determining whether an event falls outside the range of its normal occurrence due to natural variations in the climate system," Vimal Mishra, the Bikram Sarabhai Chair Professor in the Department of Civil Engineering at IIT-Gandhinagar and a specialist in climate science, hydrology, and climate extremes, said.

During one extreme event attribution committee hearing at the U.S. National Academies of Sciences, Engineering and Medicine (NASEM) in 2025, Stanford University climate scientist Noah Diffenbaugh questioned "whether single event attribution is even possible at all, from a scientific point of view". Mark Keenan, a former UN and U.K. government scientist, wrote recently in *American Thinker*, "How do we know [a climate model] accurately represents a climate that no one has ever observed?"

NASEM experts have previously noted that it is challenging to ascertain the influence of climate change on extreme weather. Dr. Srinivasan also said, "extreme weather events can occur even without anthropogenic climate change".

In the Sixth Assessment Report, IPCC experts also noted that some local phenomena such as land-sea breezes and mountain wind systems can only be realistically represented by simulations at a resolution of around 10 km or less, which current models do not support. Similarly, short-duration, sub-daily extreme events, e.g. intense bursts of rain lasting only an hour or so, are harder to model and link to climate change than longer events like day-long heatwaves or several days of heavy rain. This is because most global climate models cannot capture fast-changing processes.

According to Dr. Mishra, analysis of localised events is also hampered by limited long-term weather records and computing power. "For example, without long-term hourly or sub-hourly rainfall observations for a particular place, we cannot confidently mark out the range of natural variability for a heavy rainfall event there," he explained. "Uncertainties arising from observations and models can lead to unscientific claims and sweeping generalisations."

In fact, scientists are also not agreed on what amounts to 'extreme'. "For instance, when our group reconstructed droughts over roughly 1,200 years, we found that some kinds of droughts seen in the past no longer occur," Dr. Mishra said. "An event that appears extreme over a 10-20-year timeline may not look exceptional when analysed with a dataset spanning ... 500 years."

"Extreme event attribution is about assigning legal liability for emissions, either at the country level or the corporation level," Raghu Murtugudde, a professor emeritus at the University of Maryland, said. "Studies claim that carbon majors [businesses with particularly high emissions] can be defined and certain climate changes can be attributed to certain organisations. The real question is whether these findings can hold up in court." He also said climate models will never be perfect enough for counterfactual worlds – the worlds that might have existed if not for some fact today, like climate change – to be accepted without question. Instead, Subimal Ghosh, convener of the Interdisciplinary Programme in Climate Studies at IIT-Bombay, said preparedness is more important: "Our priority should be to develop more effective early warning systems and adaptation infrastructure in order to save more people."

Harsh Kabra is an independent journalist

Confidence in extreme event attribution is generally lower for thunderstorms. MARCUS WOODBRIDGE

3. Blaming Climate Change for Extreme Weather Has Limits

Source: The Hindu
GS: GS-III — Environment | Climate Change | Disaster Management

Context: Extreme Event Attribution (EEA) is used to assess the extent to which **human-induced climate change** has influenced the likelihood or intensity of an extreme-weather event.

● Attribution is relatively stronger for **heatwaves**, but considerably more difficult for **short-duration, localised events** such as intense rainfall and thunderstorms.

1. Extreme Event Attribution — Key Concepts

● **Detection:** Identifies whether an event lies outside the range of **natural climate variability**.

● **Attribution:** Estimates the **human-induced climate contribution** to the event.

● **Counterfactual analysis:** Compares present-day climate conditions with a simulated **pre-industrial climate** having much lower atmospheric carbon dioxide levels.

● Reliable attribution depends on **long-term observations, climate models and statistical analysis**.

2. Why Localised Events Are Difficult to Attribute

● **Short duration:** Intense rainfall and thunderstorms can develop within an hour, making their connection with long-term climate trends difficult to establish.

● **Model limitations:** Global models often cannot adequately capture processes operating at very small scales, including **land-sea breezes and mountain wind systems**.

● **Data gaps:** Insufficient **long-term hourly/sub-daily weather records** make it difficult to establish natural variability at a specific location.

● **Natural variability:** Extreme events can occur without anthropogenic climate change, requiring the natural component to be separated from the human influence.

● **Time-frame problem:** An event may appear extreme in a **10–20-year dataset** but may not be exceptional when compared with much longer historical records.

3. Implications & Way Forward

● **Avoid over-attribution:** Climate change may increase the **probability or intensity** of an event without being its sole cause.

● **Scientific confidence:** Attribution should clearly communicate the level of uncertainty, particularly for highly localised events.

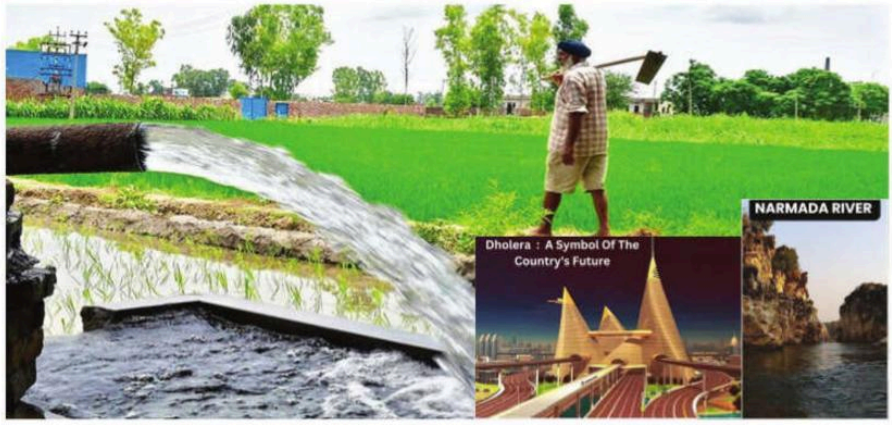
● **Improve data & modelling:** Strengthen **high-resolution weather observations, long-term datasets and computing capacity**.

● **Early-warning systems:** Improve forecasting and **last-mile dissemination** to reduce loss of life.

● **Adaptation:** Strengthen **climate-resilient infrastructure and disaster preparedness**, irrespective of whether a particular event can be conclusively attributed to climate change.

Counting the Water

A cumulative water budget would close the gap, and it need not be exotic. Give each notified basin an annual withdrawable envelope ~ surface flow and assessed recharge, net of prior claims for drinking water and irrigation ~ and debit every industrial clearance above a threshold against it, the running balance public and a plant's draw disclosed at approval rather than buried in a feasibility file



The semiconductor fab rising on the coastal plain at Dholera will need some of the purest water on the planet, and it has chosen to make it in one of the least watered corners of Gujarat. The Central Ground Water Board's aquifer mapping puts the freshwater-bearing area of Dholera taluka at zero hectares ~ the whole block is saline, the brackish edge of the Gulf of Khambhat, where the sea has worked its way inland for decades.

Not a litre of the plant's supply can come from the ground it stands on. It will come instead from the Narmada, carried the better part of a hundred kilometres down a canal built for farms and towns, drawn from a river that was fully spoken for long before a chip was ever etched in India.

That arrangement, on its own terms, clears every test. Tata Electronics' fab ~ the country's first commercial wafer facility, targeting fifty thousand wafers a month at mature nodes from 28 to 110 nanometres ~ carries, in its own environmental-appraisal file, a total water requirement of about 17,549 kilolitres a day, some 6,571 of them fresh and the rest recycled. That figure is the plant's own, not a global average, and defensible in isolation ~ as is the assurance to source it from the Narmada.

Set the numbers beside the ground they sit on, and the arithmetic stops cohering: a block with no usable water of its own is being built to drink a river's. The clearance asks only whether this project has a source. It never asks what becomes of the basin when the next nine plants answer the same question the same way.

This is the hole in India's industrial policy: it has no water budget. Environmental clearance is a transaction ~ one project, one file, one named source of supply ~ while water stress is an aggregate, the sum of every straw in a shared basin.

What the country needs is a statutory, basin-level cumulative water budget as the precondition for siting a water-intensive plant, in place of the project-by-project clearance it now runs. Without a running basin total that each new approval is debited against, siting policy is not managing scarcity. It is discovering it, one dry well at a time.

The calendar sharpens the point. On 15 July 2026 the Union Cabinet approved the second India Semiconductor Mission with an outlay of Rs 1.27 lakh crore, a programme built to pull a further tranche of fabs onto Indian soil. Eleven days earlier, on 4 July, the Prime Minister had inaugurated CG Semi's Rs 7,600-crore assembly-and-test plant at Sanand ~ less thirsty than a wafer fab, but planted in the same water-anxious belt, and joined there by Micron's packaging unit, to which the state has assured more than 20 million litres a day of Narmada water, scalable to ninety.

Three approvals, three separate water plans, one shared table. Behind the chips comes the data centre, its cooling towers evaporating lakhs of litres a day, courted into the same basins. Each will arrive bearing a water plan that passes on its own merits. None will be weighed against the others.

The industry's defenders have a real case, and it deserves stating at full strength. A modern fab recycles hard ~ Micron proposes to reuse eighty to eighty-five per cent on site ~ and takes surface water, not the groundwater irrigation is draining; against agriculture, which swallows nine of every ten litres India pulls from below ground, a semiconductor cluster is a rounding error. All true, and all beside the point.

Recycling settles the efficiency of the process once it is running, not whether the makeup water still to be found each year is a draw the basin can bear. And surface-sourcing does not lighten the load so much as move it: a fab drawing from the Narmada shows up in no groundwater ledger, even as its allocation tightens the same canal system on which the fields depend ~ in the Sanand command, already rationed to one delivery in four days through a dry summer. The draw is not erased; it is shifted to a column no one is totting up.

T KANNAN

The writer is a practising Chartered Accountant and Cost Accountant and can be reached at kannan@cakt.in

That is the structural failure ~ an aggregation problem wearing the costume of a permitting success. The trap hides inside the reassuring word "safe." Sanand taluka is rated Safe by the groundwater board, its stage of extraction a comfortable 56 per cent; yet close to 72 per cent of its aquifer area is already saline, the fresh water penned into a narrow lens that a cluster of thirsty plants can draw down until the sea moves in behind it. "Safe" is a snapshot of past extraction, not a residual budget for future load.

Nationally it is starker: the board's 2024 dynamic assessment classed 751 of 6,746 blocks as over-exploited, another 206 critical and 711 semi-critical ~ close to a quarter of the country's groundwater stressed to semi-critical or worse, Gujarat among the states where it concentrates. What cannot be added up cannot be governed, and India has built a clearance system engineered never to add anything up.

Cumulative-liability thinking is not exotic to Indian regulation. A bank holds capital against its aggregate exposure, not its next loan, and the concentration limit exists precisely to stop a book of individually sound advances from sinking the lender in sum; environmental law itself already runs cumulative-impact assessment for coal blocks in a shared field and dams cascaded on one river.

The instrument exists ~ it has simply never been turned on the resource industrial policy now most obviously runs on. NITI Aayog warned in 2018 that demand would outrun supply by 2030 and urged industrial zoning that keeps thirsty plants out of dry regions; eight years on, the incentives are voluble and the zoning silent.

A cumulative water budget would close the gap, and it need not be exotic. Give each notified basin an annual withdrawable envelope ~ surface flow and assessed recharge, net of prior claims for drinking water and irrigation ~ and debit every industrial clearance above a threshold against it, the running balance public and a plant's draw disclosed at approval rather than buried in a feasibility file. Where the balance is spent, the next plant is sited elsewhere, brings its own desalination, or is refused.

Australia's Murray-Darling plan caps extraction at the basin and issues entitlements against the cap; South Africa's water law reserves what people and rivers need before a drop reaches industry. Neither picks winners. Each imposes an honest constraint and lets capital respond.

None of this is anti-industrial: it is the only footing on which an industry that runs on water can be built to last in a country that is running short of it.

The industrial half of this problem has an agricultural twin that urges declaring water insolvency where the ground has already been drawn past recovery ~ and the two are one balance sheet read from opposite ends. India has resolved, rightly, to make the century's most strategic material at home. The question its clearance files never put is the only one the basins will finally answer: with whose water, and once it is gone, from where?

5. आज विश्व ताजे जल के संसाधनों की उपलब्धता और पहुँच के संकट से क्यों जूझ रहा है?

(उत्तर *150* शब्दों में दीजिए)

Why is the world today confronted with a crisis of availability of and access to freshwater resources?

(Answer in *150* words) 10

4. Counting the Water: Need for a Cumulative Water Budget

Source: The Statesman
GS: GS-III — Environment | Water Resources | Sustainable Development

Context: The proposed **semiconductor fabrication plant at Dholera, Gujarat** highlights a larger policy gap: environmental clearances assess water availability **project-by-project**, rather than evaluating the **cumulative water stress of an entire basin**.

1. Dholera: Water-Intensive Industrialisation

● **Water demand:** The proposed fab requires about **17,549 kilolitres/day** of water.

● **Freshwater requirement:** Around **6,571 kilolitres/day** is expected to be fresh water, with the remainder recycled.

● **Source:** Freshwater is proposed to come from the **Narmada**, through a canal located about **100 km away**.

● **Water recycling:** Tata Electronics proposes recycling **80–85%** of wastewater, reducing dependence on freshwater.

● The concern is not simply whether Dholera has a water source, but **what happens when multiple water-intensive projects draw from the same stressed basin**.

2. Problem with the Existing Project-by-Project Approach

● **No cumulative water budget:** Environmental clearance generally asks whether an individual project has an assured source, but does not adequately account for the **combined withdrawals of existing and future projects**.

● **Hidden cumulative stress:** One project may appear sustainable while several projects together can exceed the basin's **sustainable water availability**.

● **Groundwater stress:** Gujarat already faces significant groundwater pressure; the article cites the **2024 assessment** showing **751 of 6,746 assessment units over-exploited, 206 critical and 711 semi-critical**.

● **Competing demands:** Industrial water use must be assessed alongside existing **drinking-water and irrigation requirements**.

3. Cumulative Water Budget — Way Forward

● **Basin-level accounting:** Every notified basin should have an annual **withdrawable water envelope** based on:

- **Surface-water flow**
- **Groundwater recharge**
- Existing claims for **drinking water and irrigation**
- Permissible **industrial withdrawals**

● **Water debit system:** Every new industrial clearance should be treated as a **debit against the basin's remaining water budget**, rather than as an isolated project approval.

● **Transparent balance:** The remaining water availability should be publicly disclosed before approving additional water-intensive projects.

● **When the budget is exhausted:** New projects should either be **shifted to water-abundant locations, adopt alternative sources such as desalination where feasible, or be refused**.

● THE BUS-SIZED TELESCOPE, NAMED AFTER LATE NANCY GRACE ROMAN, NASA'S FIRST CHIEF ASTRONOMER, WILL TAKE MORE THAN 3 MONTHS TO REACH ITS DESTINATION

'To find the rare & unusual': NASA launches new space telescope

Marcia Dunn
Cape Canaveral, August 30

NASA'S NEWEST crown jewel blasted off Sunday to hunt for planets around other stars, explore secret dark energy and survey the cosmos like never before.

SpaceX launched the $4.3 billion Roman Space Telescope shortly after daybreak aboard a triple-the-fire-power Falcon Heavy rocket from Kennedy Space Center. Roman blazed toward an observation point 1.6 million kilometers away that's home to the Webb Space Telescope, one of NASA's other big-ticket eyes in the sky.

The bus-sized telescope — named after the late Nancy Grace Roman, NASA's first chief astronomer — will take more than three months to reach its destination.

Once there, it will cast the widest gaze yet on the hidden parts of the universe from space, uncovering the unimaginable with unsurpassed speed.

"It's going to find thousands of supernovae, tens of thousands of planets, billions of galaxies and tens of billions of stars," said NASA science mission director Nicky Fox. "It's going to be able to do things that we've never been able to do before with its massive field of view."

Roman's field of view is more than 100 times wider than that of NASA's Hubble Space Telescope, still churning out celestial glamour shots after 36 years in orbit. Webb joined the effort several years ago with an even narrower yet spot-on vision capable of zooming in on objects almost as old as the universe-creating Big Bang.

A SpaceX Falcon Heavy rocket launches NASA's new Roman Space Telescope in Cape Canaveral, Florida, on Sunday. REUTERS

These three orbiting powerhouses will join forces — along with the European Space Agency's Euclid spacecraft and the National Science Foundation's Vera C Rubin Observatory in Chile — to reveal some of the universe's biggest secrets.

Inside the countless galaxies awaiting discovery are stars with planets. Once these new worlds are spotted by Roman, the more powerful and sensitive Webb will take aim to fill in the blanks.

"Roman's vast reach will allow us to find the weird, the rare and the unusual," senior project scientist Julie McEnery said on the eve of launch. "We'll redefine what it means to find a needle in a haystack."

Perhaps even more important, astronomers expect Roman to shed light on the dark matter and dark energy that make up most of the universe yet remain concealed. Roman's catalog of galaxies will help scientists ascertain how quickly the universe is expanding due to these puzzling, unseen forces.

Roman's superpower is speed. A month of Milky Way observations by Roman would take Hubble a century to complete, according to McEnery. Roman should make quick work of scanning the galactic bulge at dead center, she added, providing the deepest look yet into the heart of our galaxy. AP

5. NASA Launches the Nancy Grace Roman Space Telescope

Source: The Indian Express — Sunday
GS: GS-III — Science & Technology | Space Technology | Astronomy

Context: NASA launched the **Nancy Grace Roman Space Telescope**, a **bus-sized space telescope**, aboard SpaceX's **Falcon Heavy** from the Kennedy Space Center.

● It is designed to provide a much wider view of the universe and investigate **exoplanets, galaxies, dark matter and dark energy**.

1. Nancy Grace Roman Space Telescope — Key Features

● **Named after:** Nancy Grace Roman, NASA's first chief astronomer.

● **Location:** It will travel about **1.6 million km** from Earth to an observation point near the location of the **James Webb Space Telescope**.

● **Field of view:** More than **100 times wider than the Hubble Space Telescope**, allowing it to survey enormous regions of the sky.

● **Survey capability:** Expected to detect **thousands of supernovae, tens of thousands of planets and billions of galaxies and stars**.

2. Scientific Significance

● **Dark matter:** Roman will help map the distribution of dark matter through its influence on galaxies and cosmic structures.

● **Dark energy:** Its observations will help scientists understand the **mysterious force driving the accelerated expansion of the universe**.

● **Exoplanets:** Its wide-field observations will identify large numbers of planets orbiting other stars.

● **Galaxies:** It will create a vast catalogue of galaxies, helping scientists study **how the universe evolved and expanded**.

● **Complementarity:** Roman's wide-field survey capability will complement the more detailed observations of the **James Webb Space Telescope**, while also working alongside missions such as **Euclid**.

3. Why the Mission Matters

● **Unprecedented scale:** Its very wide field of view enables rapid surveys of huge portions of the sky rather than focusing on small regions.

● **Faster cosmic mapping:** A month of Roman observations could accomplish work that would take **Hubble about a century**, according to the mission team.

● **Deeper understanding of the universe:** By studying dark matter, dark energy, galaxies and planetary systems together, Roman could provide crucial evidence about the **structure, evolution and expansion of the universe**.

Govt. notifies IST as common time reference across India; gives 180 days for compliance

Press Trust of India
NEW DELHI

The Union government has notified the Legal Metrology (Indian Standard Time) Rules, 2026, mandating Indian Standard Time (IST) as the single reference for legal, administrative, commercial and other official purposes across the country.

The nodal Consumer Affairs Ministry notified the rules on August 27. Still, they will come into force 180 days after their publication in the Official Gazette, giving government departments, businesses, and institutions time to align their systems.

The move comes amid growing reliance on digital and technology-based systems–from banking and payments to telecommunications, railways, power grids and computer networks–that depend on accurate and synchronised time stamps. The Ministry said inconsistencies between different time sources could affect the coordination and recording of such activities, prompting the push for a uniform national time standard.

The Centre is building facilities to disseminate accurate IST.
GETTY IMAGES/ISTOCKPHOTO

The common time reference is expected to support accurate time-stamping of banking and digital payment transactions, coordination among railways, airports and other transport systems, reliable functioning of telecommunication and internet networks, precise time-keeping in power systems, upkeep of government and legal records, and coordination of emergency and other time-critical services, the Ministry said in a statement.

A key feature of the rules is the emphasis on reducing dependence on foreign satellite-based time sources, which several critical systems currently rely on. The government is building infrastructure to disseminate accurate IST through Indian institutions and legal metrology laboratories.

6. Indian Standard Time Notified as India's Common Time Reference

Source: *The Hindu*
GS: GS-I — Geography | GS-III — Science & Technology

Context: The **Legal Metrology (Indian Standard Time) Rules, 2026**, notified on **27 August 2026**, make **Indian Standard Time (IST)** the common reference for legal, administrative, commercial and official purposes.

- They will come into force **180 days after Gazette publication**.

1. Indian Standard Time (IST): Basics

- **Basis: 82°30′E Standard Meridian**, passing through **Mirzapur, Uttar Pradesh**.
- **Time difference:** IST is **5 hours 30 minutes ahead of GMT/UTC**.
- **States along the Standard Meridian: Uttar Pradesh → Madhya Pradesh → Chhattisgarh → Odisha → Andhra Pradesh**.
- India follows **one standard time** despite its wide east–west extent, ensuring uniformity in official and economic activities.

2. Why Accurate IST Matters

- **Financial systems:** Precise time-stamping of banking and digital-payment transactions.
- **Critical infrastructure:** Synchronisation of **railways, aviation, power grids, telecommunications and internet networks**.
- **Governance:** Reliable legal, administrative and government records.
- **Emergency services:** Better coordination of time-critical operations.

3. Strategic Significance

- **Reduced foreign dependence:** Critical systems can reduce reliance on **foreign satellite-based time sources**.
- **Indigenous infrastructure:** The government is establishing facilities to disseminate accurate IST through **Indian institutions and legal-metrology laboratories**.
- **Digital sovereignty:** A reliable national time reference strengthens the functioning and security of India's increasingly **digitised critical infrastructure**.

Iceland referendum: People reject govt push for EU membership

Reuters
Reykjavik, August 30

ICELANDERS VOTED to stay out of the EU, referendum results showed Sunday, as they rejected a government push to reopen membership talks and sided with those who said Iceland's fishing waters were too important to risk.

The Arctic island of 400,000 people has debated whether to join the EU for well over a decade and had initially been expected to narrowly back holding membership talks, but opinion polls this month showed views had changed. "This is a clear setback for Brussels," an EU diplomat told Reuters, adding that the issues of fishing and independence had been decisive.

In Saturday's referendum, 52.8% of ballots cast were against the government's proposal to hold negotiations with Brussels, 47.2% were in favour, and 82.5% of eligible voters took part, public broadcaster *RUV* and other Icelandic media reported.

Out of six constituencies, only the two in central Reykjavik had a majority that voted in favour, while rural areas and the Reykjavik suburbs voted against.

The government framed membership as a shield against trade wars and Arctic rivalry and presented the referendum as a "now or never" moment. Prime Minister Kristrun Frostadottir said a "no would end the debate for as long as her centre-left coalition was in power.

In Brussels, some officials had voiced hopes a vote to join from Iceland could ease scepticism toward EU enlargement and strategically strengthen the bloc when Arctic security is in focus.

Iceland, a NATO member state but with no standing army of its own, also debated whether EU accession could boost the country's security when US President Donald Trumphas cast doubt on the US commitment to the military alliance.

7. Iceland Rejects Push to Reopen European Union Membership Talks

Source: *The Indian Express*
GS: GS-II — International Relations | European Union

Context: Iceland held a referendum on whether to **resume negotiations with the European Union (EU)**, with **52.8% voting against** and **47.2% in favour**; turnout was **82.5%**.

- The vote therefore blocks the present government's attempt to reopen the EU accession process.

1. Why Iceland Rejected EU Talks

● **Fisheries & sovereignty:** Control over Iceland's fishing waters was the decisive concern; many voters feared that EU membership could restrict national control over this strategically important sector.
● **Independence:** Concerns remain that deeper integration with the EU could reduce Iceland's policy autonomy.
● **Urban–rural divide:** The two central Reykjavik constituencies supported reopening talks, while **rural areas and Reykjavik suburbs largely opposed** it.
● **Government's argument:** The government viewed EU membership as a potential shield against **trade wars and Arctic rivalry**, and as a means of strengthening Iceland's security.

2. European Union — Basics & Enlargement

● The **European Union (EU)** is a political and economic union built around **economic integration, the single market, free movement and common European cooperation**.
● **27 member states** currently constitute the EU.
● **Founding members (1958):** Belgium, France, Germany, Italy, Luxembourg and the Netherlands.
● **Latest member: Croatia**, which joined on **1 July 2013**.
● **Iceland:** Not an EU member, but participates in the **European Economic Area (EEA)**, giving it access to the EU single market.

3. Why Iceland's Decision Matters

● **EU enlargement:** The result is a setback to the bloc's enlargement ambitions, particularly when Europe is seeking greater strategic cohesion.
● **Arctic geopolitics:** Iceland occupies an important position in the **North Atlantic–Arctic region**; EU membership could have strengthened the bloc's presence in Arctic affairs.
● **Security:** Iceland is a **NATO member but has no standing army**, making its security closely connected to broader transatlantic arrangements.
● **Domestic priorities:** The result demonstrates that concerns over **resource control and national sovereignty** can outweigh perceived economic and strategic benefits of integration.