



TELEGRAM CHANNEL: <https://t.me/patrioticIAS>  
YOUTUBE CHANNEL: <https://www.youtube.com/@PatrioticIAS>  
CONTACT: 9971932488



# PATRIOTIC IAS

## DAILY CURRENT AFFAIRS

### THE HINDU NEWSPAPER

### 20 MARCH 2026

YouTube link: <https://www.youtube.com/@PatrioticIAS>

Telegram Channel: <https://t.me/patrioticIAS>

GS Paper 1: History,

TOPICS COVERED

20 March 2026

20Mar

Kerala to celebrate Id-ul-Fitr today following moon sighting  
चांद दिखने के बाद केरल आज ईद-उल-फितर मनाएगा

20Mar

Before salt, there was water: why Mahad Satyagraha deserves its centenary  
नमक से पहले पानी था: महाड़ सत्याग्रह अपनी शताब्दी का हकदार क्यों है

Address : 3rd Floor, KV Tower, Padleyganj Road, Gorakhpur  
Email Id : [info@patrioticias.in](mailto:info@patrioticias.in)  
Contact Number : 9971932488  
Website : [patrioticias.in](http://patrioticias.in)



**Festive fervour**



**GS I: History: A&C**  
Fresh start: A woman in traditional attire takes part in the Gudi Padwa procession to mark the Marathi New Year at Girgaon in Mumbai on Thursday, BHANUJAL, 1008H

Fresh start: A woman in traditional attire takes part in the **Gudi Padwa procession to mark the Marathi New Year.**



**GS I: History: A&T**

**Kerala to celebrate Id-ul-Fitr today following moon sighting**

Muslims in Kerala are set to celebrate Id-ul-Fitr on Friday, marking the conclusion of the month-long fasting observed during Ramzan. Islamic judges, known as *Kazis* across the State, confirmed the festival following the sighting of the new moon of the Islamic month of Shawwal after the Iftar on Thursday, the 29th day of Ramzan. Id-ul-Fitr is celebrated as a time of gratitude, prayer, and community spirit. Special Id prayers will be offered on Friday morning in mosques and open grounds known as Id Gahs.

mosques and open grounds known as Id Gahs.

शुक्रवार सुबह **मस्जिदों** और खुले मैदानों, जिन्हें **ईदगाह** कहा जाता है, में विशेष **ईद की नमाज़** अदा की जाएगी।

**20Marc. Kerala to celebrate Id-ul-Fitr today following moon sighting**  
**चांद दिखने के बाद केरल आज ईद-उल-फितर मनाएगा**

- Muslims in Kerala are set to celebrate Id-ul-Fitr on Friday, marking the conclusion of the month-long fasting observed during Ramzan. केरल में मुसलमान शुक्रवार को **ईद-उल-फितर** मनाने जा रहे हैं, जो **रमजान** के दौरान रखे गए महीने भर के रोज़े के समापन का प्रतीक है।
- Islamic judges, known as *Kazis* across the State, confirmed the festival following the sighting of the new moon of the Islamic month of Shawwal after the Iftar on Thursday, the 29th day of Ramzan. राज्य भर में **काज़ी** के रूप में जाने जाने वाले इस्लामिक न्यायाधीशों ने गुरुवार को **इफ्तार** के बाद, रमजान के **29वें दिन**, इस्लामी महीने **शव्वाल** के नए चांद के दिखने के बाद इस त्योहार की पुष्टि की।
- Id-ul-Fitr is celebrated as a time of gratitude, prayer, and community spirit. **ईद-उल-फितर** को **कृतज्ञता, प्रार्थना, और सामुदायिक भावना** के रूप में मनाया जाता है।
- Special Id prayers will be offered on Friday morning in



FULL CONTEXT

# Before salt, there was water: why Mahad Satyagraha deserves its centenary

The republic must mark the centenary of the Mahad Satyagraha with the seriousness it deserves; it calls for a year of honest reckoning to ask whether the constitutional promise of dignity and freedom from untouchability has become a lived reality for all

CS History

MOB

Sanjay Hegde

**T**hink of a child in school. He is thirsty. There is water in the classroom. But he cannot drink it. Not because the water is dirty. Not because there is a rule against drinking in class. He cannot drink because the peon who is supposed to pour the water into his cupped hands, from a height, so that the vessel is not polluted by his touch, happens to be absent that day.

## No peon, no water

That was the rule that governed the childhood of Bhimrao Ramji Ambedkar. He wrote about it with quiet, devastating precision in his autobiographical essay *Waiting for a Visa*, and in the fragment known as *No Peon, No Water*. He and his siblings, travelling to meet their father, arrived at a railway station parched with thirst. No one would give them water. They were Mahars. They were "untouchable." The public tap was not for them.

Let that image stay with you for a moment: small children, thirsty, surrounded by water, unable to drink. Not in a desert, but in a school. Not in a time of famine, but in a time of plenty.

That boy grew up. He went to Columbia. He went to the London School of Economics. He read law at Gray's Inn. And then he came home and walked to a water tank.

## What happened at Mahad

On March 20, 1927, Ambedkar led a procession of thousands through the streets of Mahad, a small town in the Konkan, in the Bombay Presidency. Their destination was the Chavdar Tale, a public water tank. The Bombay Legislative Council passed the Bole Resolution in 1923, and the Mahad Municipality opened the tank to the depressed classes in 1924. But resolutions on paper and water in the throat are different things. The upper castes ensured that the resolution remained a dead letter.

Ambedkar walked to the tank. He bent down. He drank.

Thousands followed him – men, women, children. They drank. For perhaps the first time in their lives, they drank water from a public source as a matter of right, not as an act of stealth or charity.

And then the violence came. Rumours spread that the *satyagrahis* intended to enter the Veereshwar temple. Returning delegates were attacked in the streets, in their bullock carts, in their villages. The tank was "purified" with cow dung and urine, as though human dignity were a contaminant that could be washed away.

When Ambedkar returned to Mahad in December 1927 for a second conference, he brought with him not just the resolve to drink water again but a deeper symbolic intent. On December 25, 1927, the conference publicly burned a copy of the Manusmriti. That fire was not a mere gesture. It was a declaration that the future republic, if it was to mean anything at all, would rest on rights, not on graded inequality codified in ancient texts.

## Ten years in court

What followed the satyagraha was as instructive as the satyagraha itself.

The upper castes of Mahad did not merely resort to violence. They also went to court.



On March 20, 1927, Ambedkar led a procession of thousands through the streets of Mahad. FILE PHOTO

On December 12, 1927, even before the second conference began, Hindu residents filed a civil suit in the Kolaba District Court seeking a temporary injunction to prevent the depressed classes from using the Chavdar tank. The injunction was granted on December 14, 1927.

Ambedkar, true to his belief in constitutional methods, chose to respect the court's order while continuing his conference. He addressed the gathering. He burned the Manusmriti. But he did not go to the tank.

The litigation dragged on for a decade. It passed through the trial court at Mahad and then the court of the Assistant Judge at Thana. At every stage, the courts held that the plaintiffs had failed to establish any immemorial custom entitling caste Hindus to exclude untouchables from the tank.

The case finally reached the Bombay High Court, where it was decided on March 17, 1937, by Justices Broomfield and N.J. Wadia in *Narhari Damodar Vaidya v. Bhimrao Ramji Ambedkar*. Justice Broomfield, in a passage that deserves to be remembered, held that the appellants had not established the immemorial custom they had alleged. The tank belonged to the municipality. It was public property. The untouchables had every right to use it.

A man led a procession to drink water from a public tank in 1927. It took until 1937 for the courts to confirm that he was entitled to do so.

The law vindicated Ambedkar. But the fact that vindication took a decade tells its own story about the depth of the resistance he faced.

## Salt versus water

Three years after Mahad, on March 12, 1930, Mahatma Gandhi set out from Sabarmati *ashram* on his march to Dandi. The Salt Satyagraha was a masterstroke of political mobilisation. It challenged the economic apparatus of the colonial state and captured the imagination of the world press. Its place in the national narrative is secure, and rightly so. But consider what each satyagraha actually demanded, and of whom.

The Salt March demanded freedom from the British. The Mahad Satyagraha demanded freedom from fellow Indians. Dandi identified an external oppressor and asked him to leave. Mahad identified an internal sickness and asked a civilisation to heal itself. One required courage against a foreign ruler. The other required something harder: the willingness to look one's own neighbours, one's own co-religionists, one's own countrymen in the eye and say, "You have treated us as less than human, and we will not accept it any longer."

There is no dishonour to the Salt March in saying this. But there is a historical imbalance that needs correcting.

The salt tax was an imposition of an empire. Once the empire left, the tax could be abolished by a stroke of the legislative pen. Untouchability, by contrast, did not arrive with the British and did not leave with them. It was woven into the social fabric of Indian life for millennia. It required not a change of government, but a change of heart, of custom, of the very conception of who counts as human.

It is no accident that the man who drank water at Chavdar went on to draft

the Constitution. The architecture of Part III bears the watermark of Mahad.

Article 15, which prohibits discrimination on grounds of caste and specifically addresses access to wells, tanks, bathing ghats, and places of public resort, reads as though Ambedkar had the Chavdar tank before his eyes.

Article 17, which abolishes untouchability and makes its practice a punishable offence, is the Mahad Satyagraha transmuted into constitutional text.

The Dandi March gave India the aspiration for Swaraj. Mahad gave India the grammar of equality. Swaraj could have been written by many hands. The grammar of equality could only have been written by one who had been denied water as a child.

## The case for a centenary

The 100th anniversary of the Mahad Satyagraha falls on March 20, 2027. We are now in the 99th year. If this republic has any sense of its origins, any honest memory of the struggles that gave it a Constitution, it must mark this centenary with the seriousness and grandeur it deserves.

I would propose a year-long commemoration beginning on March 20, 2026, and culminating on March 20, 2027, with a great gathering at the Chavdar tank. Let citizens of every caste, creed, and class come to Mahad and drink together. Let it be a constitutional baptism: a re-immersion in the founding promise that no Indian shall be diminished by the accident of birth.

But let us not stop with only ceremonies.

Let the centenary year become a year of honest reckoning. Let us ask whether the child in a government school in rural India today, the Dalit boy, the Adivasi girl, the daughter of the sanitation worker, truly lives free of the "no peon, no water" principle, or whether that principle has merely found new vocabularies while retaining its venom.

Let us ask whether the manual scavenger who cleans our sewers with bare hands occupies a fundamentally different position from the Mahars barred from the Chavdar tank. Let us ask whether the constitutional text has become the reality of the republic.

The centenary must be a call for true equality for all, for the last, the least, and the lost. For every Indian whom the lottery of birth still consigns to a life of diminished citizenship, of invisible labour, of social suffering that is too familiar to even register as injustice any more. The waters of the Chavdar tank must flow again, not as historical memory but as living commitment.

Ambedkar did not merely draft a Constitution. He first had to prove, by walking to a tank in a small town and drinking water from it, that those for whom he would one day write that Constitution were human enough to drink. That act, radical and simple and shattering, remains the foundational moment of Indian constitutionalism. It came before Dandi. In what it demanded, and of whom it demanded it, it went deeper than Dandi.

And in the unfinished business of Indian equality, it still awaits its full redemption. The centenary approaches. Let the republic remember, lest it forget. (Sanjay Hegde is a Senior Advocate practising in the Supreme Court)

**20 Marc. Before salt, there was water: why Mahad Satyagraha deserves its centenary**

**नमक से पहले पानी था: महाड़ सत्याग्रह अपनी शताब्दी का हकदार क्यों है**

- The republic must mark the **centenary** of the **Mahad Satyagraha** with the seriousness it deserves; it calls for a year of **honest reckoning** to ask whether the **constitutional promise** of **dignity** and **freedom from untouchability** has become a lived reality for all  
गणराज्य को महाड़ सत्याग्रह की शताब्दी को उस गंभीरता के साथ मनाना चाहिए जिसका वह हकदार है; यह



एक वर्ष की **ईमानदार समीक्षा** की मांग करता है ताकि यह पूछा जा सके कि **संवैधानिक वादा** यानी गरिमा और **अस्पृश्यता से मुक्ति** क्या सभी के लिए वास्तविकता बन पाया है

- Think of a child in school. He is **thirsty**. There is **water** in the classroom. But he cannot drink it.  
एक स्कूल के बच्चे की कल्पना करें। वह **प्यासा** है। कक्षा में **पानी** है, लेकिन वह उसे पी नहीं सकता।
- Not because the water is dirty or there is a rule against drinking.  
ऐसा इसलिए नहीं क्योंकि पानी गंदा है या पीने का कोई नियम नहीं है।
- He cannot drink because the **peon** who must pour water from a height is absent.  
वह इसलिए नहीं पी सकता क्योंकि **चपरासी**, जो ऊँचाई से पानी डालता है, अनुपस्थित है।
- This is to ensure the vessel is not **polluted by his touch**.  
यह इसलिए कि बर्तन उसके **स्पर्श से अपवित्र** न हो।

### No peon, no water

#### चपरासी नहीं, तो पानी नहीं

- That was the rule governing the childhood of **Bhimrao Ramji Ambedkar**.  
यही नियम **भीमराव रामजी अंबेडकर** के बचपन पर लागू था।
- He described it in **Waiting for a Visa and No Peon, No Water**.  
उन्होंने इसे **Waiting for a Visa** और **No Peon, No Water** में लिखा।
- He and his siblings, travelling, reached a station **thirsty**, but no one gave them water.  
वे और उनके भाई-बहन यात्रा के दौरान **प्यासे** स्टेशन पहुंचे, लेकिन किसी ने पानी नहीं दिया।
- They were **Mahars**, considered “**untouchable**.”  
वे **महार** थे, जिन्हें “**अछूत**” माना जाता था।
- The **public tap** was not for them.  
**सार्वजनिक नल** उनके लिए नहीं था।
- Imagine small children, thirsty, surrounded by water, unable to drink.  
कल्पना करें छोटे बच्चे, प्यासे, पानी से घिरे हुए, लेकिन पी नहीं सकते।
- Not in a desert, but in a **school**, not in famine but in **plenty**.  
न रेगिस्तान में, बल्कि **स्कूल** में; न अकाल में, बल्कि **प्रचुरता** में।
- That boy studied at **Columbia University, London School of Economics, and Gray's Inn**.  
वही लड़का आगे चलकर **कोलंबिया विश्वविद्यालय, लंदन स्कूल ऑफ इकोनॉमिक्स, और ग्रेज़ इन** में पढ़ा।
- Then he returned and walked to a **water tank**.  
फिर वह लौटकर एक **पानी के टैंक** तक गया।

### What happened at Mahad

#### महाड़ में क्या हुआ

- On **March 20, 1927**, Ambedkar led thousands to the **Chavdar Tale** in Mahad.  
**20 मार्च 1927** को अंबेडकर ने हजारों लोगों का नेतृत्व करते हुए महाड़ के **चावदार तालाब** तक मार्च किया।
- The **Bole Resolution (1923)** and **1924 order** had opened the tank to depressed classes.  
**बोले प्रस्ताव (1923)** और **1924 के आदेश** ने तालाब को दलितों के लिए खोल दिया था।
- But upper castes ensured it remained a **dead letter**.  
लेकिन ऊँची जातियों ने इसे **कागज़ी आदेश** बना दिया।
- Ambedkar walked to the tank, bent down, and **drank water**.  
अंबेडकर तालाब तक गए, झुके और **पानी पिया**।
- Thousands followed — men, women, children.  
हजारों लोग — पुरुष, महिलाएँ, बच्चे — उनके पीछे चले।
- For the first time, they drank water as a **right**, not charity.  
पहली बार उन्होंने पानी **अधिकार** के रूप में पिया, न कि दया के रूप में।
- Violence followed.  
इसके बाद **हिंसा** हुई।
- Rumours spread about entering the **Veereshwar temple**.  
अफवाह फैली कि वे **वीरेश्वर मंदिर** में प्रवेश करेंगे।
- People were attacked in streets and villages.  
लोगों पर सड़कों और गाँवों में हमला किया गया।



- The tank was “purified” with cow dung and urine.  
तालाब को गोबर और मूत्र से शुद्ध किया गया।
- In **December 1927**, Ambedkar returned and burned the **Manusmriti (Dec 25, 1927)**.  
**दिसंबर 1927** में अंबेडकर लौटे और **मनुस्मृति (25 दिसंबर 1927)** को जलाया।
- This symbolised rejection of **graded inequality**.  
यह स्तरीकृत असमानता के विरोध का प्रतीक था।

### Ten years in court दस साल अदालत में

- Upper castes also took the matter to **court**.  
ऊँची जातियों ने मामला अदालत में ले जाया।
- On **December 12, 1927**, a suit was filed seeking an **injunction**.  
**12 दिसंबर 1927** को रोक के लिए मुकदमा दायर किया गया।
- The injunction was granted on **December 14, 1927**.  
**14 दिसंबर 1927** को आदेश जारी हुआ।
- Ambedkar respected the court order and did not go to the tank.  
अंबेडकर ने अदालत के आदेश का सम्मान किया और तालाब नहीं गए।
- The case continued for **10 years** through multiple courts.  
मामला **10 वर्षों** तक विभिन्न अदालतों में चला।
- Courts ruled that no **immemorial custom** existed to exclude untouchables.  
अदालतों ने कहा कि अछूतों को रोकने की कोई प्राचीन परंपरा नहीं थी।
- Final judgment came on **March 17, 1937** in **Bombay High Court**.  
अंतिम फैसला **17 मार्च 1937** को **बॉम्बे हाई कोर्ट** में आया।
- Case: **Narhari Damodar Vaidya v. B.R. Ambedkar**.  
मामला: **नरहरी दामोदर वैद्य बनाम बी.आर. अंबेडकर**।
- The tank was declared **public property**, accessible to all.  
तालाब को **सार्वजनिक संपत्ति** घोषित किया गया।
- A man drank water in **1927**, but legal validation came in **1937**.  
एक व्यक्ति ने **1927** में पानी पिया, लेकिन कानूनी मान्यता **1937** में मिली।
- The delay shows the depth of **social resistance**.  
यह देरी **सामाजिक प्रतिरोध** की गहराई को दर्शाती है।

### Salt versus water नमक बनाम पानी

- Three years after Mahad, on **March 12, 1930**, **Mahatma Gandhi** began the **Dandi March** from **Sabarmati Ashram**.  
महाड़ के तीन वर्ष बाद, **12 मार्च 1930** को **महात्मा गांधी** ने **साबरमती आश्रम** से **डांडी मार्च** शुरू किया।
- The **Salt Satyagraha** challenged the **economic apparatus of the colonial state** and gained global attention.  
**नमक सत्याग्रह** ने **औपनिवेशिक आर्थिक ढांचे** को चुनौती दी और वैश्विक ध्यान आकर्षित किया।
- Its place in the **national narrative** is secure and justified.  
राष्ट्रीय इतिहास में इसका स्थान सुरक्षित और उचित है।
- But consider what each satyagraha demanded and from whom.  
लेकिन विचार करें कि प्रत्येक सत्याग्रह ने क्या और किससे मांग की।
- The **Salt March** demanded freedom from the **British**.  
**नमक मार्च** ने **ब्रिटिश शासन से स्वतंत्रता** की मांग की।
- The **Mahad Satyagraha** demanded freedom from **fellow Indians**.  
**महाड़ सत्याग्रह** ने **अपने ही भारतीयों से मुक्ति** की मांग की।
- Dandi targeted an **external oppressor**.  
डांडी ने **बाहरी शोषक** को निशाना बनाया।
- Mahad targeted an **internal social injustice**.  
महाड़ ने **आंतरिक सामाजिक अन्याय** को चुनौती दी।



- One required courage against a **foreign ruler**, the other required confronting **society itself**.  
एक में **विदेशी शासक** के खिलाफ साहस चाहिए था, दूसरे में **अपने समाज का सामना** करना।
- There is no dishonour to the Salt March, but there is a **historical imbalance**.  
नमक मार्च का कोई अपमान नहीं है, लेकिन एक **ऐतिहासिक असंतुलन** है।
- The **salt tax** ended with the departure of the British.  
**नमक कर** ब्रिटिशों के जाने के साथ समाप्त हो गया।
- But **untouchability** did not begin or end with colonial rule.  
लेकिन **अछूत प्रथा** न तो अंग्रेजों के साथ शुरू हुई और न उनके जाने से खत्म हुई।
- It required a change in **heart, custom, and social values**.  
इसके लिए **मन, परंपरा और सामाजिक मूल्यों** में परिवर्तन जरूरी था।
- It is no accident that **Ambedkar**, who drank water at **Chavdar tank**, drafted the **Constitution**.  
यह संयोग नहीं है कि **अंबेडकर**, जिन्होंने **चावदार तालाब** से पानी पिया, वही **संविधान निर्माता** बने।
- **Article 15** prohibits discrimination and ensures access to **wells, tanks, ghats**.  
**अनुच्छेद 15** भेदभाव को रोकता है और **कुएं, तालाब, घाट** तक पहुंच सुनिश्चित करता है।
- It reflects the experience of **Mahad**.  
यह **महाड़ के अनुभव** को दर्शाता है।
- **Article 17** abolishes **untouchability** and makes it punishable.  
**अनुच्छेद 17** **अछूत प्रथा** को समाप्त करता है और इसे दंडनीय बनाता है।
- It is Mahad translated into **constitutional law**.  
यह महाड़ का **संवैधानिक रूपांतरण** है।
- The **Dandi March** gave India the idea of **Swaraj**.  
**डांडी मार्च** ने भारत को **स्वराज** का विचार दिया।
- Mahad gave India the **grammar of equality**.  
महाड़ ने भारत को **समानता का आधार** दिया।
- Swaraj could be written by many, but equality required one who **suffered discrimination**.  
स्वराज कई लोग लिख सकते थे, लेकिन समानता वही लिख सकता था जिसने **भेदभाव झेला** हो।

### The case for a centenary शताब्दी का महत्व

- The **100th anniversary** of Mahad falls on **March 20, 2027**.  
महाड़ की **100वीं वर्षगांठ 20 मार्च 2027** को है।
- We are currently in the **99th year**.  
हम वर्तमान में **99वें वर्ष** में हैं।
- The republic must commemorate it with **seriousness and grandeur**.  
गणराज्य को इसे **गंभीरता और भव्यता** से मनाना चाहिए।
- A **year-long commemoration** from **March 20, 2026 to March 20, 2027** is proposed.  
**20 मार्च 2026 से 20 मार्च 2027** तक वर्षभर कार्यक्रम का प्रस्ताव है।
- It should culminate at the **Chavdar tank**.  
इसका समापन **चावदार तालाब** पर होना चाहिए।
- People of all **castes, creeds, classes** should gather and drink together.  
सभी **जाति, धर्म, वर्ग** के लोग एक साथ आकर पानी पिएं।
- It should symbolise a **constitutional commitment to equality**.  
यह **संवैधानिक समानता की प्रतिबद्धता** का प्रतीक होना चाहिए।
- The centenary should also be a time for **honest introspection**.  
यह समय **ईमानदार आत्ममंथन** का भी होना चाहिए।
- Ask whether discrimination still exists in **schools and society**.  
पूछें कि क्या आज भी **स्कूलों और समाज में भेदभाव** है।
- Whether the principle of **“no peon, no water”** still survives in new forms.  
क्या **“चपरासी नहीं, तो पानी नहीं”** का सिद्धांत नए रूप में अभी भी मौजूद है।
- Ask whether **manual scavengers** face the same exclusion as Mahars.  
पूछें कि क्या **मैन्युअल स्कैवेंजर्स** वही भेदभाव झेलते हैं जो महारों ने झेला।
- Ask whether the **Constitutional promises** have become reality.  
पूछें कि क्या **संवैधानिक वादे** वास्तविकता बने हैं।



- The centenary must call for **true equality for all**.  
यह शताब्दी **सभी के लिए वास्तविक समानता** का आह्वान होनी चाहिए।
- Especially for those still facing **social exclusion and invisible labour**.  
विशेषकर उन लोगों के लिए जो आज भी **सामाजिक बहिष्कार और अदृश्य श्रम** झेल रहे हैं।
- The waters of **Chavdar tank** must • ow again as a **living commitment**.  
**चावदार तालाब** का पानी फिर से **जीवंत संकल्प** के रूप में बहना चाहिए।
- Ambedkar proved humanity by **drinking water** before drafting the Constitution.  
अंबेडकर ने संविधान लिखने से पहले **पानी पीकर मानवता सिद्ध की**।
- That act remains a **foundational moment of Indian constitutionalism**.  
वह घटना भारतीय **संवैधानिकता का आधारभूत क्षण** है।
- It came before **Dandi** and went deeper in its demand for equality.  
यह **डांडी** से पहले आया और समानता की दृष्टि से अधिक गहरा था।
- The struggle for equality remains **unfinished**.  
समानता का संघर्ष अभी भी **अधूरा** है।
- The centenary approaches — the republic must **remember**.  
शताब्दी निकट है — गणराज्य को **याद रखना चाहिए**।

## GS Paper II: Governance,

### TOPICS COVERED

20 March 2026

20Mar	<b>New education Bill is 'constitutional overreach': Cong.</b> नया शिक्षा विधेयक 'संवैधानिक अतिक्रमण': कांग्रेस
20Mar	<b>Lack of 'sustainable water sources' will thwart Jal Jeevan Mission: panel</b> 'सतत जल स्रोतों' की कमी जल जीवन मिशन को बाधित करेगी: समिति



# New education Bill is 'constitutional overreach': Cong.

**GS II: Governance**  
**The Hindu Bureau**  
NEW DELHI

The proposed legislation to restructure the regulatory framework of higher education represents constitutional overreach by the Union government, the Congress said on Thursday. The Viksit Bharat Shiksha Adhishtan (VBSA) Bill, 2025, was introduced without consulting States, bureaucratises higher education, and hands over grant-giving powers to the Education Ministry that is controlled by politicians, Congress communications chief Jairam Ramesh said, in a statement explaining the party's opposition to the Bill.

Mr. Ramesh added that a Parliamentary panel has flagged a high number of vacancies at existing regulatory bodies, including the University Grants Commission (UGC) and the All India Council for Technical Education (AICTE). The Bill proposes to subsume these bodies, and the National Council for Teacher Education (NCTE) into a single 12-member Commission, under which three separate Regulatory, Ac-



Jairam Ramesh

creditation, and Standards Councils will operate.

"This concerning news comes at a time when there is already a move to restructure the architecture of higher education regulation through the VBSA Bill, 2025," Mr. Ramesh said.

Though the Centre has cited Entry 66 of the Union List in the Constitution to defend its right to introduce the Bill, the legislation gives the proposed new umbrella Commission "powers beyond this scope and specifically encroaches on State government powers", he added.

The Bill seeks to divide UGC's grant-giving powers from the regulatory structure to minimise conflicts of interest, with the government saying future funding mechanisms will be designed by the Education Ministry.

**20Mar. New education Bill is 'constitutional overreach': Cong.**

**नया शिक्षा विधेयक 'संवैधानिक अतिक्रमण': कांग्रेस**

- The proposed legislation to restructure the regulatory framework of higher education represents constitutional overreach by the Union government, the Congress said on Thursday.

उच्च शिक्षा के नियामक ढांचे के पुनर्गठन के लिए प्रस्तावित यह विधेयक केंद्र सरकार द्वारा संवैधानिक अतिक्रमण को दर्शाता है, ऐसा कांग्रेस ने गुरुवार को कहा।

- The **Viksit Bharat Shiksha Adhishtan (VBSA) Bill, 2025**, was introduced without consulting States, bureaucratises higher education, and hands over grant-giving powers to the Education Ministry that is controlled by politicians, Congress communications chief Jairam Ramesh said, in a statement explaining the party's opposition to the Bill.

**विकसित भारत शिक्षा अधिष्ठान (VBSA) विधेयक, 2025** को राज्यों से परामर्श किए बिना पेश किया गया, यह उच्च शिक्षा को नौकरशाहीकरण करता है, और अनुदान देने की शक्तियां शिक्षा मंत्रालय को सौंपता है जो राजनीतिज्ञों द्वारा नियंत्रित है, कांग्रेस के संचार प्रमुख जयराम रमेश ने विधेयक के विरोध में जारी बयान में कहा।

- Mr. Ramesh added that a Parliamentary panel has flagged a high number of vacancies at existing regulatory bodies, including the University Grants Commission (UGC) and the All India Council for Technical Education (AICTE).

श्री रमेश ने जोड़ा कि एक संसदीय पैनल ने मौजूदा नियामक संस्थाओं, जैसे विश्वविद्यालय अनुदान आयोग (UGC) और अखिल भारतीय तकनीकी शिक्षा परिषद (AICTE) में बड़ी संख्या में रिक्तियों को चिह्नित किया है।

- The **Bill proposes to subsume these bodies, and the National Council for Teacher Education (NCTE) into a single 12-member Commission, under which three separate Regulatory, Accreditation, and Standards Councils will operate.**

यह विधेयक इन संस्थाओं और राष्ट्रीय शिक्षक शिक्षा परिषद

(NCTE) को एक 12-सदस्यीय आयोग में समाहित करने का प्रस्ताव करता है, जिसके तहत तीन अलग-अलग नियामक, प्रत्यायन और मानक परिषदें कार्य करेंगी।

- "This concerning news comes at a time when there is already a move to restructure the architecture of higher education regulation through the VBSA Bill, 2025," Mr. Ramesh said. "यह चिंताजनक खबर ऐसे समय में आई है जब VBSA विधेयक, 2025 के माध्यम से उच्च शिक्षा के नियामक ढांचे को पुनर्गठित करने की पहले से ही पहल हो रही है," श्री रमेश ने कहा।
- Though the Centre has cited Entry 66 of the Union List in the Constitution to defend its right to introduce the Bill, the legislation gives the proposed new umbrella Commission "powers beyond this scope and specifically encroaches on State government powers", he added. हालांकि केंद्र ने इस विधेयक को पेश करने के अपने अधिकार को सही ठहराने के लिए संविधान की संघ सूची की प्रविष्टि 66 का हवाला दिया है, लेकिन यह विधेयक प्रस्तावित नए अम्ब्रेला आयोग को "इस दायरे से परे शक्तियां देता है और विशेष रूप से राज्य सरकारों की शक्तियों का अतिक्रमण करता है," उन्होंने जोड़ा।
- The Bill seeks to divide UGC's grant-giving powers from the regulatory structure to minimise conflicts of interest, with the government saying future funding mechanisms will be designed by the Education Ministry. यह विधेयक UGC की अनुदान देने की शक्तियों को नियामक ढांचे से अलग करने का प्रयास करता है ताकि



हितों के टकराव को कम किया जा सके, जबकि सरकार का कहना है कि भविष्य की वित्तपोषण व्यवस्था शिक्षा मंत्रालय द्वारा तैयार की जाएगी।

# Lack of 'sustainable water sources' will thwart Jal Jeevan Mission: panel

GS II: Governance

**Jacob Koshy**  
NEW DELHI

A parliamentary committee has said that the objectives of the Jal Shakti Ministry's flagship ₹8.69-lakh-crore Jal Jeevan Mission (JJM) — that aims to provide consistent and potable water supply to all rural households — will remain "unfulfilled" if sustainable sources of water supply are not found.

This comes after an official in the Department of Drinking Water and Sanitation — an arm of the Ministry — told the committee that despite taps under the scheme having been installed at many places, there was an "...issue of water availability due to shortage of sources" and that in some places "...water sources were being exhausted within a year or two".

This prompted the committee to observe that "...the objective of providing water for the next 25-30 years under JJM will remain unfulfilled due to lack of source sustainabil-



The programme, originally envisioned to achieve 100% coverage by 2024, has been stuck at around 81% since 2025. K. MURALI KUMAR

ty". Sources include rivers, lakes, ponds or any natural pool.

The committee recommended that the Ministry implement "source to tap" schemes, under which the entire chain of water supply such as the source of water, tank, supply, were accounted for. There are 6.83 lakh sanctioned schemes under the JJM.

The committee "note(d) with concern" that there was no information from the States on how many of these schemes were "source to tap". The panel said it was "...of the view

that to maintain a long-term steady supply of safe drinking water, source sustainability is of paramount importance otherwise assets created under JJM will come to naught after extinguishment of available sources".

## Govt. nod for extension

The Union Cabinet last week approved extending the JJM programme to 2028 and allocated additional funds to meet its target. A press note from the Ministry had noted that the programme's focus will change "...from infrastruc-

ture creation to service delivery, supported by drinking water governance and institutional ecosystem for sustainable rural piped potable water supply".

"To this end, a uniform national digital framework, namely 'Sujalam Bharat', shall be instituted, under which every village shall be assigned a unique Sujal Gaon/Service Area ID digitally mapping the complete drinking water supply system from source to tap," a Ministry statement said.

The programme, originally envisioned to achieve 100% coverage by 2024, has been stuck at around 81% since 2025. As *The Hindu* has previously reported, covering the remaining 20% requires more money than has already been spent so far.

From the baseline of 3.23 crore (17%) rural households with existing tap water connections in 2019, more than 12.56 crore additional rural households have been provided with tap water connections so far under the JJM.

## 20Mar. Lack of 'sustainable water sources' will thwart Jal Jeevan Mission: panel

### 'सतत जल स्रोतों' की कमी जल जीवन मिशन को बाधित करेगी: समिति

- A parliamentary committee has said that the objectives of the Jal Shakti Ministry's flagship ₹8.69-lakh-crore Jal Jeevan Mission (JJM) — that aims to provide consistent and potable water supply to all rural households — will remain "unfulfilled" if sustainable sources of water supply are not found.

एक संसदीय समिति ने कहा है कि जल शक्ति मंत्रालय की प्रमुख ₹8.69 लाख करोड़ की जल जीवन मिशन (JJM) — जिसका उद्देश्य सभी ग्रामीण घरों को निरंतर और पेयजल आपूर्ति प्रदान करना है — के लक्ष्य "अपूर्ण" रह जाएंगे यदि सतत जल स्रोत नहीं मिलते।

- This comes after an official in the Department of Drinking Water and Sanitation — an arm of the Ministry — told the committee that despite taps under the scheme having been installed at many places, there was an "...issue of water availability due to shortage of sources" and that in some places "...water sources were being exhausted within a year or two".  
यह तब सामने आया जब पेयजल और स्वच्छता विभाग के एक अधिकारी — जो मंत्रालय का हिस्सा है — ने



समिति को बताया कि योजना के तहत कई स्थानों पर नल लगाए जाने के बावजूद “जल उपलब्धता की समस्या स्रोतों की कमी के कारण है” और कुछ जगहों पर “जल स्रोत एक-दो वर्ष में समाप्त हो रहे हैं”।

- This prompted the committee to observe that “...the objective of providing water for the next 25-30 years under JJM will remain unfulfilled due to lack of source sustainability”. Sources include rivers, lakes, ponds or any natural pool.

इससे समिति ने यह टिप्पणी की कि “JJM के तहत अगले 25-30 वर्षों तक पानी उपलब्ध कराने का लक्ष्य स्रोतों की स्थिरता की कमी के कारण अधूरा रह जाएगा।” स्रोतों में नदियां, झीलें, तालाब या कोई भी प्राकृतिक जलस्रोत शामिल हैं।

- The committee recommended that the Ministry implement “source to tap” schemes, under which the entire chain of water supply such as the source of water, tank, supply, were accounted for. There are 6.83 lakh sanctioned schemes under the JJM.

समिति ने मंत्रालय को “सोर्स टू टैप” योजनाएं लागू करने की सिफारिश की, जिसके तहत जल आपूर्ति की पूरी श्रृंखला जैसे जल स्रोत, टैंक, आपूर्ति को शामिल किया जाए। JJM के तहत 6.83 लाख योजनाएं स्वीकृत हैं।

- The committee “note(d) with concern” that there was no information from the States on how many of these schemes were “source to tap”. The panel said it was “...of the view that to maintain a long-term steady supply of safe drinking water, source sustainability is of paramount importance otherwise assets created under JJM will come to naught after extinguishment of available sources”.

समिति ने “चिंता के साथ नोट किया” कि राज्यों से यह जानकारी नहीं मिली कि इनमें से कितनी योजनाएं “सोर्स टू टैप” हैं। पैनल ने कहा कि “दीर्घकालिक सुरक्षित पेयजल आपूर्ति बनाए रखने के लिए स्रोतों की स्थिरता अत्यंत महत्वपूर्ण है, अन्यथा JJM के तहत बनाए गए संसाधन स्रोत समाप्त होने के बाद व्यर्थ हो जाएंगे।”

## Govt. nod for extension

### विस्तार के लिए सरकार की मंजूरी

- The Union Cabinet last week approved extending the JJM programme to 2028 and allocated additional funds to meet its target. A press note from the Ministry had noted that the programme’s focus will change “...from infrastructure creation to service delivery, supported by drinking water governance and institutional ecosystem for sustainable rural piped potable water supply”.

केंद्रीय मंत्रिमंडल ने पिछले सप्ताह JJM कार्यक्रम को 2028 तक बढ़ाने को मंजूरी दी और लक्ष्य पूरा करने के लिए अतिरिक्त धनराशि आवंटित की। मंत्रालय की एक प्रेस विज्ञप्ति में कहा गया कि कार्यक्रम का फोकस “इन्फ्रास्ट्रक्चर निर्माण से सेवा वितरण की ओर बदलेगा, जिसे पेयजल शासन और संस्थागत ढांचे का समर्थन मिलेगा।”

- “To this end, a uniform national digital framework, namely ‘Sujalam Bharat’, shall be instituted, under which every village shall be assigned a unique Sujal Gaon/Service Area ID digitally mapping the complete drinking water supply system from source to tap,” a Ministry statement said.

मंत्रालय के बयान में कहा गया कि “इस उद्देश्य से एक राष्ट्रीय डिजिटल ढांचा ‘सुजलाम भारत’ स्थापित किया जाएगा, जिसके तहत हर गांव को एक विशिष्ट सुजल गांव/सेवा क्षेत्र आईडी दी जाएगी, जो सोर्स से टैप तक पूरे जल आपूर्ति सिस्टम का डिजिटल मैपिंग करेगी।”

- The programme, originally envisioned to achieve 100% coverage by 2024, has been stuck at around 81% since 2025. As The Hindu has previously reported, covering the remaining 20% requires more money than has already been spent so far.

यह कार्यक्रम, जिसे मूल रूप से 2024 तक 100% कवरेज हासिल करने के लिए बनाया गया था, 2025 से लगभग 81% पर अटका हुआ है। जैसा कि पहले रिपोर्ट किया गया है, शेष 20% को कवर करने के लिए अब तक खर्च की गई राशि से अधिक धन की आवश्यकता है।

- From the baseline of 3.23 crore (17%) rural households with existing tap water connections in 2019, more than 12.56 crore additional rural households have been provided with tap water connections so far under the JJM.

2019 में 3.23 करोड़ (17%) ग्रामीण घरों में मौजूदा नल जल कनेक्शन के आधार से बढ़कर, अब तक 12.56 करोड़ से अधिक अतिरिक्त ग्रामीण घरों को JJM के तहत नल जल कनेक्शन प्रदान किए जा चुके हैं।



## GS Paper II: International Relations

TOPICS COVERED

20 March 2026

20Mar	<b>Israel won't hit Iran gas facility again: Trump</b> इज़राइल फिर ईरान के गैस संयंत्र पर हमला नहीं करेगा: ट्रम्प
20Mar	<b>Doraiswami named India's Ambassador to China</b> डोराइसवामी को चीन में भारत का राजदूत नियुक्त किया गया

# Israel won't hit Iran gas facility again: Trump

Trump distances U.S. from Israeli strike on South Pars gas field after Iran attacks on infrastructure

Tehran says it is ready to exercise restraint but warns of escalation if facilities are attacked again

The UAE's Habshan facility, Qatar's Ras Laffan, and Saudi Arabia's Samref refinery were hit

Stanly Johny

Distancing himself from an Israeli strike on Iran's South Pars gas field, U.S. President Donald Trump on Thursday said Tel Aviv would not target the "extremely important and valuable" site again and warned Tehran against attacking Qatar's energy facilities.

His remarks came after Iran launched missile attacks at energy facilities in Qatar, Saudi Arabia, the United Arab Emirates and Israel, following Israeli air strikes that caused fire at South Pars in Iran's southern Bushehr province, one of the largest known gas fields in the world.

"Israel, out of anger for what has taken place in the Middle East, has violently lashed out at South Pars Gas Field in Iran. A relatively small section of the whole has been hit. The

United States knew nothing about this particular attack, and the country of Qatar was in no way, shape, or form, involved with it, nor did it have any idea that it was going to happen," Mr. Trump wrote in a social media post.

"Unfortunately, Iran did not know this, or any of the pertinent facts pertaining to the South Pars attack, and unjustifiably and unfairly attacked a portion of Qatar's LNG Gas facility," he added. "No more attacks will be made by Israel pertaining to this extremely important and valuable South Pars Field unless Iran unwisely decides to attack a very innocent, in this case, Qatar - In which instance the United States will massively blow up the entirety of the South Pars Gas Field."

American media quoted Israeli officials as saying that the U.S. was informed in advance about the South



Qatar's state-run energy firm said Ras Laffan Industrial City, one of the most critical energy hubs in the world which handles roughly 20% of the global LNG exports, came under attack. FILE PHOTO

Pars strike. South Pars is part of an offshore gas reservoir in the Persian Gulf shared by Qatar and Iran. The Qatari side calls it the North Field.

Iran on Wednesday evening said it targeted energy facilities in Qatar, the UAE, Saudi Arabia and Israel after several phases

at South Pars came under attack.

Qatar's state-run energy firm Qatar Energy said on Wednesday its Ras Laffan Industrial City, one of the most critical energy hubs in the world which handles roughly 20% of the global LNG exports, came under attack. On Thursday, it said

several of the company's LNG facilities were hit by Iranian missiles, causing "extensive damage".

The UAE suspended operations at Abu Dhabi's Habshan gas facility after authorities said debris of intercepted missiles fell on the site. The Bab oil field in the Emirate and a refinery

near the Saudi capital Riyadh were also targeted by Iranian projectiles. Saudi Arabia's Defence Ministry said a drone crashed into the Samref refinery in the Red Sea port of Yanbu. In Kuwait, drone attacks sparked fire at Mina Abdullah and Mina Al-Ahmadi refineries.

Israeli media reported on Thursday that an oil refinery in the northern port city of Haifa was hit. Images of a thick plume of dark smoke rising from the area of the refinery also emerged on the social media.

Oil prices surged on Thursday, with the benchmark Brent crude topping \$115.

The Iranian attacks "constitute a dangerous escalation and a violation of international law", the UAE's Foreign Ministry said in a statement. "The UAE reserves its full right to take all necessary measures to

protect its sovereignty and national security, and to safeguard its national interests." The Foreign Ministry of Qatar declared "the military attaché and the security attaché at the [Iranian] embassy [in Doha], in addition to the staff of the two attaché offices 'persona non grata,'" and asked them to leave the country within 24 hours.

Later in the day, Iran's Foreign Minister Abbas Araghchi signalled that Iran was ready for restraint but threatened to escalate if its energy facilities were attacked again.

"Our response to Israel's attack on our infrastructure employed fraction of our power. The only reason for restraint was respect for requested de-escalation," he wrote in a social media post. "Zero restraint if our infrastructures are struck again. Any end to this war must address damage to our civilian sites."

## 20Mar. Israel won't hit Iran gas facility again: Trump इज़राइल फिर ईरान के गैस संयंत्र पर हमला नहीं करेगा: ट्रम्प

- Trump distances U.S. from Israeli strike on South Pars gas field after Iran attacks on infrastructure

ट्रम्प ने ईरान के इन्फ्रास्ट्रक्चर पर हमलों के बाद साउथ पार्स गैस क्षेत्र पर इज़राइली हमले से अमेरिका को अलग किया

- Tehran says it is ready to exercise restraint but warns of escalation if facilities are attacked again

तेहरान ने कहा कि वह संयम बरतने को तैयार है लेकिन अगर सुविधाओं पर फिर हमला हुआ तो स्थिति के बढ़ने की चेतावनी दी

- The UAE's Habshan facility, Qatar's Ras Laffan, and Saudi Arabia's Samref refinery were hit

यूएई का हबशन संयंत्र, कतर का रस लाफान और सऊदी अरब की सैमरेफ रिफाइनरी पर हमला हुआ

- Distancing himself from an Israeli strike on Iran's South Pars gas field, U.S. President Donald Trump on Thursday said Tel Aviv would not target the "extremely important and valuable" site again and warned Tehran against attacking Qatar's energy facilities.

ईरान के साउथ पार्स गैस क्षेत्र पर इज़राइली हमले से खुद को अलग करते हुए अमेरिकी राष्ट्रपति डोनाल्ड ट्रम्प ने गुरुवार को कहा कि तेल अवीव इस "अत्यंत महत्वपूर्ण और मूल्यवान" स्थल को फिर निशाना नहीं बनाएगा और तेहरान को कतर की ऊर्जा सुविधाओं पर हमला न करने की चेतावनी दी।

- His remarks came after Iran launched missile attacks at energy facilities in Qatar, Saudi Arabia, the United Arab Emirates and Israel, following Israeli air strikes that caused fire at South Pars in Iran's southern Bushehr province, one of the largest known gas fields in the world.



उनकी यह टिप्पणी तब आई जब ईरान ने कतर, सऊदी अरब, संयुक्त अरब अमीरात और इज़राइल में ऊर्जा सुविधाओं पर मिसाइल हमले किए, जो ईरान के दक्षिणी बुशेहर प्रांत के साउथ पार्स में लगी आग के बाद हुए, जो दुनिया के सबसे बड़े ज्ञात गैस क्षेत्रों में से एक है।

- "Israel, out of anger for what has taken place in the Middle East, has violently lashed out at South Pars Gas Field in Iran. A relatively small section of the whole has been hit. The United States knew nothing about this particular attack, and the country of Qatar was in no way, shape, or form, involved with it, nor did it have any idea that it was going to happen," Mr. Trump wrote in a social media post.  
"इज़राइल ने मध्य पूर्व में हुई घटनाओं के गुस्से में ईरान के साउथ पार्स गैस क्षेत्र पर हिंसक हमला किया। पूरे क्षेत्र का केवल एक छोटा हिस्सा प्रभावित हुआ है। संयुक्त राज्य अमेरिका को इस विशेष हमले की कोई जानकारी नहीं थी, और कतर किसी भी रूप में इसमें शामिल नहीं था, न ही उसे इसके होने की कोई जानकारी थी," श्री ट्रम्प ने सोशल मीडिया पोस्ट में लिखा।
- "Unfortunately, Iran did not know this, or any of the pertinent facts pertaining to the South Pars attack, and unjustifiably and unfairly attacked a portion of Qatar's LNG Gas facility," he added.  
"दुर्भाग्य से, ईरान को यह या साउथ पार्स हमले से जुड़े किसी भी महत्वपूर्ण तथ्य की जानकारी नहीं थी, और उसने अनुचित और अन्यायपूर्ण तरीके से कतर के LNG गैस संयंत्र के एक हिस्से पर हमला किया," उन्होंने कहा।
- "No more attacks will be made by Israel pertaining to this extremely important and valuable South Pars Field unless Iran unwisely decides to attack a very innocent, in this case, Qatar - In which instance the United States will massively blow up the entirety of the South Pars Gas Field."  
"इज़राइल इस अत्यंत महत्वपूर्ण और मूल्यवान साउथ पार्स क्षेत्र पर और हमले नहीं करेगा, जब तक कि ईरान मूर्खतापूर्ण तरीके से एक निर्दोष देश, इस मामले में कतर, पर हमला नहीं करता — ऐसी स्थिति में संयुक्त राज्य अमेरिका पूरे साउथ पार्स गैस क्षेत्र को नष्ट कर देगा।"
- American media quoted Israeli officials as saying that the U.S. was informed in advance about the South Pars strike.  
अमेरिकी मीडिया ने इज़राइली अधिकारियों के हवाले से कहा कि साउथ पार्स हमले की जानकारी अमेरिका को पहले से थी।
- South Pars is part of an offshore gas reservoir in the Persian Gulf shared by Qatar and Iran. साउथ पार्स फारस की खाड़ी में स्थित एक अपतटीय गैस भंडार का हिस्सा है जिसे कतर और ईरान साझा करते हैं।
- The Qatari side calls it the North Field.  
कतर इसे नॉर्थ फील्ड कहता है।
- Iran on Wednesday evening said it targeted energy facilities in Qatar, the UAE, Saudi Arabia and Israel after several phases at South Pars came under attack.  
ईरान ने बुधवार शाम कहा कि उसने कतर, यूएई, सऊदी अरब और इज़राइल में ऊर्जा सुविधाओं को निशाना बनाया क्योंकि साउथ पार्स के कई चरणों पर हमला हुआ था।
- Qatar's state-run energy firm Qatar Energy said on Wednesday its Ras Laffan Industrial City, one of the most critical energy hubs in the world which handles roughly 20% of the global LNG exports, came under attack.  
कतर की सरकारी ऊर्जा कंपनी **Qatar Energy** ने कहा कि उसका **रस लाफान औद्योगिक शहर**, जो वैश्विक LNG निर्यात का लगभग 20% संभालता है, हमले का शिकार हुआ।
- On Thursday, it said several of the company's LNG facilities were hit by Iranian missiles, causing "extensive damage".  
गुरुवार को कंपनी ने कहा कि उसके कई LNG संयंत्र ईरानी मिसाइलों से प्रभावित हुए, जिससे "व्यापक नुकसान" हुआ।
- The UAE suspended operations at Abu Dhabi's Habshan gas facility after authorities said debris of intercepted missiles fell on the site.  
यूएई ने अबू धाबी के **हबशन गैस संयंत्र** में संचालन रोक दिया क्योंकि अधिकारियों ने कहा कि रोकी गई मिसाइलों का मलबा वहां गिरा।
- The Bab oil field in the Emirate and a refinery near the Saudi capital Riyadh were also targeted by Iranian projectiles.  
अमीरात का बाब तेल क्षेत्र और सऊदी राजधानी रियाद के पास की रिफाइनरी भी ईरानी हमलों का निशाना बनी।



- Saudi Arabia's Defence Ministry said a drone crashed into the Samref refinery in the Red Sea port of Yanbu.  
सऊदी अरब के रक्षा मंत्रालय ने कहा कि यनबू के रेड सी बंदरगाह में स्थित **सैमरेफ रिफाइनरी** में एक ड्रोन गिरा।
- In Kuwait, drone attacks sparked fire at Mina Abdullah and Mina Al-Ahmadi refineries.  
कुवैत में ड्रोन हमलों से मीना अब्दुल्ला और मीना अल-अहमदी रिफाइनरियों में आग लग गई।
- Israeli media reported on Thursday that an oil refinery in the northern port city of Haifa was hit.  
इज़राइली मीडिया ने बताया कि उत्तरी बंदरगाह शहर **हाइफा** की एक तेल रिफाइनरी पर हमला हुआ।
- Images of a thick plume of dark smoke rising from the area of the refinery also emerged on social media.  
रिफाइनरी क्षेत्र से उठते घने काले धुएं की तस्वीरें सोशल मीडिया पर सामने आईं।
- Oil prices surged on Thursday, with the benchmark Brent crude topping \$115.  
गुरुवार को तेल की कीमतें बढ़ गईं और ब्रेट कूड \$115 से ऊपर पहुंच गया।
- The Iranian attacks "constitute a dangerous escalation and a violation of international law", the UAE's Foreign Ministry said in a statement.  
यूएई के विदेश मंत्रालय ने कहा कि ईरानी हमले "खतरनाक वृद्धि और अंतरराष्ट्रीय कानून का उल्लंघन" हैं।
- "The UAE reserves its full right to take all necessary measures to protect its sovereignty and national security, and to safeguard its national interests."  
"यूएई अपनी संप्रभुता और राष्ट्रीय सुरक्षा की रक्षा के लिए सभी आवश्यक कदम उठाने का पूरा अधिकार रखता है।"
- The Foreign Ministry of Qatar declared "the military attaché and the security attaché at the [Iranian] embassy [in Doha], in addition to the staff of the two attaché offices 'persona non grata'," and asked them to leave the country within 24 hours.  
कतर के विदेश मंत्रालय ने दोहा स्थित ईरानी दूतावास के सैन्य और सुरक्षा अधिकारियों को "अवांछित व्यक्ति" घोषित किया और उन्हें 24 घंटे में देश छोड़ने को कहा।
- Later in the day, Iran's Foreign Minister Abbas Araghchi signalled that Iran was ready for restraint but threatened to escalate if its energy facilities were attacked again.  
दिन में बाद में, ईरान के विदेश मंत्री **अब्बास अराघची** ने संकेत दिया कि ईरान संयम बरतने को तैयार है लेकिन यदि उसकी ऊर्जा सुविधाओं पर फिर हमला हुआ तो स्थिति बढ़ेगी।
- "Our response to Israel's attack on our infrastructure employed a fraction of our power. The only reason for restraint was respect for requested de-escalation," he wrote in a social media post.  
"हमारे इंफ्रास्ट्रक्चर पर इज़राइल के हमले के जवाब में हमने अपनी शक्ति का केवल एक हिस्सा इस्तेमाल किया। संयम का कारण केवल तनाव कम करने के अनुरोध का सम्मान था," उन्होंने लिखा।
- "Zero restraint if our infrastructures are struck again. Any end to this war must address damage to our civilian sites."  
"यदि हमारे इंफ्रास्ट्रक्चर पर फिर हमला हुआ तो कोई संयम नहीं रहेगा। इस युद्ध का अंत तभी होगा जब नागरिक स्थलों को हुए नुकसान का समाधान किया जाएगा।"



## GS Paper III: Economy

TOPICS COVERED		20 March 2026
20Mar	FTA talks with Israel, GCC countries may be delayed इज़राइल और GCC देशों के साथ FTA वार्ता में देरी हो सकती है	
20Mar	Himachal Assembly passes supplementary budget हिमाचल विधानसभा ने अनुपूरक बजट पारित किया	
20Mar	Supreme Court reserves verdict on ambit of 'industry' सुप्रीम कोर्ट ने 'उद्योग' की परिधि पर निर्णय सुरक्षित रखा	
20Mar	New GDP series, charting the path ahead नई GDP श्रृंखला, आगे का मार्ग तय करना	
20Mar	AI-powered tax governance in India and its challenges भारत में AI-संचालित कर प्रशासन और इसकी चुनौतियाँ	
20Mar	Oil, power, and politics of disruption तेल, शक्ति और विघटन की राजनीति	

PATRIOTIC IAS



## FTA talks with Israel, GCC countries may be delayed

GS III: Economy

T.C.A. Sharad Raghavan  
NEW DELHI

The ongoing conflict in West Asia is going to create delays in India's negotiations on free trade agreements (FTA) with the Gulf Cooperation Council countries as well as Israel, a senior official in the Commerce Ministry said.

The FTA with the U.K., however, could be implemented by May 1, and the trade agreement with the European Union could be ratified by the European Parliament by the end of November, they added.

"There are several impacts of the war in the Middle East, but one of them is that our talks with the GCCs and Israel will be delayed, since most of the parties involved are at war currently," the official explained, declining to be named as the matter is still under discussion.

FTA negotiations with the GCC countries – Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE) – were launched on February 24.

The same month, between February 23-26, India and Israel also held the first round of negotiations for a bilateral FTA.

"The implementation of the U.K. FTA should happen by end-April, and we might decide to announce it on May 1," the official said, adding that India was looking for a "significant date" to announce it, and that International Labour Day was a good and early candidate.

The India-U.K. Comprehensive Economic and Trade Agreement (CETA) was signed on July 24, 2025.

## 20Mar. FTA talks with Israel, GCC countries may be delayed इज़राइल और GCC देशों के साथ FTA वार्ता में देरी हो सकती है

The ongoing conflict in West Asia is going to create delays in India's negotiations on free trade agreements (FTA) with the Gulf Cooperation Council countries as well as Israel, a senior official in the Commerce Ministry said.

पश्चिम एशिया में चल रहा संघर्ष भारत की **मुक्त व्यापार समझौता (FTA)** वार्ताओं में देरी पैदा करने वाला है, जो कि **गल्प कोऑपरेशन काउंसिल** देशों और इज़राइल के साथ हो रही हैं, ऐसा वाणिज्य मंत्रालय के एक वरिष्ठ अधिकारी ने कहा।

The FTA with the U.K., however, could be implemented by May 1, and the trade agreement with the European Union could be ratified by the European Parliament by the end of November, they added.  
हालांकि, **यू.के.** के साथ FTA को **1 मई** तक लागू किया जा सकता है, और **यूरोपीय संघ** के साथ व्यापार समझौते को नवंबर के अंत तक **यूरोपीय संसद** द्वारा अनुमोदित किया जा सकता है, उन्होंने जोड़ा।

"There are several impacts of the war in the Middle East, but one of them is that our talks with the GCCs and Israel will be delayed, since most of the parties involved are at war currently," the official explained, declining to be named as the matter is still under discussion.

"मध्य पूर्व में युद्ध के कई प्रभाव हैं, लेकिन उनमें से एक यह है कि **GCC** और इज़राइल के साथ हमारी वार्ता में देरी होगी, क्योंकि इसमें शामिल अधिकांश पक्ष वर्तमान में युद्ध में हैं," अधिकारी ने बताया, नाम उजागर करने से इनकार करते हुए क्योंकि मामला अभी विचाराधीन है।

FTA negotiations with the GCC countries — Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE) — were launched on February 24.

**GCC देशों** — बहरीन, कुवैत, ओमान, कतर, सऊदी अरब और संयुक्त अरब अमीरात (UAE) — के साथ FTA वार्ता **24 फरवरी** को शुरू की गई थी।

The same month, between February 23-26, India and Israel also held the first round of negotiations for a bilateral FTA.

उसी महीने, **23-26 फरवरी** के बीच, भारत और इज़राइल ने द्विपक्षीय **FTA** के लिए वार्ता का पहला दौर भी आयोजित किया।

"The implementation of the U.K. FTA should happen by end-April, and we might decide to announce it on May 1," the official said, adding that India was looking for a "significant date" to announce it, and that International Labour Day was a good and early candidate.

"**यू.के. FTA** का कार्यान्वयन अप्रैल के अंत तक होना चाहिए, और हम इसे **1 मई** को घोषित करने का निर्णय ले सकते हैं," अधिकारी ने कहा, यह जोड़ते हुए कि भारत इसे घोषित करने के लिए एक **"महत्वपूर्ण तिथि"** की तलाश में था, और **अंतर्राष्ट्रीय श्रम दिवस** एक अच्छा और प्रारंभिक विकल्प था।

The India-U.K. Comprehensive Economic and Trade Agreement (CETA) was signed on July 24, 2025.

भारत-यू.के. व्यापक आर्थिक और व्यापार समझौता (CETA) **24 जुलाई, 2025** को हस्ताक्षरित किया गया था।



## Himachal Assembly passes supplementary budget

GS III: Economy

Himachal Pradesh Vidhan Sabha on Thursday passed a supplementary budget amounting to ₹40,461.95 crore for the year 2025-26. Chief Minister Sukhvinder Singh Sukhu presented the supplementary demands for the year 2025-26 in the House, and the budget was passed through a voice vote. The supplementary budget included ₹36,374.61 crore under State schemes and ₹4,087.34 crore for Centrally-sponsored schemes. Under the State schemes, ₹26,194.95 crore has been earmarked for 'ways and means', and overdrafts, ₹4,150.14 crore has been allocated for power sector. PTI

मुख्यमंत्री सुखविंदर सिंह सुक्खू ने सदन में वर्ष 2025-26 के लिए अनुपूरक मांगों प्रस्तुत कीं, और बजट को वायस वोट के माध्यम से पारित किया गया।

- The supplementary budget included ₹36,374.61 crore under State schemes and ₹4,087.34 crore for Centrally-sponsored schemes. अनुपूरक बजट में राज्य योजनाओं के तहत ₹36,374.61 करोड़ और केंद्र प्रायोजित योजनाओं के लिए ₹4,087.34 करोड़ शामिल थे।
- Under the State schemes, ₹26,194.95 crore has been earmarked for 'ways and means', and overdrafts, ₹4,150.14 crore has been allocated for the power sector. राज्य योजनाओं के अंतर्गत ₹26,194.95 करोड़ 'वेज एंड मीन्स' और ओवरड्राफ्ट के लिए निर्धारित किए गए हैं, जबकि ₹4,150.14 करोड़ पावर सेक्टर के लिए आवंटित किए गए हैं।

## 20Mar. Himachal Assembly passes supplementary budget

हिमाचल विधानसभा ने अनुपूरक बजट पारित किया

- Himachal Pradesh Vidhan Sabha on Thursday passed a supplementary budget amounting to ₹40,461.95 crore for the year 2025-26.

हिमाचल प्रदेश विधानसभा ने गुरुवार को वर्ष 2025-26 के लिए ₹40,461.95 करोड़ का अनुपूरक बजट पारित किया।

- Chief Minister Sukhvinder Singh Sukhu presented the supplementary demands for the year 2025-26 in the House, and the budget was passed through a voice vote.

## Supreme Court reserves verdict on ambit of 'industry'

GS III: Economy

The Hindu Bureau  
NEW DELHI

A nine-judge Bench of the Supreme Court reserved judgment on Thursday on whether educational institutions, hospitals, and sovereign functions of the government and its instrumentalities would fall within the definition of 'industrial activity' under the Industrial Disputes Act. The Bench, headed by Chief Justice of India Surya Kant, and comprising Justices B.V. Nagarathna, P.S. Narasimha, Dipankar Datta, Ujjal Bhuyan, Satish Chandra Sharma, Joymalya Bagchi, Alok Aradhe and Vipul M. Pan reserved its verdict on the third and final day of oral arguments.

The question of law before the proposed Bench concerns a 1978 judgment in *Bangalore Water Supply and Sewerage Board vs. A. Rajappa*. The 1978 judgment had expanded the definition of 'industry' under Section 2(j) of the Industrial Disputes Act, 1947. The judgment had introduced a triple test and included hospitals, educational institutions and municipalities as industries. States like Uttar Pra-

desh, Maharashtra and Punjab, represented by Additional Solicitor General K.M. Nataraj and senior advocates Shekhar Naphade and Shadan Farasat, respectively, urged the apex court to relook the seven-judge Bench judgment. Senior advocates like Indira Jaising, C.U. Singh, and Gopal Sankaranarayan argued in favour of keeping the reasoning of the 1978 judgment intact.

Ms. Jaising had submitted that bringing enterprises under the definition of industry provide workmen with a remedy to ventilate their grievances in relation to fair wages, health and safety, occupational safety, security of employment and challenge unfair dismissals before a judicial authority.

The 1978 judgment had expanded the ambit of 'industry' to hold that any systematic activity (whether or not for profit), including charitable and government-run services, were an industry if they met the parameters of a triple test. The judgment was designed to benefit employees to claim the status and legal protection as industrial 'workers'.

## 20Mar. Supreme Court reserves verdict on ambit of 'industry'

सुप्रीम कोर्ट ने 'उद्योग' की परिधि पर निर्णय सुरक्षित रखा

- A nine-judge Bench of the Supreme Court reserved judgment on Thursday on whether educational institutions, hospitals, and sovereign functions of the government and its instrumentalities would fall within the definition of 'industrial activity' under the Industrial Disputes Act.

सुप्रीम कोर्ट की नौ-न्यायाधीशों की पीठ ने गुरुवार को यह तय करने पर अपना निर्णय सुरक्षित रख लिया कि क्या शैक्षणिक संस्थान, अस्पताल, और सरकार के सार्वभौमिक कार्य तथा उसके अंग औद्योगिक विवाद अधिनियम के तहत 'औद्योगिक गतिविधि' की परिभाषा में आएंगे।

- The Bench, headed by Chief Justice of India Surya Kant, and comprising Justices B.V. Nagarathna, P.S. Narasimha, Dipankar Datta, Ujjal Bhuyan, Satish Chandra Sharma, Joymalya Bagchi, Alok Aradhe and Vipul M. Pan reserved its verdict on the third and final day of oral arguments.

यह पीठ, जिसकी अध्यक्षता भारत के मुख्य न्यायाधीश सुर्य कांत कर रहे थे, और जिसमें न्यायमूर्ति बी.वी. नागरत्ना, पी.एस. नरसिम्हा, दिपांकर दत्ता, उज्जल भुइयां, सतीश चंद्र शर्मा, जॉयमाल्य बागची, आलोक अराधे और विपुल एम. पान शामिल थे, ने मौखिक बहस के तीसरे और अंतिम दिन अपना निर्णय सुरक्षित रखा।

- The question of law before the proposed Bench concerns a 1978 judgment in *Bangalore Water Supply and Sewerage Board vs. A. Rajappa*.

प्रस्तावित पीठ के सामने कानून का प्रश्न 1978 के निर्णय *Bangalore Water Supply and Sewerage Board vs. A. Rajappa* से संबंधित है।



- The 1978 judgment had expanded the definition of 'industry' under Section 2(j) of the Industrial Disputes Act, 1947.  
1978 के इस निर्णय ने औद्योगिक विवाद अधिनियम, 1947 की धारा 2(j) के तहत 'उद्योग' की परिभाषा का विस्तार किया था।
- The judgment had introduced a triple test and included hospitals, educational institutions and municipalities as industries.  
इस निर्णय ने एक ट्रिपल टेस्ट पेश किया और अस्पतालों, शैक्षणिक संस्थानों और नगरपालिकाओं को उद्योग के रूप में शामिल किया।
- States like Uttar Pradesh, Maharashtra and Punjab, represented by Additional Solicitor General K.M. Nataraj and senior advocates Shekhar Naphade and Shadan Farasat, respectively, urged the apex court to relook the seven-judge Bench judgment.  
उत्तर प्रदेश, महाराष्ट्र और पंजाब जैसे राज्यों ने, जिनका प्रतिनिधित्व अतिरिक्त सॉलिसिटर जनरल के.एम. नटराज और वरिष्ठ अधिवक्ता शेखर नफाडे तथा शादन फरासत कर रहे थे, ने शीर्ष अदालत से सात-न्यायाधीशों की पीठ के इस निर्णय पर पुनर्विचार करने का आग्रह किया।
- Senior advocates like Indira Jaising, C.U. Singh, and Gopal Sankaranarayan argued in favour of keeping the reasoning of the 1978 judgment intact.  
वरिष्ठ अधिवक्ता इंदिरा जयसिंग, सी.यू. सिंह और गोपाल शंकरनारायण ने 1978 के निर्णय के तर्क को यथावत रखने के पक्ष में दलील दी।
- Ms. Jaising had submitted that bringing enterprises under the definition of industry provide workmen with a remedy to ventilate their grievances in relation to fair wages, health and safety, occupational safety, security of employment and challenge unfair dismissals before a judicial authority.  
सुश्री जयसिंग ने प्रस्तुत किया कि उद्यमों को उद्योग की परिभाषा में लाने से कर्मचारियों को उचित वेतन, स्वास्थ्य और सुरक्षा, व्यावसायिक सुरक्षा, रोजगार की सुरक्षा तथा अनुचित बर्खास्तगी के खिलाफ न्यायिक प्राधिकरण के समक्ष अपनी शिकायतें रखने का अवसर मिलता है।
- The 1978 judgment had expanded the ambit of 'industry' to hold that any systematic activity (whether or not for profit), including charitable and government-run services, were an industry if they met the parameters of a triple test.  
1978 के निर्णय ने 'उद्योग' के दायरे का विस्तार करते हुए कहा कि कोई भी संगठित गतिविधि (चाहे लाभ के लिए हो या नहीं), जिसमें परोपकारी और सरकारी सेवाएं शामिल हों, यदि वे ट्रिपल टेस्ट के मानकों को पूरा करती हैं, तो उन्हें उद्योग माना जाएगा।
- The judgment was designed to benefit employees to claim the status and legal protection as industrial 'workers'.  
यह निर्णय कर्मचारियों को औद्योगिक 'श्रमिक' के रूप में दर्जा और कानूनी संरक्षण प्राप्त करने में लाभ पहुंचाने के लिए बनाया गया था।



## New GDP series, charting the path ahead

ISSUE III: Economy MOB

A much-awaited new GDP series with the base year as 2022-23 is now available in the public domain. On February 27, 2026, the Ministry of Statistics and Programme Implementation came out with a press note on a new series of GDP estimates and related aggregates for the financial years 2022-23, 2023-24 and 2024-25. This addresses the long-standing demand for a more accurate and realistic picture of the size of the Indian economy by updating the base year. It overcomes the limitations of earlier estimates, which relied on the outdated 2011-12 base year.

The overall size of the Indian economy in terms of GDP as per the new series at current prices (in rupees lakh crore) is estimated to be 261.18 (financial year 2022-23), 289.84 (FY 2023-24) and 318.07 (2024-25), respectively (first revised estimate). These aggregates are marginally (between 3% and 4%) lower than what were released earlier based on the previous series. The relative shares of primary, secondary and tertiary sectors in total Gross Value Added (GVA) at current prices during 2024-25 remained at 21.4%, 25.8% and 52.9%, respectively. The manufacturing sector depicts a high growth rate (more than 9%) in real GVA for both the years: 12.7% in 2023-24 and 9.3% in 2024-25. As regards the expenditure side estimates, the share of private financial consumption expenditure in GDP is around 56%, both at current and constant prices during the years 2023-24 and 2024-25.

**Major refinements in the new series**  
Some of the most significant refinements in the methodology adopted in the new series include: first, segregation of activities of multi-activity enterprises belonging to non-financial private corporate sector by apportioning the total GVA of the enterprise across its business activities using the corresponding revenue share information of the company available in the form of MGT 77A data (as against entire GVA being allocated to the major activity of the enterprise in 2011-12 series); second, use of a separate blown up factor at the industry x size class level, based on paid-up capital, for scaling up the GVA of the reported active companies to account for the contribution of the active companies which did not file returns; third, a comprehensive coverage of Limited Liability Partnerships (LLPs) using Ministry of Corporate Affairs (MCA) data; and fourth, the use of high-frequency (annual) data on GVA per worker (GVAPW) as per the Annual Survey of Unincorporated Sector Enterprises



**G.C. Manna**  
is a professor at the Institute for Human Development, Senior Adviser at the National Council of Applied Economic Research (NCAER), and a Member of the Advisory Committee on National Accounts Statistics

Updating the ASI sampling frame and refining the ASUSE survey methodology can further enhance the accuracy and reliability of GDP and GSDP estimates

(ASUSE) in conjunction with the estimates of the number of workers utilising the information available through Periodic Labour Force Survey (PLFS) to estimate the GVA contribution of the Household Sector. In this context, it is worthwhile to mention that in the 2011-12 series, base year (2011-12) GVA estimates at the activity level for the Household Sector were extrapolated using suitable indicators to derive GVA for subsequent years.

The new series also introduces significant improvements in the estimation of real GVA through the expanded application of 'double deflation' and 'volume extrapolation' methods, bringing the estimates more in line with international guidelines. In addition, the benchmark estimates for 2022-23 private final consumption expenditure (PFCE) are now derived more directly by utilising data from the Household Consumption Expenditure Survey (HCES 2022-23), especially for items that are widely consumed across household groups and tend to exhibit low income elasticity.

### The challenges ahead

Among the four institutional sectors, namely, general government, public corporations, private corporations and households for which GVA estimates are separately computed and then aggregated, the database of the first two sectors is quite robust. Coming to the private corporate sector, particularly the private non-financial corporate segment, for which GVA is compiled using the MCA database – a critical issue lies in allocating the national-level total GVA of companies across States to derive the corresponding Gross State Value Added (GSVA), given that the primary data are available only at the enterprise level.

In the 2011-12 series, total manufacturing GVA at the national level was allocated proportionately over States by using their shares in GVA as per the Annual Survey of Industries (ASI). In the new series, apart from ASI data (confining to manufacturing sector), the GST data is also available for this purpose. A major limitation with the ASI data is the inadequacy of the ASI frame. To illustrate, the number of companies in 2011-12, as on December 15, 2014, as per the MCA database classified under 'Manufacturing' was 135,802 (source: Changes in Methodology and Data Sources in the New Series of National Accounts, Base Year 2011-12, Central Statistics Office, 2015) as against only 67,649 factories covered under the corporate sector in ASI, 2011-12

(Table 7, Principal Characteristics by Type of Organisation in ASI 2011-12 (Revised)). Accordingly, the proportionate shares of different States in the total GVA derived from the ASI based on a truncated frame may not reflect the real GDP figure. Remedial measures to improve the sampling frame of ASI by utilising the MCA and GST databases can be a step in the right direction. In parallel, a properly designed sample survey of active companies could be worth exploring to derive the percentage shares of different States in total GVA by the companies.

### Resolving fluctuations

As regards the Household Sector, its GVA at the activity, i.e., 'compilation category' level in the new series is derived as the product of GVAPW as per the ASUSE and number of workers based on the Periodic Labour Force Survey (PLFS). This necessitates that the corresponding estimates from the surveys are fairly reliable. However, available results from the ASUSE indicate a certain volatility in the estimates across the years for some industries and States.

For example, the all-India annual estimates of GVAPW (rural and urban combined) as per the ASUSE (covering both household sector and 'quasi-corporate' units) for the years 2021-22, 2022-23 and 2023-24 were found to be ₹163,078; ₹255,447; and ₹201,930, respectively, for the 'manufacture of rubber and plastic products' which is a distinct compilation category in GDP calculations.

Similarly, the annual estimates of GVAPW pertaining to the manufacturing industry in respect of Bihar were found to be ₹89,638; ₹117,021; and ₹100,101, respectively, for the three years. To address this problem, the methodology in the new series recommends the use of three years' moving average, wherever necessary, except for the base year. However, in resolving the issue of such fluctuations in the annual estimates of GVAPW, it may be worth exploring whether a rotating panel design in the ASUSE with a substantial overlap in the samples between any two consecutive years – similar to the procedure adopted in the PLFS – can yield better estimates.

Finally, to conclude, updating the ASI frame and refinements in the survey methodology of ASUSE can be effective in further improvement of the GDP and GSDP estimates.

*The views expressed are personal*

## 20Mar. New GDP series, charting the path ahead नई GDP श्रृंखला, आगे का मार्ग तय करना

- A much-awaited new **GDP series** with the base year as **2022-23** is now available in the public domain.  
बहुप्रतीक्षित नई जीडीपी श्रृंखला, जिसका आधार वर्ष **2022-23** है, अब सार्वजनिक रूप से उपलब्ध है।
- On **February 27, 2026**, the **Ministry of Statistics and Programme Implementation** came out with a press note on a new series of GDP estimates and related aggregates for the financial years **2022-23, 2023-24 and 2024-25**.  
27 फरवरी 2026 को सांख्यिकी और कार्यक्रम कार्यान्वयन मंत्रालय ने 2022-23, 2023-24 और 2024-25 के लिए नई जीडीपी श्रृंखला और संबंधित आंकड़ों पर प्रेस नोट जारी किया।
- This addresses the long-standing demand for a more **accurate** and **realistic picture** of the size of the Indian economy by updating the base year.  
यह आधार वर्ष को अपडेट करके भारतीय अर्थव्यवस्था के आकार का अधिक सटीक और वास्तविक चित्र प्रस्तुत करने की लंबे समय से चली आ रही मांग को पूरा करता है।
- It overcomes the limitations of earlier estimates, which relied on the outdated **2011-12 base year**.  
यह पुराने अनुमानों की सीमाओं को दूर करता है, जो पुराने **2011-12 आधार वर्ष** पर आधारित थे।
- The overall size of the Indian economy in terms of GDP as per the new series at current prices (in rupees **lakh crore**) is estimated to be **261.18 (2022-23), 289.84 (2023-24) and 318.07 (2024-25)**, respectively (• **rst revised estimate**).  
नई श्रृंखला के अनुसार वर्तमान कीमतों पर भारतीय अर्थव्यवस्था का कुल आकार (रुपये **लाख करोड़** में) क्रमशः **261.18 (2022-23), 289.84 (2023-24) और 318.07 (2024-25)** है (प्रथम संशोधित अनुमान)।
- These aggregates are marginally (**3% to 4%**) lower than what were released earlier based on the previous series.  
ये आंकड़े पहले जारी किए गए आंकड़ों की तुलना में लगभग (**3% से 4%**) कम हैं।
- The relative shares of **primary, secondary and tertiary sectors** in total **Gross Value Added (GVA)** at current prices during **2024-25** remained at **21.4%, 25.8% and 52.9%**, respectively.



2024-25 में वर्तमान कीमतों पर कुल सकल मूल्य वर्धन (GVA) में प्राथमिक, द्वितीयक और तृतीयक क्षेत्रों की हिस्सेदारी क्रमशः 21.4%, 25.8% और 52.9% रही।

- The manufacturing sector depicts a high growth rate (more than 9%) in real GVA for both the years: 12.7% in 2023-24 and 9.3% in 2024-25.

निर्माण क्षेत्र ने वास्तविक GVA में उच्च वृद्धि दर (9% से अधिक) दिखाई: 2023-24 में 12.7% और 2024-25 में 9.3%।

- As regards the expenditure side estimates, the share of private • nal consumption expenditure (PFCE) in GDP is around 56%, both at current and constant prices during the years 2023-24 and 2024-25.

व्यय पक्ष के अनुसार, GDP में निजी अंतिम उपभोग व्यय (PFCE) की हिस्सेदारी लगभग 56% है, जो 2023-24 और 2024-25 में वर्तमान और स्थिर दोनों कीमतों पर समान है।

### Major re• nements in the new series

#### नई श्रृंखला में प्रमुख सुधार

- Some of the most signi• cant re• nements in the methodology adopted in the new series include:  
नई श्रृंखला में अपनाई गई पद्धति में कुछ प्रमुख सुधार शामिल हैं:
- rst, segregation of activities of multi-activity enterprises belonging to non-• nancial private corporate sector by apportioning the total GVA of the enterprise across its business activities using the corresponding revenue share information of the company available in the form of MGT 77A data (as against entire GVA being allocated to the major activity of the enterprise in 2011-12 series);  
पहला, गैर-वित्तीय निजी कॉर्पोरेट क्षेत्र के बहु-गतिविधि उद्यमों की गतिविधियों का विभाजन, जिसमें कंपनी के MGT 77A डेटा के आधार पर कुल GVA को विभिन्न व्यावसायिक गतिविधियों में बांटा जाता है (जबकि 2011-12 श्रृंखला में पूरा GVA मुख्य गतिविधि को दिया जाता था);
- second, use of a separate blown up factor at the industry x size class level, based on paid-up capital, for scaling up the GVA of the reported active companies to account for the contribution of the active companies which did not • le returns;  
दूसरा, चुकता पूंजी (paid-up capital) के आधार पर उद्योग और आकार वर्ग स्तर पर अलग ब्लोन-अप फैक्टर का उपयोग, जिससे उन सक्रिय कंपनियों के योगदान को शामिल किया जा सके जिन्होंने रिटर्न दाखिल नहीं किया;
- third, a comprehensive coverage of Limited Liability Partnerships (LLPs) using Ministry of Corporate Affairs (MCA) data;  
तीसरा, कॉर्पोरेट मामलों के मंत्रालय (MCA) के डेटा का उपयोग करके लिमिटेड लाइबिलिटी पार्टनरशिप (LLPs) का व्यापक कवरेज;
- fourth, the use of high-frequency (annual) data on GVA per worker (GVAPW) as per the Annual Survey of Unincorporated Sector Enterprises (ASUSE) in conjunction with the estimates of the number of workers utilising the information available through Periodic Labour Force Survey (PLFS) to estimate the GVA contribution of the Household Sector.  
चौथा, ASUSE के अनुसार प्रति श्रमिक GVA (GVAPW) के वार्षिक डेटा का उपयोग, जिसे PLFS के श्रमिक संख्या के आंकड़ों के साथ मिलाकर घरेलू क्षेत्र के GVA योगदान का अनुमान लगाया जाता है।
- In this context, it is worthwhile to mention that in the 2011-12 series, base year (2011-12) GVA estimates at the activity level for the Household Sector were extrapolated using suitable indicators to derive GVA for subsequent years.  
इस संदर्भ में, 2011-12 श्रृंखला में आधार वर्ष (2011-12) के लिए घरेलू क्षेत्र के GVA का अनुमान उपयुक्त संकेतकों के आधार पर आगे के वर्षों के लिए निकाला जाता था।
- The new series also introduces significant improvements in the estimation of real GVA through the expanded application of 'double deation' and 'volume extrapolation' methods, bringing the estimates more in line with international guidelines.  
नई श्रृंखला में वास्तविक GVA के अनुमान में 'डबल डिफ्लेशन' और 'वॉल्यूम एक्सट्रापोलेशन' विधियों का व्यापक उपयोग किया गया है, जिससे अनुमान अंतरराष्ट्रीय मानकों के अनुरूप हो गए हैं।
- In addition, the benchmark estimates for 2022-23 private • nal consumption expenditure (PFCE) are now derived more directly by utilising data from the Household Consumption Expenditure Survey (HCES 2022-23), especially for items that are widely consumed across household groups and tend to exhibit low income elasticity.



इसके अलावा, 2022-23 के PFCE के बेंचमार्क अनुमान अब सीधे HCES 2022-23 के डेटा का उपयोग करके तैयार किए गए हैं, विशेषकर उन वस्तुओं के लिए जो व्यापक रूप से उपभोग की जाती हैं और जिनकी आय लोच कम होती है।

## The challenges ahead आगे की चुनौतियाँ

- Among the four institutional sectors, namely, **general government, public corporations, private corporations and households** for which GVA estimates are separately computed and then aggregated, the database of the first two sectors is quite **robust**.

चार संस्थागत क्षेत्रों — सामान्य सरकार, सार्वजनिक निगम, निजी निगम और घरेलू क्षेत्र — जिनके लिए GVA अलग-अलग गणना कर जोड़ा जाता है, उनमें पहले दो क्षेत्रों का डेटा काफी मजबूत है।

- Coming to the **private corporate sector**, particularly the **private non-financial corporate segment**, for which GVA is compiled using the **MCA database** — a critical issue lies in allocating the national-level total GVA of companies across **States** to derive the corresponding **Gross State Value Added (GSVA)**, given that the primary data are available only at the **enterprise level**.

निजी कॉर्पोरेट क्षेत्र, विशेषकर गैर-वित्तीय निजी कॉर्पोरेट खंड में, जहां GVA का अनुमान MCA डेटाबेस से किया जाता है — एक प्रमुख समस्या यह है कि कंपनियों के राष्ट्रीय स्तर के कुल GVA को राज्यों में बांटना ताकि संबंधित GSVA निकाला जा सके, जबकि मूल डेटा केवल एंटरप्राइज स्तर पर उपलब्ध है।

- In the **2011-12 series**, total manufacturing GVA at the national level was allocated proportionately over States by using their shares in GVA as per the **Annual Survey of Industries (ASI)**.

2011-12 श्रृंखला में राष्ट्रीय स्तर के कुल विनिर्माण GVA को ASI के अनुसार राज्यों की हिस्सेदारी के आधार पर वितरित किया जाता था।

- In the new series, apart from **ASI data** (relating to manufacturing sector), the **GST data** is also available for this purpose.

नई श्रृंखला में ASI डेटा (जो केवल विनिर्माण क्षेत्र तक सीमित है) के अलावा GST डेटा भी इस उद्देश्य के लिए उपलब्ध है।

- A major limitation with the **ASI data** is the inadequacy of the **ASI frame**.

ASI डेटा की एक बड़ी सीमा इसका अधूरा सैंपल फ्रेम है।

- To illustrate, the number of companies in **2011-12**, as on **December 15, 2014**, as per the **MCA database** classified under 'Manufacturing' was **135,802** as against only **67,649 factories** covered under the corporate sector in **ASI, 2011-12**.

उदाहरण के लिए, 2011-12 में 15 दिसंबर 2014 तक MCA डेटाबेस के अनुसार 'मैन्युफैक्चरिंग' के तहत 135,802 कंपनियां थीं, जबकि ASI 2011-12 में केवल 67,649 फैक्ट्रियां शामिल थीं।

- Accordingly, the proportionate shares of different States in the total GVA derived from the ASI based on a **truncated frame** may not reflect the reality and hence affect the **State GDP** figure.

इसलिए, अधूरे फ्रेम पर आधारित ASI से प्राप्त राज्यों की GVA हिस्सेदारी वास्तविकता को नहीं दर्शा सकती और इससे राज्य GDP प्रभावित हो सकता है।

- Remedial measures to improve the sampling frame of **ASI** by utilising the **MCA and GST databases** can be a step in the right direction.

ASI के सैंपल फ्रेम को सुधारने के लिए MCA और GST डेटाबेस का उपयोग करना सही दिशा में एक कदम हो सकता है।

- In parallel, a properly designed **sample survey of active companies** could be worth exploring to derive the percentage shares of different States in total GVA by the companies. साथ ही, सक्रिय कंपनियों का एक उचित सैंपल सर्वे राज्यों की GVA हिस्सेदारी निकालने के लिए उपयोगी हो सकता है।

## Resolving Fluctuations उतार-चढ़ाव का समाधान

- As regards the **Household Sector**, its GVA at the activity level in the new series is derived as the product of **GVAPW (ASUSE)** and number of workers based on **PLFS**.



घरेलू क्षेत्र के लिए नई श्रृंखला में GVA का अनुमान ASUSE के GVA PW और PLFS के श्रमिकों की संख्या के गुणनफल से किया जाता है।

- This necessitates that the corresponding estimates from the surveys are fairly **reliable**. इसके लिए आवश्यक है कि सर्वेक्षणों से प्राप्त आंकड़े पर्याप्त विश्वसनीय हों।
- However, available results from the **ASUSE** indicate a certain **volatility** in the estimates across the years for some industries and States. हालांकि, **ASUS** के आंकड़े कुछ उद्योगों और राज्यों के लिए वर्षों में **अस्थिरता** दिखाते हैं।
- For example, the all-India annual estimates of **GVAPW** (rural and urban combined) as per ASUSE for the years **2021-22, 2022-23 and 2023-24** were **₹163,078; ₹255,447; and ₹201,930**, respectively, for the '**manufacture of rubber and plastic products**'. उदाहरण के लिए, **2021-22, 2022-23 और 2023-24** के लिए '**रबर और प्लास्टिक उत्पादों के निर्माण**' में **GVAPW** के अनुमान क्रमशः **₹163,078; ₹255,447; और ₹201,930** थे।
- Similarly, the annual estimates of **GVAPW** for the manufacturing industry in Bihar were **₹89,638; ₹117,021; and ₹100,101**, respectively, for the three years. इसी तरह, **बिहार** में विनिर्माण उद्योग के लिए **GVAPW** के अनुमान क्रमशः **₹89,638; ₹117,021; और ₹100,101** थे।
- To address this problem, the methodology in the new series recommends the use of **three years' moving average**, wherever necessary, except for the **base year**. इस समस्या के समाधान के लिए नई श्रृंखला में आवश्यकतानुसार **तीन वर्षों का मूविंग एवरेज** उपयोग करने की सिफारिश की गई है, **आधार वर्ष** को छोड़कर।
- However, in resolving the issue of such fluctuations, it may be worth exploring whether a **rotating panel design in ASUSE** with substantial overlap between consecutive years — similar to **PLFS** — can yield better estimates. हालांकि, इस तरह के उतार-चढ़ाव को कम करने के लिए यह देखा जा सकता है कि **ASUS** में **रोटेटिंग पैनल डिजाइन**, जिसमें लगातार वर्षों में पर्याप्त ओवरलैप हो — **PLFS** की तरह — बेहतर अनुमान दे सकता है।
- Finally, to conclude, updating the **ASI frame** and tenements in the survey methodology of **ASUSE** can be effective in further improvement of the **GDP and GSDP estimates**. अंततः, **ASI फ्रेम** को अपडेट करना और **ASUSE** की **सर्वे पद्धति** में सुधार करना **GDP और GSDP** के **अनुमानों** को और बेहतर बनाने में सहायक हो सकता है।



# AI-powered tax governance in India and its challenges

GS III: Economy

MOB

A key tax policy challenge facing India has been the low tax-Gross Domestic Product (GDP) ratio and high levels of tax evasion. On average, during 2001-22, India's tax-GDP ratio (16.36%) was the lowest among emerging and developing economies. India loses around 4.3% of tax revenues due to tax evasion annually. At the India AI Impact Summit (February 2026), global leaders and tech titans hailed India's progress in utilising the power of Artificial Intelligence (AI) to solve real-world problems.

One problem area where the application of AI is worth examining is tax revenue mobilisation and tax governance. In this context, India's Income Tax Department (ITD)'s Project Insight (PI) initiative — aimed at leveraging AI and data analytics to strengthen tax administration and revenue mobilisation — warrants critical examination.

## The benefits

Launched in 2017 and fully operational in 2019, the PI aims to encourage voluntary tax compliance, reduce high-risk cases of potential tax evasion, make tax enforcement fairer and equitable, and reduce prejudice in tax enforcement.

The PI has three components. The Income Tax Transaction Analysis Centre (INTRAC) is the analytical engine that utilises AI and advanced data analytics to process financial data from multiple sources, including banking and financial institutions, property and securities transactions, credit card and GST payments, and high-value purchases, to generate a 360-degree taxpayer financial profile.

Such information helps the ITD detect inconsistencies between taxpayers' declared income and their actual financial activities. The Compliance Management Centralized Processing Centre ensures behavioural compliance using information from the INTRAC. It nudges taxpayers who have filed incorrect tax returns to file correct returns using the Non-intrusive Usage of Data to Guide and Enable (NUDGE) strategy, which involves sending SMS or email reminders to the person pay taxes that match their actual economic activities. Taxpayers can either submit a revised tax return or stand by the initial returns



**Shthanu R. Nair**

teaches economics and public policy at the Indian Institute of Management (IIM) Kozhikode, Kerala



**Ranjith Gundaboina**

works on Artificial Intelligence applications in financial services and was an Assistant Manager at the State Bank of India, managing credit portfolios and risk assessment

Artificial Intelligence in India's tax administration is improving outcomes, but safeguards are needed

they filed. Deploying AI in tax administration has several benefits. First, it can assist tax agencies in accurately assessing taxpayers' risk profiles and identifying tax evasion. Second, it enables tax administrators to prioritise tax evasion cases based on the size and sophistication of evasion. Third, AI can automate routine tax administration tasks, freeing tax administrators to focus on those that require greater human judgment. Fourth, AI can enhance taxpayer services by assisting taxpayers with filing correct tax returns, answering queries through smart chatbots, and preventing tax scams.

## Outcome of PI initiative, concerns and risks

The PI is beginning to show the results. After receiving nudges, many taxpayers utilised the ITD's updated-return feature to make voluntary changes to their original tax returns. Since 2020-21, over one crore revised returns have been filed, resulting in an additional ₹1,000 crore in taxes. Out of the 19,501 taxpayers contacted by the ITD as part of a targeted Foreign Income and Assets NUDGE campaign, 62% of them corrected the information originally reported in their tax returns. Also, 30,161 tax filers declared overseas assets totalling ₹29,208 crore and foreign income of ₹1,089 crore from cryptocurrencies or virtual digital assets.

The NUDGE campaign covering 6.25 lakh taxpayers resulted in corrections of false claims for income-tax deductions amounting to ₹963 crore for political donations, and the payment of additional taxes to the tune of ₹410 crore. The average time taken to process a tax refund has decreased from 93 to 17 days. Recently, using big data analysis and AI tools, the ITD discovered that restaurants across India had suppressed sales turnover of ₹70,000 crore since 2019-20 using sophisticated methods such as selective deletion of cash invoices, post-billing modifications, wiping of sales data, and manipulation of bill value.

Many advanced countries, such as Australia, Italy, the United Kingdom and the United States have successfully implemented AI-enabled platforms modelled on the PI and have generated additional revenue.

As India transitions to algorithmic tax

governance, several operational, ethical, and legal issues require serious attention.

The first is about data provenance and quality. AI systems such as the PI are only as good as the data they are trained on. They could identify outliers, but cannot always distinguish evasion from legitimate complexity. Data on variable-income professionals using prior savings, clerical errors, or joint family financial structures can trigger false positives. Without accessible human review, taxpayers must prove the legitimacy of flagged patterns.

The second is on the algorithmic bias. AI models trained on historical enforcement data can unintentionally duplicate existing socio-economic or geographic biases, identifying tax fraud more often in some taxpayer or geographic areas than others, as demonstrated by the Dutch childcare benefits scandal.

The third is on the issue of explainability and due process. For an AI-based tax compliance system to be legitimate, taxpayers need to know why they were identified, how their information is used, how the system arrives at its decisions, and have a clear, easy way to challenge decisions. There must be a human-in-the-loop evaluation for any decision with serious consequences for taxpayers.

The fourth is about the concerns over data privacy and security. Accessing sensitive financial and personal information about taxpayers creates a big attack surface for potential exploitation.

## There is no ombudsman

Finally, India lacks an AI ombudsperson to review contested decisions, a requirement for algorithmic impact assessments and public reporting of false-positive and appeal-success rates, and external audits of risk-scoring models.

Without such strong AI governance guardrails outlined above, the PI might turn into a hidden surveillance system that compromises accountability and tax system fairness, making taxpayers less trusting and more resistant. India must make a clear choice: to pursue a modern tax intelligence system that is both ethical and effective.

The views expressed are personal

## 20Mar. AI-powered tax governance in India and its challenges भारत में AI-संचालित कर प्रशासन और इसकी चुनौतियाँ

- A key tax policy challenge facing India has been the low tax-GDP ratio and high levels of tax evasion.

भारत के सामने एक प्रमुख कर नीति चुनौती कम कर-जीडीपी अनुपात और उच्च स्तर का कर चोरी है।

- On average, during 2001-22, India's tax-GDP ratio (16.36%) was the lowest among emerging and developing economies.

औसतन 2001-22 के दौरान भारत का कर-जीडीपी अनुपात (16.36%) उभरती और विकासशील अर्थव्यवस्थाओं में सबसे कम था।

- India loses around 4.3% of tax revenues annually due to tax evasion.

भारत हर साल लगभग 4.3% कर राजस्व चोरी के कारण खो देता है।

- At the India AI Impact Summit (February 2026), global leaders and tech titans hailed India's progress in utilising the power of Artificial Intelligence (AI) to solve real-world problems.

फरवरी 2026 के इंडिया एआई इम्पैक्ट समिट में वैश्विक नेताओं और तकनीकी विशेषज्ञों ने आर्टिफिशियल इंटेलिजेंस (AI) के उपयोग में भारत की प्रगति की सराहना की।

- One problem area where the application of AI is worth examining is tax revenue mobilisation and tax governance.

एक ऐसा क्षेत्र जहाँ एआई का उपयोग महत्वपूर्ण है, वह है कर संग्रहण और कर प्रशासन।

- In this context, India's Income Tax Department (ITD)'s Project Insight (PI) initiative — aimed at leveraging AI and data analytics to strengthen tax administration and revenue mobilisation — warrants critical examination.

इस संदर्भ में, भारत के आयकर विभाग (ITD) की प्रोजेक्ट इनसाइट (PI) पहल — जो एआई और डेटा एनालिटिक्स के उपयोग से कर प्रशासन और राजस्व संग्रह को मजबूत करने के लिए है — का गंभीर मूल्यांकन आवश्यक है।

The benefits  
लाभ



- Launched in **2017** and fully operational in **2019**, the **PI** aims to encourage **voluntary tax compliance**, reduce high-risk cases of potential **tax evasion**, make tax enforcement **fairer and equitable**, and reduce **prejudice** in tax enforcement.  
2017 में शुरू होकर 2019 में पूर्ण रूप से लागू हुई PI का उद्देश्य **स्वैच्छिक कर अनुपालन** को बढ़ावा देना, संभावित **कर चोरी** के उच्च जोखिम मामलों को कम करना, कर प्रवर्तन को **न्यायसंगत और समान** बनाना और **पक्षपात** को कम करना है।
- The **PI** has three components.  
**PI** के तीन घटक हैं।
- The **Income Tax Transaction Analysis Centre (INTRAC)** is the analytical engine that utilises **AI and advanced data analytics** to process financial data from multiple sources, including **banking and financial institutions, property and securities transactions, credit card and GST payments, and high-value purchases**, to generate a **360-degree taxpayer**
  - **nancial pro** • le.**INTRAC** एक विश्लेषणात्मक प्रणाली है जो **एआई** और **उन्नत डेटा विश्लेषण** का उपयोग करके **बैंकिंग, वित्तीय संस्थानों, संपत्ति और प्रतिभूति लेन-देन, क्रेडिट कार्ड और GST भुगतान, तथा उच्च मूल्य खरीद** से डेटा लेकर करदाता का **360-डिग्री वित्तीय प्रोफाइल** तैयार करती है।
- Such information helps the **ITD** detect inconsistencies between taxpayers' declared income and their actual financial activities.  
यह जानकारी **आयकर विभाग** को करदाताओं की घोषित आय और वास्तविक वित्तीय गतिविधियों के बीच असंगतियों का पता लगाने में मदद करती है।
- The **Compliance Management Centralized Processing Centre** ensures behavioural compliance using information from the **INTRAC**.  
**कम्प्लायंस मैनेजमेंट सेंट्रलाइज्ड प्रोसेसिंग सेंटर, INTRAC** की जानकारी का उपयोग करके **व्यवहारिक अनुपालन सुनिश्चित** करता है।
- It nudges taxpayers who have • led incorrect tax returns to give correct returns using the **Non-intrusive Usage of Data to Guide and Enable (NUDGE)** strategy, which involves sending **SMS or email reminders** to pay taxes that match their actual economic activities.  
यह **NUDGE रणनीति** के माध्यम से गलत कर रिटर्न भरने वालों को सही रिटर्न भरने के लिए प्रेरित करता है, जिसमें **SMS या ईमेल रिमाइंडर** भेजे जाते हैं।
- Taxpayers can either submit a **revised tax return** or stand by the initial returns they • led.  
करदाता या तो **संशोधित रिटर्न** जमा कर सकते हैं या अपने पहले भरे गए रिटर्न पर कायम रह सकते हैं।
- Deploying **AI in tax administration** has several benefits.  
**कर प्रशासन में एआई** के उपयोग के कई लाभ हैं।
- First, it can assist tax agencies in accurately assessing taxpayers' **risk pro** • les and identifying **tax evasion**.  
पहला, यह कर एजेंसियों को करदाताओं के **जोखिम प्रोफाइल** का सही आकलन करने और **कर चोरी** की पहचान करने में मदद करता है।
- Second, it enables tax administrators to **prioritise tax evasion cases** based on the size and sophistication of evasion.  
दूसरा, यह कर प्रशासकों को **कर चोरी के मामलों को प्राथमिकता** देने में सक्षम बनाता है।
- Third, **AI** can automate routine tax administration tasks, freeing tax administrators to focus on those that require greater **human judgment**.  
तीसरा, **एआई** नियमित कार्यों को स्वचालित कर देता है, जिससे अधिकारी अधिक **मानवीय निर्णय** वाले कार्यों पर ध्यान दे सकते हैं।
- Fourth, **AI** can enhance **taxpayer services** by assisting taxpayers with • ling correct returns, answering queries through **smart chatbots**, and preventing **tax scams**.  
चौथा, **एआई** करदाताओं को सही रिटर्न भरने, **स्मार्ट चैटबॉट्स** के माध्यम से प्रश्नों के उत्तर देने और **कर धोखाधड़ी** रोकने में मदद करके सेवाओं को बेहतर बनाता है।

### Outcome of PI initiative, concerns and risks

#### PI पहल के परिणाम, चिंताएँ और जोखिम

- The **PI** is beginning to show the results.  
**PI** अब परिणाम दिखाने लगा है।
- After receiving **nudges**, many taxpayers utilised the ITD's **updated-return feature** to make voluntary changes to their original tax returns.



**नज (nudges)** प्राप्त करने के बाद कई करदाताओं ने ITD के **अपडेटेड-रिटर्न फीचर** का उपयोग कर स्वैच्छिक सुधार किए।

- Since **2020-21**, over **one crore revised returns** have been • led, resulting in an additional **₹11,000 crore** in taxes.

**2020-21** से अब तक **एक करोड़ से अधिक संशोधित रिटर्न** दाखिल किए गए, जिससे **₹11,000 करोड़** अतिरिक्त कर प्राप्त हुआ।

- Out of the **19,501 taxpayers** contacted by the ITD as part of a targeted **Foreign Income and Assets NUDGE campaign**, **62%** of them corrected the information originally reported in their tax returns.

**19,501 करदाताओं** में से, जिन्हें **विदेशी आय और संपत्ति NUDGE अभियान** के तहत संपर्क किया गया, **62%** ने अपने रिटर्न में सुधार किया।

- Also, **30,161 tax lers** declared overseas assets totalling **₹29,208 crore** and foreign income of **₹1,089 crore** from **cryptocurrencies or virtual digital assets**.

साथ ही, **30,161 करदाताओं** ने **₹29,208 करोड़** की विदेशी संपत्ति और **₹1,089 करोड़** की विदेशी आय (**क्रिप्टोकॉरेसी/वर्चुअल डिजिटल एसेट्स**) घोषित की।

- The **NUDGE campaign** covering **6.25 lakh taxpayers** resulted in corrections of false claims for income-tax deductions amounting to **₹963 crore** for political donations, and the payment of additional taxes to the tune of **₹410 crore**.

**6.25 लाख करदाताओं** को कवर करने वाले **NUDGE अभियान** से **₹963 करोड़** के गलत दावों में सुधार हुआ और **₹410 करोड़** अतिरिक्त कर जमा हुआ।

- The average time taken to process a **tax refund** has decreased from **93 to 17 days**.

**टैक्स रिफंड** प्रक्रिया का समय **93 दिनों से घटकर 17 दिन** हो गया है।

- Recently, using **big data analysis and AI tools**, the ITD discovered that restaurants across India had suppressed sales turnover of **₹70,000 crore since 2019-20** using methods such as **selective deletion of cash invoices, post-billing modifications, wiping of sales data, and manipulation of bill value**.

हाल ही में **बिग डेटा और एआई टूल्स** से ITD ने पाया कि **2019-20 से ₹70,000 करोड़** की बिक्री छुपाई गई, जिसमें **कैश बिल हटाना, बिल संशोधन, डेटा मिटाना, और बिल मूल्य में हेरफेर** शामिल था।

- Many advanced countries, such as **Australia, Italy, the United Kingdom and the United States** have successfully implemented **AI-enabled platforms** modelled on the PI and have generated additional revenue.

कई विकसित देश जैसे **ऑस्ट्रेलिया, इटली, यूके और अमेरिका** ने **AI आधारित प्लेटफॉर्म** लागू कर अतिरिक्त राजस्व अर्जित किया है।

- As India transitions to **algorithmic tax governance**, several **operational, ethical, and legal issues** require serious attention.

जैसे-जैसे भारत **एल्गोरिथमिक कर प्रशासन** की ओर बढ़ रहा है, कई **संचालनात्मक, नैतिक और कानूनी मुद्दों** पर ध्यान देना आवश्यक है।

- The • rst is about **data provenance and quality**.

पहला मुद्दा **डेटा स्रोत और गुणवत्ता** का है।

- AI systems such as the PI are only as good as the **data** they are trained on. PI जैसे AI सिस्टम उतने ही अच्छे हैं जितना उनका **डेटा**।

- They could identify **outliers**, but cannot always distinguish **evasion** from legitimate complexity.

ये **आउटलायर्स** पहचान सकते हैं, लेकिन हमेशा **कर चोरी** और वास्तविक जटिलता में अंतर नहीं कर सकते।

- Data on **variable-income professionals**, prior savings, **clerical errors**, or **joint family structures** can trigger **false positives**.

**अनियमित आय, बचत, क्लेरिकल त्रुटियाँ, या संयुक्त परिवार संरचना** जैसे कारण **फॉल्स पॉजिटिव** उत्पन्न कर सकते हैं।

- Without accessible **human review**, taxpayers must prove the legitimacy of tagged patterns. बिना **मानवीय समीक्षा** के, करदाताओं को खुद अपनी वैधता साबित करनी पड़ती है।

- The second is on the **algorithmic bias**.

दूसरा मुद्दा **एल्गोरिथमिक पक्षपात** का है।

- AI models trained on historical data can duplicate existing **socio-economic or geographic biases**, as seen in the **Dutch childcare benefits scandal**.



ऐतिहासिक डेटा पर आधारित AI मॉडल सामाजिक-आर्थिक या भौगोलिक पक्षपात दोहरा सकते हैं, जैसा कि डच चाइल्डकेयर घोटाले में देखा गया।

- The third is on **explainability and due process**. तीसरा मुद्दा व्याख्यात्मकता और उचित प्रक्रिया का है।
- Taxpayers need to know **why** they were identified, **how** their data is used, and must have a way to **challenge decisions**. करदाताओं को पता होना चाहिए कि उन्हें **क्यों** चिन्हित किया गया, डेटा **कैसे** उपयोग हुआ और निर्णय को चुनौती देने का अधिकार होना चाहिए।
- There must be a **human-in-the-loop evaluation** for serious decisions. गंभीर निर्णयों में **मानव हस्तक्षेप** आवश्यक होना चाहिए।
- The fourth is about **data privacy and security**. चौथा मुद्दा डेटा गोपनीयता और सुरक्षा का है।
- Accessing sensitive **financial and personal information** creates risks of **data exploitation**. संवेदनशील वित्तीय और व्यक्तिगत जानकारी तक पहुंच डेटा दुरुपयोग का खतरा बढ़ाती है।

**There is no ombudsman**  
कोई ओम्बड्समैन नहीं है

- Finally, India lacks an **AI ombudsperson** to review contested decisions. अंततः, भारत में विवादित मामलों की समीक्षा के लिए **AI ओम्बड्समैन** नहीं है।
- There is no requirement for **algorithmic impact assessments**, public reporting of **false positives**, or **external audits** of risk models. एल्गोरिथमिक प्रभाव आकलन, फॉल्स पॉजिटिव रिपोर्टिंग, और बाहरी ऑडिट की कोई व्यवस्था नहीं है।
- Without such **governance safeguards**, the PI may become a **surveillance system** compromising accountability and fairness. इन सुरक्षा उपायों के बिना, PI एक निगरानी प्रणाली बन सकता है जो पारदर्शिता और निष्पक्षता को नुकसान पहुंचाएगा।
- This may reduce **taxpayer trust** and increase resistance. इससे करदाताओं का भरोसा कम हो सकता है और विरोध बढ़ सकता है।
- India must choose a system that is both **ethical and effective**. भारत को ऐसा सिस्टम अपनाना चाहिए जो **नैतिक और प्रभावी** दोनों हो।



# Oil, power, and politics of disruption

The closure of the Strait of Hormuz disrupts a vital artery of the global economy, triggering price increases and turmoil in energy markets; as supply shocks reshape the geopolitics of energy, countries like India, the U.S., and Russia recalibrate strategies amid shifting oil flows and rising dependence

## ESS III: Economy

### ECONOMIC NOTES

Jayan Jose Thomas

**T**he blue waters of the Strait of Hormuz, connecting the Persian Gulf to the Arabian Sea, form a vital artery of the global economy. Through this narrow gateway—stretching just 33 km at some points—pass ships carrying nearly a fifth of the oil that is traded worldwide. After the U.S. and Israel launched a military campaign against Iran on February 28, Iran blocked ships passing through the Strait, leading to price increases and turmoil in energy markets.

#### Global energy flows

Oil and natural gas account for a little over half of the global energy supply (with coal, renewables, and other sources accounting for the rest, according to IEA data for 2024). They fuel vehicles from trucks to aeroplanes, produce electricity and cooking gas, and provide critical raw materials for industries.

West Asian countries around the Persian Gulf, notably Saudi Arabia, the UAE, and Iran, are among the largest producers of crude oil and natural gas. At the same time, some of the largest energy consumers are in East and South Asia, particularly China, India, and Japan. Still, these countries have limited domestic oil reserves to power their growing economies (though China is a major natural gas producer) (Chart 1). They depend on crude and natural gas imports from West Asia, much of which passes through the Strait of Hormuz.

#### America and West Asia

The concentration of energy reserves, especially oil, in a few regions has been the primary trigger for some of the long-standing and intense contests between global powers. Aside from the Persian Gulf countries, only a few nations—the U.S., Russia, Venezuela, and Canada—have large oil and natural gas reserves.

The U.S. has been a principal player in the geopolitics of energy, both a major producer and consumer. Given the gas-guzzling sectors driving its economy, the U.S. has an average energy supply per person that is 10 times that of India and 2.4 times that of China. The hunt for more energy has been one of the primary motives of the U.S. international policies.

Control over oil in West Asia shifted from large American and European firms to state-owned national oil companies since the 1950s. Oil prices increased sharply in the 1970s, with Arab members exerting greater influence within the Organization of the Petroleum Exporting Countries. The U.S. response has been twofold: It increased domestic production by drilling more shale oil, especially since the mid-2000s, making it the world's largest oil producer, and it tried to mould the geopolitics of oil in its favour through strategic interventions, including the Gulf War (1990-91), the Iraq War (2003-11), recent action in Venezuela (2020), and the ongoing U.S.-Israel war with Iran.

Although current production levels are modest, Venezuela and Iran together account for 39% of the world's proven oil reserves. The promise of future oil is what makes these countries strategically important, especially in the profit projections of U.S. President Donald Trump. However, the closure of the Strait of Hormuz has, at least in the short term, upset Mr. Trump's calculations and made Russia an unintended beneficiary of the energy turmoil. Following the

## When routes run tight

The closure of the Strait of Hormuz has disrupted a vital artery of the global economy, pushing up oil prices and unsettling energy markets

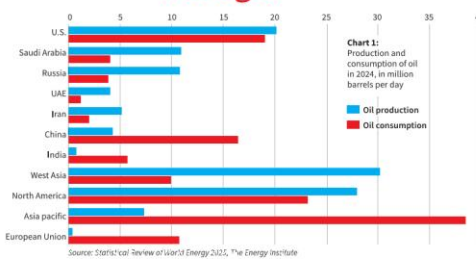
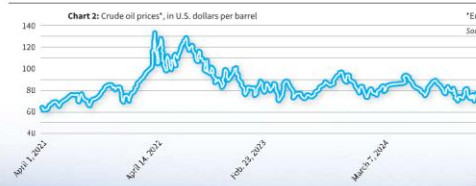


Table 1: Oil trade in 2024, in million barrels per day

	Crude & product imports	Crude exports	Product exports	Net Exports
Saudi Arabia	0.4	6.4	1.2	7.2
Russia	0.0	4.9	2.2	7.0
UAE	0.8	3.7	2.0	4.9
Canada	1.0	4.4	0.7	4.2
Iraq	0.1	3.6	0.5	4.0
U.S.	8.4	4.0	5.9	1.4
India	6.0	0.0	1.9	-4.1
China	13.4	0.0	1.2	-12.2
World	69.4	43.2	26.2	0.0



## THE GIST

Oil and natural gas account for a little over half of the global energy supply, with West Asian producers and Asian consumers tightly linked through trade flows.

The U.S. expands domestic production and pursues strategic interventions, while Russia emerges as a key supplier as disruptions hit West Asian output.

India's purchase of discounted Russian oil boosted its refining and exports. But with global oil prices rising, uncertainty looms.



Russia-Ukraine war in 2022, Russia became a pariah in the West, especially Europe, and trade sanctions have long stymied its oil trade. But suddenly, as oil production capabilities in West Asia take a hit, Russian oil has become crucial for stabilising energy prices. Outside West Asia, Russia is the only country with a large tradable oil surplus (Table 1).

**Russian oil and India**  
The oil markets are deeply interlinked. Even a ripple in a corner of the market can gather itself into a tumultuous wave. India is the world's second-largest importer of crude oil and the third-largest consumer. Supply disruptions result in higher prices for essential goods and services in India. At the same time, India's actions in the oil market significantly impact global oil prices.

European countries, with limited domestic oil and natural gas reserves, have traditionally relied on energy

**Today, with the Strait of Hormuz closed and oil prices crossing \$100 a barrel, U.S. is desperate to see greater purchases of sanctioned Russian oil**

imports, mainly from Russia, to withstand the frosty winters. But with sanctions on Russian products imposed since 2022, Europe has had to seek new energy sources, mainly in West Asia.

In this context, India began purchasing Russian oil at discounted prices. The share of Russian imports in India's oil purchases increased dramatically—from 2.5% in 2021 to 39.0% in 2023. Notice that crude oil is processed in refineries to convert it into a range of products, including petrol, diesel, LPG, and petrochemicals. While dependent on imported crude, China and India have built large refining capacity and export a portion of their refined oil products.

Some Indian refiners have made large profits by exporting products processed from discounted crude.

Despite their protestations, Western leaders quietly welcomed the stability in oil prices that resulted when demand from India was partly diverted to sanctioned Russian oil since 2022 (Chart 2).

**Under strain**  
Today, with the Strait of Hormuz closed and oil prices crossing \$100 a barrel, the U.S. is desperate to see greater purchases of sanctioned Russian oil, which has long been marooned at sea, to calm the markets.

A week, indeed, can be a long time in international politics. As tensions prolong in West Asia, the global energy order could be reshaped. (Jayan Jose Thomas is a Professor of Economics at the Indian Institute of Technology, Delhi)

## 20Mar. Oil, power, and politics of disruption

### तेल, शक्ति और विघटन की राजनीति

- The closure of the **Strait of Hormuz** disrupts a **vital artery** of the **global economy**, triggering **price increases** and **turmoil in energy markets**; as **supply shocks** reshape the **geopolitics of energy**, countries like **India**, the **U.S.**, and **Russia** recalibrate strategies amid shifting **oil flows** and rising **dependence**

स्ट्रेट ऑफ होर्मुज़ का बंद होना वैश्विक अर्थव्यवस्था की एक महत्वपूर्ण जीवनरेखा को बाधित करता है, जिससे कीमतों में वृद्धि और ऊर्जा बाजारों में उथल-पुथल होती है; जैसे-जैसे आपूर्ति झटके ऊर्जा की भू-राजनीति को बदलते हैं, भारत, अमेरिका, और रूस जैसे देश बदलते हुए तेल प्रवाह और बढ़ती निर्भरता के बीच अपनी रणनीतियों को पुनः समायोजित करते हैं

- The blue waters of the **Strait of Hormuz**, connecting the **Persian Gulf** to the **Arabian Sea**, form a **vital artery** of the **global economy**. **हॉर्मुज़ जलडमरूमध्य**, जो **पर्शियन गल्फ** को **अरब सागर** से जोड़ता है, **वैश्विक अर्थव्यवस्था** की एक महत्वपूर्ण जीवन रेखा है।



- Through this narrow gateway — stretching just **33 km** at some points — pass ships carrying nearly a **fifth of the oil traded worldwide**.  
यह संकीर्ण मार्ग, जो कुछ स्थानों पर केवल **33 किमी** चौड़ा है, से होकर दुनिया के लगभग **1/5** तेल व्यापार वाले जहाज गुजरते हैं।
- After the **U.S. and Israel** launched a military campaign against **Iran on February 28**, Iran blocked ships passing through the Strait.  
**28 फरवरी** को **अमेरिका और इज़राइल** द्वारा **ईरान** पर सैन्य अभियान शुरू करने के बाद, ईरान ने जलडमरूमध्य को बंद कर दिया।
- This led to **price increases** and turmoil in **energy markets**.  
इससे **कीमतों में वृद्धि** और **ऊर्जा बाजारों में अस्थिरता** पैदा हुई।

### Global energy • ows वैश्विक ऊर्जा प्रवाह

- Oil and **natural gas** account for a little over **half of global energy supply** (IEA 2024).  
तेल और **प्राकृतिक गैस** वैश्विक ऊर्जा आपूर्ति का **आधा से अधिक हिस्सा** बनाते हैं (IEA 2024)।
- They fuel **vehicles, electricity generation, cooking gas**, and provide raw materials for industries.  
ये **वाहनों, बिजली उत्पादन, खाना पकाने की गैस** और उद्योगों के लिए कच्चा माल प्रदान करते हैं।
- **West Asian countries** like **Saudi Arabia, UAE, and Iran** are among the largest producers of oil and gas.  
**पश्चिम एशियाई देश** जैसे **सऊदी अरब, यूएई और ईरान** तेल और गैस के प्रमुख उत्पादक हैं।
- Major consumers are in **East and South Asia** — especially **China, India, and Japan**.  
प्रमुख उपभोक्ता **पूर्वी और दक्षिण एशिया** में हैं — विशेषकर **चीन, भारत और जापान**।
- These countries depend on **imports from West Asia**, much of which passes through the **Strait of Hormuz**.  
ये देश **पश्चिम एशिया से आयात** पर निर्भर हैं, जिसका अधिकांश हिस्सा **हॉर्मुज जलडमरूमध्य** से गुजरता है।

### America and West Asia अमेरिका और पश्चिम एशिया

- The concentration of **oil reserves** in a few regions has driven **global geopolitical contests**.  
कुछ क्षेत्रों में **तेल भंडार की एकाग्रता** ने **वैश्विक भू-राजनीतिक संघर्षों** को जन्म दिया है।
- Apart from Gulf countries, major reserves exist in the U.S., **Russia, Venezuela, and Canada**.  
गल्फ देशों के अलावा, **अमेरिका, रूस, वेनेजुएला और कनाडा** में बड़े भंडार हैं।
- The **U.S.** is both a major **producer and consumer** of energy.  
**अमेरिका** ऊर्जा का प्रमुख **उत्पादक और उपभोक्ता** दोनों है।
- Its per capita energy use is **10 times India** and **2.4 times China**.  
प्रति व्यक्ति ऊर्जा खपत **भारत से 10 गुना** और **चीन से 2.4 गुना** अधिक है।
- The search for energy has shaped **U.S. foreign policy**.  
ऊर्जा की खोज ने **अमेरिकी विदेश नीति** को प्रभावित किया है।
- Control over oil shifted to **national oil companies** in the **1950s**.  
**1950 के दशक** से तेल का नियंत्रण **राष्ट्रीय कंपनियों** के पास गया।
- Oil prices surged in the **1970s**, with **OPEC** gaining influence.  
**1970 के दशक** में तेल कीमतें बढ़ीं और **OPEC** का प्रभाव बढ़ा।
- The U.S. response included boosting **shale oil production (mid-2000s)** and strategic interventions like **Gulf War (1990-91), Iraq War (2003-11), Venezuela (2026), and Iran conflict**.  
अमेरिका ने **शेल ऑयल उत्पादन (2000 के बाद)** बढ़ाया और **गल्फ युद्ध, इराक युद्ध, वेनेजुएला (2026), और ईरान संघर्ष** जैसे कदम उठाए।
- Although current production is modest, **Venezuela and Iran** hold **39% of global oil reserves**.  
हालांकि वर्तमान उत्पादन कम है, लेकिन **वेनेजुएला और ईरान** के पास **39% वैश्विक तेल भंडार** है।
- The closure of Hormuz disrupted **Trump's energy calculations**.  
**हॉर्मुज के बंद होने से ट्रंप की ऊर्जा रणनीति** प्रभावित हुई।



- It made **Russia** an unintended beneficiary of the crisis.  
इससे **रूस** को अप्रत्याशित लाभ मिला।
- After the **Russia-Ukraine war (2022)**, Russia faced sanctions, but now its oil has become crucial.  
**रूस-यूक्रेन युद्ध (2022)** के बाद प्रतिबंधों के बावजूद अब रूसी तेल महत्वपूर्ण हो गया है।
- Outside West Asia, **Russia** is the only country with a large **tradable oil surplus**.  
पश्चिम एशिया के बाहर, **रूस** ही एकमात्र देश है जिसके पास बड़ा **निर्यात योग्य तेल अधिशेष** है।

## Russian oil and India रूसी तेल और भारत

- The oil markets are **deeply interlinked**.  
तेल बाजार आपस में **गहराई से जुड़े हुए** हैं।
- Even a ripple in a corner of the market can turn into a **tumultuous wave**.  
बाजार के किसी कोने में छोटा सा प्रभाव भी **बड़ी उथल-पुथल** में बदल सकता है।
- India is the world's **second-largest importer of crude oil** and the **third-largest consumer**.  
भारत दुनिया का **दूसरा सबसे बड़ा कच्चा तेल आयातक** और **तीसरा सबसे बड़ा उपभोक्ता** है।
- Supply disruptions lead to **higher prices** for essential goods and services in India.  
आपूर्ति में बाधा आने से भारत में आवश्यक वस्तुओं और सेवाओं की **कीमतें बढ़ती हैं**।
- India's actions in the oil market also **impact global oil prices**.  
तेल बाजार में भारत की गतिविधियाँ **वैश्विक कीमतों को प्रभावित** करती हैं।
- European countries, with limited domestic reserves, relied on **Russian energy imports**.  
यूरोपीय देश सीमित संसाधनों के कारण **रूस से ऊर्जा आयात** पर निर्भर थे।
- After **sanctions from 2022**, Europe shifted to **West Asia** for energy.  
**2022** के बाद प्रतिबंधों के कारण यूरोप ने ऊर्जा के लिए **पश्चिम एशिया** की ओर रुख किया।
- India began purchasing **discounted Russian oil**.  
भारत ने **रियायती रूसी तेल** खरीदना शुरू किया।
- The share of Russian oil rose from **2.5% (2021)** to **39.0% (2023)**.  
रूसी तेल का हिस्सा **2.5% (2021)** से बढ़कर **39.0% (2023)** हो गया।
- Crude oil is processed into **petrol, diesel, LPG, petrochemicals**.  
कच्चे तेल को **पेट्रोल, डीजल, एलपीजी, पेट्रोकेमिकल्स** में बदला जाता है।
- India and China have large **refining capacity** and export refined products.  
भारत और चीन के पास बड़ी **रिफाइनिंग क्षमता** है और वे उत्पाद निर्यात करते हैं।
- Some Indian refiners earned **large profits** from discounted crude exports.  
कुछ भारतीय रिफाइनरों ने रियायती तेल से बने उत्पादों के निर्यात से **बड़ा लाभ** कमाया।
- Western leaders quietly welcomed **price stability** due to India buying Russian oil.  
पश्चिमी नेताओं ने भारत द्वारा रूसी तेल खरीदने से बनी **कीमत स्थिरता** का स्वागत किया।
- Demand diversion since **2022** helped stabilise global markets.  
**2022** के बाद मांग के बदलाव से वैश्विक बाजार स्थिर रहे।

## Under strain दबाव में स्थिति

- With the **Strait of Hormuz closed**, oil prices crossed **\$110 per barrel**.  
**हॉर्मुज जलडमरूमध्य बंद** होने से तेल की कीमत **\$110 प्रति बैरल** से ऊपर चली गई।
- The **U.S.** now wants higher purchases of **sanctioned Russian oil** to stabilise markets.  
अब **अमेरिका** बाजार स्थिर करने के लिए **प्रतिबंधित रूसी तेल** की अधिक खरीद चाहता है।
- Large volumes of Russian oil had been **marooned at sea** earlier.  
पहले रूसी तेल की बड़ी मात्रा **समुद्र में फंसी हुई** थी।
- A week can be a long time in **international politics**.  
**अंतरराष्ट्रीय राजनीति** में एक सप्ताह भी बहुत लंबा समय होता है।
- Prolonged tensions in **West Asia** may reshape the **global energy order**.  
**पश्चिम एशिया** में लंबे तनाव से **वैश्विक ऊर्जा व्यवस्था** बदल सकती है।



## GS Paper III: S&T,

### TOPICS COVERED

20 March 2026

20Mar **Losing the way**  
रास्ता खोना

20Mar **How far should governments go in using AI?**  
सरकारों को AI के उपयोग में कितनी दूर तक जाना चाहिए?

GS III: S&T

MOB

## Losing the way

ISRO must fix issues before launch of next second-generation satellites

ISRO's NavIC constellation, for which it has launched 11 satellites since 2013, is in operational distress. Only three satellites remain capable of providing position, navigation, and timing (PNT) services, leaving the constellation unable to fulfil its purpose of replacing the U.S.'s GPS system over the Indian subcontinent. A PNT constellation requires at least four PNT-capable satellites, and India had only four until ISRO said an atomic clock onboard the IRNSS-1F satellite failed on March 13. The constellation's first-generation satellites use rubidium atomic clocks made by Swiss company SpectraTime, and which have been dogged by failure. ISRO's latest attempt to launch a second-generation satellite, NVS-02, was abortive after the machine was left in the wrong orbit. IRNSS-1F, launched in March 2016, completed its 10-year design life just three days before its clock failed. Eight other satellites have either been decommissioned, have failed to reach orbit or have bad clocks. In 2018, ISRO transitioned to using indigenous rubidium atomic clocks, developed by the ISRO-Space Applications Centre. NVS-01, launched in May 2023, was the first to carry the device; all second-generation NVS series satellites will too.

Part of NavIC's genesis was the U.S.'s refusal to share GPS data over Kargil during the 1999 war, and it continues to function largely as a defence programme managed by ISRO. However, while the space sector reforms in 2020 vouchsafed ISRO for R&D and NewSpace India for commercialisation, the absence of a national space law leaves ISRO acting as both designer and operator of NavIC, overextending the agency. Equally, India lacks a counterpart to the GPS Directorate or EUSPA, which respectively manage the GPS and Galileo constellations. The new generation of rubidium clocks also faces procurement challenges and ISRO has proposed equipping each satellite with five atomic clocks instead of the previous three. The constellation has been degrading faster than it can be replenished, due to ISRO's poor launch rate. This problem stems from several factors, including issues with the PSLV, an insufficient budget that must maintain a PNT constellation, an upcoming human spaceflight programme, several earth-observation satellites, and R&D for new rockets. ISRO is also hand-holding start-ups that have yet to get a grip on launching rockets to low-earth orbit. Meanwhile, the Union government has encouraged electronics manufacturers to support the LI band of the NVS series for better interoperability with GPS while expecting its use by the armed forces. For all these reasons, ISRO's plan to launch three more second-generation satellites in 2026 does little to inspire confidence.

## 20Mar. Losing the way रास्ता खोना

• ISRO must fix issues before launch of next second-generation satellites

ISRO को अगली दूसरी पीढ़ी के उपग्रहों के प्रक्षेपण से पहले समस्याओं को ठीक करना चाहिए

• ISRO's NavIC constellation, for which it has launched 11 satellites since 2013, is in operational distress.

ISRO का NavIC कॉन्स्टेलेशन, जिसके लिए उसने 2013 से 11 उपग्रह लॉन्च किए हैं, वर्तमान में संचालन संकट में है।

• Only three satellites remain capable of providing position, navigation, and timing (PNT) services, leaving the constellation unable to fulfill its purpose of replacing the U.S.'s GPS system over the Indian subcontinent.

केवल तीन उपग्रह ही पोजिशन, नेविगेशन और टाइमिंग (PNT) सेवाएं देने में सक्षम हैं, जिससे यह कॉन्स्टेलेशन भारतीय उपमहाद्वीप में अमेरिका के GPS सिस्टम को बदलने के अपने उद्देश्य को पूरा नहीं कर पा रहा है।

• A PNT constellation requires at least four PNT-capable satellites, and India had only four until ISRO said an atomic clock onboard the IRNSS-1F satellite failed on March 13.

एक PNT कॉन्स्टेलेशन के लिए कम से कम चार PNT-सक्षम उपग्रह आवश्यक होते हैं, और भारत के पास केवल चार थे जब तक कि ISRO ने 13 मार्च को IRNSS-1F उपग्रह पर लगे एटॉमिक क्लॉक के फेल होने की जानकारी नहीं दी।

• The constellation's first-generation satellites use rubidium atomic clocks made by Swiss company SpectraTime, and which have been dogged by failure.

इस कॉन्स्टेलेशन के प्रथम-पीढ़ी के उपग्रह रूबिडियम एटॉमिक क्लॉक का उपयोग करते हैं, जो स्विस् कंपनी SpectraTime द्वारा बनाए गए हैं और जो बार-बार फेल होते रहे हैं।

• ISRO's latest attempt to launch a second-generation satellite, NVS-02, was aborted after the machine was left in the wrong orbit.

ISRO का दूसरा पीढ़ी का उपग्रह NVS-02 लॉन्च करने का प्रयास विफल हो गया क्योंकि यह गलत कक्षा (ऑर्बिट) में रह गया।

• IRNSS-1F, launched in March 2016, completed its 10-year design life just three days before its clock failed. IRNSS-1F, जिसे मार्च 2016 में लॉन्च किया गया था, उसके क्लॉक के फेल होने से केवल तीन दिन पहले ही उसका 10 वर्ष का डिजाइन जीवन पूरा हुआ था।

• Eight other satellites have either been decommissioned, have failed to reach orbit or have bad



## clocks.

आठ अन्य उपग्रह या तो सेवा से हटाए जा चुके हैं, या कक्षा तक नहीं पहुंच पाए या उनके क्लॉक खराब हैं।

- In 2018, ISRO transitioned to using **indigenous rubidium atomic clocks**, developed by the **ISRO-Space Applications Centre**.

2018 में ISRO ने स्वदेशी रूबिडियम एटॉमिक क्लॉक का उपयोग शुरू किया, जिसे ISRO-स्पेस एप्लीकेशन्स सेंटर ने विकसित किया।

- **NVS-01**, launched in **May 2023**, was the first to carry the device; all second-generation **NVS series satellites** will too.

**NVS-01**, जिसे **मई 2023** में लॉन्च किया गया, पहला उपग्रह था जिसमें यह डिवाइस था; सभी दूसरी पीढ़ी के **NVS सीरीज उपग्रहों** में भी यह होगा।

- Part of NavIC's genesis was the **U.S.'s refusal** to share **GPS data** over **Kargil** during the **1999 war**, and it continues to function largely as a **defence programme** managed by ISRO. NavIC की उत्पत्ति का एक कारण **1999 के कारगिल युद्ध** के दौरान **अमेरिका द्वारा GPS डेटा साझा करने से इनकार** था, और यह आज भी मुख्यतः ISRO द्वारा संचालित एक **रक्षा कार्यक्रम** के रूप में कार्य करता है।

- However, while the **space sector reforms in 2020** vouchsafed ISRO for **R&D** and **NewSpace India** for commercialisation, the absence of a **national space law** leaves ISRO acting as both designer and operator of NavIC, **overextending** the agency.

हालांकि **2020 के अंतरिक्ष क्षेत्र सुधारों** ने ISRO को **R&D** और **NewSpace India** को वाणिज्यीकरण के लिए जिम्मेदारी दी, लेकिन **राष्ट्रीय अंतरिक्ष कानून** की अनुपस्थिति में ISRO NavIC का डिजाइनर और ऑपरेटर दोनों बना हुआ है, जिससे उस पर **अधिक भार** पड़ रहा है।

- Equally, India lacks a counterpart to the **GPS Directorate** or **EUSPA**, which respectively manage the **GPS** and **Galileo constellations**.

इसी तरह, भारत के पास **GPS Directorate** या **EUSPA** जैसा कोई संस्थान नहीं है, जो क्रमशः **GPS** और **Galileo कॉन्स्टेलेशन** का प्रबंधन करते हैं।

- The new generation of **rubidium clocks** also faces **procurement challenges** and ISRO has proposed equipping each satellite with **more atomic clocks** instead of the previous three.

नई पीढ़ी के **रूबिडियम क्लॉक** को **खरीद संबंधी चुनौतियों** का सामना करना पड़ रहा है और ISRO ने प्रत्येक उपग्रह में पहले के तीन के बजाय **पांच एटॉमिक क्लॉक** लगाने का प्रस्ताव दिया है।

- The constellation has been **degrading faster** than it can be replenished, due to ISRO's **poor launch rate**.

ISRO की **कम लॉन्च दर** के कारण यह कॉन्स्टेलेशन जितनी तेजी से सुधारा जा सकता है उससे अधिक तेजी से **खराब हो रहा है**।

- This problem stems from several factors, including issues with the **PSLV**, an **insufficient budget** that must maintain a PNT constellation, an upcoming **human spaceflight programme**, several **earth-observation satellites**, and **R&D for new rockets**.

यह समस्या कई कारणों से उत्पन्न हुई है, जिनमें **PSLV की समस्याएं**, **अपर्याप्त बजट**, **आगामी मानव अंतरिक्ष उड़ान कार्यक्रम**, **कई पृथ्वी अवलोकन उपग्रह**, और **नए रॉकेट के लिए अनुसंधान एवं विकास** शामिल हैं।

- ISRO is also **hand-holding start-ups** that have yet to get a grip on launching rockets to **low-earth orbit**.

ISRO उन **स्टार्ट-अप्स** को मार्गदर्शन भी दे रहा है जो अभी तक **लो-अर्थ ऑर्बिट** में रॉकेट लॉन्च करने में सक्षम नहीं हुए हैं।

- Meanwhile, the **Union government** has encouraged **electronics manufacturers** to support the **L1 band** of the NVS series for better interoperability with **GPS** while expecting its use by the **armed forces**.

इस बीच, **केंद्र सरकार** ने **इलेक्ट्रॉनिक्स निर्माताओं** को **NVS सीरीज के L1 बैंड** को समर्थन देने के लिए प्रोत्साहित किया है ताकि **GPS** के साथ बेहतर इंटरऑपरेबिलिटी हो सके, साथ ही इसे **सशस्त्र बलों** द्वारा उपयोग की अपेक्षा की जा रही है।

- For all these reasons, ISRO's plan to launch **three more second-generation satellites in 2026** does little to inspire **confidence**.

इन सभी कारणों से, ISRO की **2026 में तीन और दूसरी पीढ़ी के उपग्रह लॉन्च करने की योजना** बहुत अधिक **विश्वास नहीं जगाती**।



## How far should governments go in using AI?



**Isha Suri**  
Research Lead at the Centre for Internet and Society



**Raman Jit Singh Chima**  
Asia Pacific Policy Director and Senior International Counsel at Access Now, a nonprofit committed to defending digital rights

ISSUE SET

PARLEY

As governments begin deploying **Artificial Intelligence (AI) tools** in public administration, national security and policymaking, questions about its safe usage and accountability have taken centre-stage. The issue came into focus in the U.S. after reports revealed a dispute between the Pentagon and AI company Anthropic, which refused to remove safeguards that were in place to prevent mass surveillance and the usage of autonomous weapons. The incident underscored a deeper tension between governments seeking to deploy AI systems and the companies that control them. As states collaborate more closely with AI companies, who ultimately governs the systems that govern us? Isha Suri and Raman Jit Singh Chima discuss the question in a conversation moderated by Areena Arora. Edited excerpts:

**What kinds of state capacity could AI actually strengthen? And where should governments be cautious about relying on it?**

**Raman Jit Singh Chima:** It depends on the problem a government is trying to solve and who it is dealing with. AI can sometimes have transformative effects, such as improving access to data or enabling better analysis, but it is often deployed without clarity on the problem, the data available, or the costs involved. There are also high-risk areas such as facial recognition, surveillance, and certain health applications, where misuse can lead to significant harm. In such cases, a 'do no harm' principle should apply, and in some contexts, outright prohibition may be justified.

**Isha Suri:** AI systems tend to work best in well-specified use cases. For example, during the COVID-19 pandemic, image-processing tools could distinguish between different types of lung infections because the problem was clearly defined and the parameters were known.

Governments should begin by defining the objective of deploying AI. That clarity is often missing. Before adopting any system, they should ask whether AI is necessary, whether less intrusive alternatives exist, and what the risks are. A necessity and proportionality test is critical. AI should not be adopted simply because it exists.

**If sharing more data with AI systems make government services faster and more efficient, why should people worry about privacy? What harms are on the table?**

**IS:** We need to question what 'efficiency' means



**Dangerous mix:** Logos of the U.S. Department of War and Anthropic. REUTERS

and for whom. Evidence on productivity gains is still weak. In many cases, efficiency claims translate into labour substitution. There is also a lack of transparency. Data collected for one purpose can be used elsewhere. Welfare data can be used for policing or denying benefits.

The idea that citizens are okay with sharing data assumes informed consent, which is often not the case. Many people do not fully understand how their data is used. In countries like India, what is often framed as cultural comfort with lower privacy is actually a function of low digital literacy.

So, individuals may make decisions without full information, while the long-term consequences unfold. That is why the state must anticipate harms and build safeguards at the design stage, not after deployment.

**RC:** The idea that better AI requires more personal data is flawed. It benefits certain commercial actors but it's not technically necessary. More data is not always better. It can be inefficient, risky, and beneficial mainly to companies that rely on large-scale data extraction and compute-heavy infrastructure. There are alternatives. Smaller models, for instance, use limited data and can produce clearer outputs. There are also on-device AI systems that do not require constant data transfer to large data centres. We should challenge the assumption that handing over data is the price of better services.

**AI companies say they need access to large public datasets to build better systems. Should governments treat these datasets as strategic national assets, or can they be shared with private companies to accelerate development?**

**RC:** We should be very wary of the idea that data



If domestic systems are built on infrastructure or partnerships controlled by large global companies, then we are not truly building indigenous capability. We are simply layering on top of existing dependencies

**ISHA SURI**

is something that can be monetised. Opening data up to private actors creates risks for privacy, security and sovereignty. It also repeats past mistakes where public systems were handed over without adequate safeguards.

**IS:** Framing data as a national or economic asset is problematic because it shifts attention away from its nature as a fundamental right tied to privacy. There are also issues of consent. Citizens may provide data for one purpose, but not for its use in commercial partnerships. We also need to question who is driving the demand for access to large datasets. Often, it is private companies with clear economic incentives.

Ultimately, what we risk is a situation where public data and public money enable private extraction of value, with limited accountability. That makes it critical for governments to step back and evaluate who benefits from such arrangements and whether they align with public interest.

**Governments have always worked with the private sector. Should we treat or fear AI differently in that partnership?**

**RC:** We should learn from past digital infrastructure projects. Systems should not be deployed first and regulated later. There is also a risk that technology becomes an end in itself. Governments may expand systems not because they improve outcomes, but to justify prior investments. Large partnerships can also lock governments into costly and inflexible arrangements.

**IS:** Projects like Aadhaar and DigiYatra should be seen as cautionary examples. Trade-offs in welfare delivery cannot be treated lightly. Even small exclusion rates can have severe consequences. There are also accountability gaps when public infrastructure is run through hybrid or private entities.

**If other governments begin adopting AI and it becomes inevitable globally, should India adopt it as well?**

**RC:** Governments should not follow global trends blindly. AI should be used only where it

advances public interest and democratic values. Policymakers should focus on practical concerns like data protection, procurement and market concentration.

**IS:** The idea of inevitability is overstated and often driven by industry narratives. Governments should define their own objectives instead of reacting to the fear of missing out.

**If other governments adopt AI more fluently, does India risk falling behind?**

**RC:** If we are concerned about artificial general intelligence, the focus should be on building foundational scientific capacity.

The current industry narrative suggests that supporting large AI companies and their infrastructure is the way to get there. That may actually be a distraction from building real capabilities. If you look at India's past, investments in core science enabled major programmes in space and nuclear development. A similar approach is needed here if we want sovereign technological capability.

**IS:** We also need to question what it means to "fall behind." AI is not just an application, it is a full stack, including compute, data and models. If domestic systems are built on infrastructure or partnerships controlled by large global companies, then we are not truly building indigenous capability. We are simply layering on top of existing dependencies. This creates risks of lock-in and long-term dependence on foreign technology monopolies. It also raises concerns about sovereignty and control. At the same time, a lot of the hype around artificial general intelligence and superintelligence may be diverting attention from present-day harms, including labour impacts, environmental costs and concentration of power.

**So where does that leave us?**

**RC:** Be cautious about how and where AI is deployed by government. Focus on clear use cases, avoid unnecessary dependence on large private players, and prioritise public interest, security and long-term sustainability.

**IS:** Governments need to clearly define their objectives before adopting any technology. Ask whether AI is necessary, and whether the risks are proportional to the benefits.



To listen to the full interview Scan the code or go to the link [www.thehindu.com](http://www.thehindu.com)

## 20Mar. How far should governments go in using AI?

### सरकारों को AI के उपयोग में कितनी दूर तक जाना चाहिए?

#### AI Governance, Risks and State Capacity

#### एआई गवर्नेंस, जोखिम और राज्य क्षमता

- As governments begin deploying **Artificial Intelligence (AI) tools** in public administration, national security and policymaking, questions about its safe usage and accountability have taken centre-stage.  
जैसे-जैसे सरकारें आर्टिफिशियल इंटेलिजेंस (AI) का उपयोग सार्वजनिक प्रशासन, राष्ट्रीय सुरक्षा और नीति निर्माण में करने लगी हैं, इसके सुरक्षित उपयोग और जवाबदेही के सवाल प्रमुख हो गए हैं।
- The issue came into focus in the U.S. after reports revealed a dispute between the Pentagon and AI company Anthropic, which refused to remove safeguards against mass surveillance and autonomous weapons.  
यह मुद्दा अमेरिका में तब सामने आया जब पेंटागन और AI कंपनी Anthropic के बीच विवाद हुआ, जिसने मास सर्विलांस और स्वायत्त हथियारों के खिलाफ सुरक्षा उपाय हटाने से इनकार कर दिया।
- The incident underscored a deeper tension between governments and the companies that control AI systems.  
इस घटना ने सरकारों और AI कंपनियों के बीच गहरे तनाव को उजागर किया।
- As states collaborate more closely with AI companies, who ultimately governs the systems that govern us?  
जैसे-जैसे राज्य AI कंपनियों के साथ सहयोग बढ़ाते हैं, सवाल उठता है कि अंततः हमें नियंत्रित करने वाली प्रणालियों को कौन नियंत्रित करता है?
- Isha Suri and Raman Jit Singh Chima discuss the question in a conversation moderated by Areena Arora.  
ईशा सूरी और रमन जीत सिंह चीमा ने इस विषय पर चर्चा की, जिसका संचालन अरीना अरोड़ा ने किया।



## State Capacity and AI Use

### राज्य क्षमता और एआई का उपयोग

- What kinds of **state capacity** could AI actually strengthen? And where should governments be cautious about relying on it?  
AI किस प्रकार की **राज्य क्षमता** को मजबूत कर सकता है और किन क्षेत्रों में सरकारों को सावधानी बरतनी चाहिए?
- **Raman Jit Singh Chima**: It depends on the **problem** a government is trying to solve and the stakeholders involved.  
**रमन जीत सिंह चीमा**: यह इस पर निर्भर करता है कि सरकार किस **समस्या** को हल करना चाहती है और उससे जुड़े पक्ष कौन हैं।
- AI can have **transformative effects**, such as improving access to **data** and enabling better **analysis**, but is often deployed without clarity on the problem or costs.  
AI **परिवर्तनकारी प्रभाव** डाल सकता है, जैसे **डेटा तक पहुंच** और बेहतर **विश्लेषण**, लेकिन अक्सर बिना स्पष्टता के लागू किया जाता है।
- There are high-risk areas such as **facial recognition, surveillance, and health applications**, where misuse can cause serious harm.  
कुछ उच्च जोखिम वाले क्षेत्र हैं जैसे **फेशियल रिकग्निशन, निगरानी और स्वास्थ्य अनुप्रयोग**, जहां दुरुपयोग से गंभीर नुकसान हो सकता है।
- In such cases, a **'do no harm' principle** should apply, and sometimes **prohibition** may be necessary.  
ऐसे मामलों में **'कोई नुकसान न हो'** सिद्धांत लागू होना चाहिए और कभी-कभी **प्रतिबंध** भी आवश्यक हो सकता है।
- **Isha Suri**: AI works best in **well-developed use cases**.  
**ईशा सूरी**: AI स्पष्ट रूप से परिभाषित उपयोग मामलों में सबसे अच्छा काम करता है।
- During **COVID-19**, image-processing tools could distinguish between different lung infections due to clear parameters.  
**COVID-19** के दौरान, स्पष्ट मानकों के कारण AI ने विभिन्न फेफड़ों के संक्रमणों को अलग-अलग पहचानने में मदद की।
- Governments should clearly define the **objective** before deploying AI.  
सरकारों को AI लागू करने से पहले स्पष्ट **उद्देश्य** तय करना चाहिए।
- They must ask whether AI is **necessary**, whether **alternatives** exist, and what the **risks** are.  
उन्हें यह पूछना चाहिए कि क्या AI **आवश्यक** है, क्या **विकल्प** मौजूद हैं और **जोखिम** क्या हैं।
- A **necessity and proportionality test** is critical.  
**आवश्यकता और अनुपातिकता परीक्षण** बहुत महत्वपूर्ण है।
- AI should not be adopted simply because it exists.  
AI को केवल इसलिए नहीं अपनाना चाहिए क्योंकि वह उपलब्ध है।

## Privacy, Data and Risks

### गोपनीयता, डेटा और जोखिम

- If sharing more data improves **efficiency**, why should people worry about **privacy**?  
यदि अधिक डेटा साझा करने से **दक्षता** बढ़ती है, तो लोगों को **गोपनीयता** की चिंता क्यों होनी चाहिए?
- **Isha Suri**: We must question what **efficiency** means and for whom.  
**ईशा सूरी**: हमें यह समझना चाहिए कि **दक्षता** किसके लिए और किस अर्थ में है।
- Evidence on productivity gains is still **weak**.  
उत्पादकता में वृद्धि के प्रमाण अभी भी **कमज़ोर** हैं।
- In many cases, efficiency means **labour substitution**.  
कई मामलों में दक्षता का मतलब **श्रम का प्रतिस्थापन** होता है।
- There is also a lack of **transparency** in how data is used.  
डेटा के उपयोग में **पारदर्शिता** की कमी है।
- Data collected for one purpose can be used for **other purposes**, such as policing or denying benefits.  
एक उद्देश्य के लिए एकत्रित डेटा का उपयोग **अन्य उद्देश्यों** जैसे पुलिसिंग या लाभ से वंचित करने में किया जा सकता है।



- The assumption of **informed consent** is often incorrect due to low **digital literacy**.  
सूचित सहमति का अनुमान अक्सर गलत होता है, खासकर कम डिजिटल साक्षरता के कारण।
- Individuals may make decisions without full understanding, leading to long-term consequences.  
लोग बिना पूरी जानकारी के निर्णय लेते हैं, जिससे दीर्घकालिक परिणाम सामने आते हैं।
- The state must anticipate harms and build **safeguards at the design stage**.  
राज्य को संभावित नुकसान का अनुमान लगाकर शुरुआत में ही सुरक्षा उपाय बनाने चाहिए।

### Alternative AI Models and Data Use वैकल्पिक एआई मॉडल और डेटा उपयोग

- **Raman Jit Singh Chima**: The idea that better AI needs more **personal data** is flawed.  
रमन जीत सिंह चीमा: यह धारणा गलत है कि बेहतर AI के लिए अधिक व्यक्तिगत डेटा जरूरी है।
- More data is not always **better**; it can be risky and inefficient.  
अधिक डेटा हमेशा बेहतर नहीं होता; यह जोखिमपूर्ण और अक्षम हो सकता है।
- It often benefits companies relying on **large-scale data extraction**.  
यह अक्सर उन कंपनियों को लाभ देता है जो बड़े पैमाने पर डेटा संग्रह करती हैं।
- There are alternatives like **smaller AI models** that use limited data and provide clearer outputs.  
छोटे AI मॉडल जैसे विकल्प हैं जो कम डेटा का उपयोग करते हैं और बेहतर परिणाम देते हैं।
- There are also **on-device AI systems** that do not require continuous data transfer to large data centres.  
ऑन-डिवाइस AI सिस्टम भी हैं जिन्हें लगातार डेटा ट्रांसफर की आवश्यकता नहीं होती।
- The assumption that sharing data is the price of better services should be challenged.  
यह धारणा कि बेहतर सेवाओं के लिए डेटा देना जरूरी है, इसे चुनौती दी जानी चाहिए।

### AI Data Governance and Public-Private Partnerships एआई डेटा गवर्नेंस और सार्वजनिक-निजी भागीदारी

- AI companies say they need access to large **public datasets** to build better systems.  
AI कंपनियां कहती हैं कि बेहतर सिस्टम बनाने के लिए उन्हें बड़े सार्वजनिक डेटा सेट की आवश्यकता है।
- Should governments treat these datasets as **strategic national assets**, or share them with private companies?  
क्या सरकारों को इन डेटा सेट्स को रणनीतिक राष्ट्रीय संपत्ति मानना चाहिए या निजी कंपनियों के साथ साझा करना चाहिए?
- **Raman Jit Singh Chima (RC)**: We should be wary of treating **data as a commodity** that can be monetised.  
रमन जीत सिंह चीमा: हमें डेटा को व्यापारिक वस्तु मानने से सावधान रहना चाहिए।
- Opening data to **private actors** creates risks for **privacy, security and sovereignty**.  
निजी कंपनियों को डेटा देने से गोपनीयता, सुरक्षा और संप्रभुता के खतरे बढ़ते हैं।
- It may repeat past mistakes where public systems were handed over without safeguards.  
यह पिछली गलतियों को दोहरा सकता है जहां सार्वजनिक प्रणालियां बिना सुरक्षा उपायों के सौंप दी गई थीं।
- **Isha Suri (IS)**: Framing data as a **national/economic asset** is problematic as it ignores its link to **fundamental rights and privacy**.  
ईशा सूरी: डेटा को राष्ट्रीय या आर्थिक संपत्ति मानना गलत है क्योंकि यह मौलिक अधिकार और गोपनीयता से जुड़ा है।
- There are also concerns of **consent**, as citizens may share data for one purpose but not for **commercial use**.  
सहमति (consent) का मुद्दा भी है, क्योंकि नागरिक एक उद्देश्य के लिए डेटा देते हैं, न कि व्यावसायिक उपयोग के लिए।
- Often, demand for large datasets comes from **private companies with economic incentives**.  
अक्सर बड़े डेटा की मांग निजी कंपनियों से आती है जिनके आर्थिक हित होते हैं।



- There is a risk that **public data and public money** enable private value extraction with **limited accountability**.  
यह खतरा है कि **सार्वजनिक डेटा और धन** से निजी लाभ होगा जबकि **जवाबदेही सीमित** होगी।
- Governments must evaluate **who benefits** and whether it aligns with **public interest**.  
सरकारों को यह देखना चाहिए कि लाभ किसे हो रहा है और क्या यह **जनहित** में है।

### AI and Public-Private Partnerships एआई और सार्वजनिक-निजी साझेदारी

- Governments have always worked with the **private sector**. Should AI be treated differently?  
सरकारें हमेशा **निजी क्षेत्र** के साथ काम करती रही हैं, क्या AI को अलग तरह से देखना चाहिए?
- **RC**: Governments should learn from past **digital infrastructure projects**.  
**RC**: सरकारों को पिछले **डिजिटल इन्फ्रास्ट्रक्चर प्रोजेक्ट्स** से सीखना चाहिए।
- Systems should not be deployed **first and regulated later**.  
पहले सिस्टम लागू कर बाद में नियमन नहीं करना चाहिए।
- There is a risk that **technology becomes an end in itself**.  
यह खतरा है कि **तकनीक खुद ही लक्ष्य बन जाए**।
- Governments may expand systems to justify **prior investments** rather than outcomes.  
सरकारें **पहले के निवेश को सही ठहराने** के लिए सिस्टम बढ़ा सकती हैं।
- Large partnerships may lead to **costly and inflexible arrangements**.  
बड़ी साझेदारियां **महंगी और कठोर व्यवस्थाएं** बना सकती हैं।
- **IS**: Projects like **Aadhaar and DigiYatra** should be seen as **cautionary examples**.  
**IS**: **आधार और डिजीयात्रा** जैसे प्रोजेक्ट **चेतावनी उदाहरण** हैं।
- Trade-offs in **welfare delivery** cannot be ignored.  
**कल्याण योजनाओं** में समझौते नजरअंदाज नहीं किए जा सकते।
- Even small **exclusion rates** can have serious consequences.  
छोटी **बहिष्करण दरें** भी गंभीर प्रभाव डाल सकती हैं।
- There are **accountability gaps** when infrastructure is run by **private or hybrid entities**.  
जब सिस्टम **निजी या मिश्रित संस्थाओं** द्वारा चलाया जाता है तो **जवाबदेही की कमी** होती है।

### Global Adoption of AI एआई का वैश्विक अपनाना

- If other countries adopt AI, should **India** follow?  
यदि अन्य देश AI अपनाते हैं, तो क्या **भारत** को भी अपनाना चाहिए?
- **RC**: Governments should not follow global trends **blindly**.  
**RC**: सरकारों को वैश्विक रुझानों का **अंधानुकरण** नहीं करना चाहिए।
- AI should be used only when it promotes **public interest and democratic values**.  
AI का उपयोग केवल तभी होना चाहिए जब यह **जनहित और लोकतांत्रिक मूल्यों** को बढ़ावा दे।
- Focus should be on **data protection, procurement, and market concentration**.  
ध्यान **डेटा सुरक्षा, खरीद प्रक्रिया और बाजार एकाग्रता** पर होना चाहिए।
- **IS**: The idea of AI inevitability is **overstated** and often driven by **industry narratives**.  
**IS**: AI के अनिवार्य होने की धारणा **अतिरंजित** है और अक्सर **उद्योग द्वारा प्रेरित** होती है।
- Governments should define their own **objectives** instead of reacting to fear of missing out.  
सरकारों को **अपने उद्देश्य तय करने चाहिए**, न कि पीछे छूटने के डर से निर्णय लेना चाहिए।

### AI Adoption, Sovereignty and Way Forward एआई अपनाना, संप्रभुता और आगे की राह

- If other governments adopt AI more **quickly**, does **India** risk falling behind?  
यदि अन्य सरकारें AI को अधिक प्रभावी ढंग से अपनाती हैं, तो क्या **भारत** पीछे रह जाएगा?
- **Raman Jit Singh Chima (RC)**: If we are concerned about **artificial general intelligence (AGI)**, the focus should be on building **foundational scientific capacity**.  
**रमन जीत सिंह चीमा**: यदि हम **आर्टिफिशियल जनरल इंटेलिजेंस (AGI)** को लेकर चिंतित हैं, तो ध्यान **मूलभूत वैज्ञानिक क्षमता** विकसित करने पर होना चाहिए।



- The current industry narrative suggests supporting **large AI companies** and their infrastructure, but this may distract from building real capabilities.  
वर्तमान उद्योग दृष्टिकोण **बड़ी AI कंपनियों** और उनके ढांचे को समर्थन देने की बात करता है, लेकिन यह वास्तविक क्षमता निर्माण से ध्यान भटका सकता है।
- India's past investments in **core science** enabled major programmes in **space and nuclear development**.  
भारत के **मूलभूत विज्ञान** में निवेश ने **अंतरिक्ष और परमाणु कार्यक्रमों** को संभव बनाया।
- A similar approach is needed to build **sovereign technological capability**.  
इसी तरह का दृष्टिकोण **तकनीकी संप्रभुता** विकसित करने के लिए आवश्यक है।
- Isha Suri (IS):** We need to question what it means to “**fall behind.**”  
**ईशा सूरी:** हमें यह समझना होगा कि “**पीछे रहना**” वास्तव में क्या है।
- AI is a **full stack system** including **compute, data and models**.  
AI एक **पूर्ण प्रणाली (फुल स्टैक)** है जिसमें **कंप्यूट, डेटा और मॉडल** शामिल हैं।
- If domestic systems rely on infrastructure controlled by **global companies**, then true **indigenous capability** is not achieved.  
यदि घरेलू सिस्टम **वैश्विक कंपनियों** के ढांचे पर निर्भर हैं, तो वास्तविक **स्वदेशी क्षमता** विकसित नहीं होती।
- This creates risks of **lock-in** and long-term **dependence on foreign technology monopolies**.  
यह **लॉक-इन** और **विदेशी तकनीकी एकाधिकार पर निर्भरता** का जोखिम पैदा करता है।
- It also raises concerns about **sovereignty and control**.  
यह **संप्रभुता और नियंत्रण** पर भी सवाल उठाता है।
- The hype around **AGI and superintelligence** may distract from present harms like **labour impacts, environmental costs, and concentration of power**.  
**AGI और सुपरइंटेलिजेंस** का प्रचार वर्तमान समस्याओं जैसे **रोजगार प्रभाव, पर्यावरणीय लागत और शक्ति के केंद्रीकरण** से ध्यान भटका सकता है।

### Way Forward आगे की राह

- So where does that leave us?  
तो हमें आगे क्या करना चाहिए?
- RC:** Be cautious about how and where **AI is deployed in government**.  
**RC:** सरकार में **AI के उपयोग** को लेकर सावधानी बरतनी चाहिए।
- Focus on **clear use cases**, avoid unnecessary dependence on **large private players**, and prioritise **public interest, security and sustainability**.  
**स्पष्ट उपयोग मामलों** पर ध्यान दें, **निजी कंपनियों पर निर्भरता** कम करें और **जनहित, सुरक्षा और स्थिरता** को प्राथमिकता दें।
- IS:** Governments must clearly define their **objectives** before adopting any technology.  
**IS:** सरकारों को किसी भी तकनीक को अपनाने से पहले अपने **उद्देश्य स्पष्ट** करने चाहिए।
- They should assess whether **AI is necessary** and whether the **risks are proportional to the benefits**.  
उन्हें यह मूल्यांकन करना चाहिए कि **AI आवश्यक है या नहीं** और क्या **जोखिम लाभ के अनुपात में हैं**।

### GS Paper III: Environment,

TOPICS COVERED

20 March 2026



Long way down



**Steady jaunt:** An adult male Nilgiri Tahr descends a steep rocky terrain in the Anamalai Tiger Reserve along the Ghat section of the Pollachi-Valparai Road in Coimbatore, Tamil Nadu on March 14. With grasses and shrubs withering with the onset of summer, Nilgiri Tahrs navigate these vast stretches in search of green fodder. PERIASAMY M.

**Steady jaunt:** An adult male Nilgiri Tahr descends a steep rocky terrain in the Anamalai Tiger Reserve along the Ghat section of the Pollachi-Valparai Road in Coimbatore, Tamil Nadu on March 14. With grasses and shrubs withering with the onset of summer, Nilgiri Tahrs navigate these vast stretches in search of green fodder. PERIASAMY M.

**GS Paper III: IS**

**TOPICS COVERED**

**20 March 2026**

**20Mar**

**Unfenced border with Myanmar in focus after arrest of seven foreigners**

सात विदेशियों की गिरफ्तारी के बाद म्यांमार के साथ खुली सीमा पर ध्यान केंद्रित

# Unfenced border with Myanmar in focus after arrest of seven foreigners

**GS III: IS**

**Vijaita Singh**  
NEW DELHI

Amid the recent arrest of seven foreign nationals, including six Ukrainians and a U.S. citizen, who allegedly crossed illegally into Myanmar via Mizoram to train armed ethnic groups in weapons handling and drone operations, data show that 43 km of the total 1,643 km border with Myanmar has been fenced so far.

The National Investigation Agency (NIA) has accused the foreigners of importing drones from Europe to Myanmar via India for the use of ethnically armed groups (EAGs) in the country. The government recently informed a parliamentary panel that to check illegal migration, trafficking and insurgent activities along the Myanmar



The fencing project will include gates that record biometrics and photographs of people who cross the border. FILE PHOTO

border, "coordination with local communities, Myanmar Army and associated security agencies is maintained" and a "joint counter-drone mechanism with monthly reporting has also been instituted".

The fencing project, which includes installation of gates that record biometrics and photographs of people who cross the border, has faced resis-

tance as people on either side share deep ethnic, social and cultural ties.

As many as 43 designated exit and entry gates were proposed to regulate the movement of people and biometrics and gate passes were introduced.

However, over the past two years, the number of gates has declined to 38 and only 20 are now functional, a government

source said.

According to latest data provided by the Ministry to a Parliamentary Standing Committee on Home Affairs, of the total 1,643 km of fencing approved by the government, 390.39 km has been sanctioned and only 43.75 km of fencing has been completed so far; 346.64 km is currently under construction.

India and Myanmar share an unfenced border and have a unique arrangement called the Free Movement Regime (FMR). While Union Home Minister Amit Shah announced in February 2024 that the FMR was being scrapped, it was only regulated and free movement of people – without visas and passports on either side of the unfenced border – was restricted to 10 km from the earlier 16 km.

**20Mar. Unfenced border with Myanmar in focus after arrest of seven foreigners**  
सात विदेशियों की गिरफ्तारी के बाद म्यांमार के साथ खुली सीमा पर ध्यान केंद्रित



- Amid the recent arrest of seven foreign nationals, including six Ukrainians and a U.S. citizen, who allegedly crossed illegally into Myanmar via Mizoram to train armed ethnic groups in weapons handling and drone operations, data show that 43 km of the total 1,643 km border with Myanmar has been fenced so far.  
हाल ही में सात विदेशी नागरिकों की गिरफ्तारी के बीच, जिनमें छह यूक्रेनी और एक अमेरिकी नागरिक शामिल हैं, जिन्होंने कथित रूप से मिजोरम के माध्यम से अवैध रूप से म्यांमार में प्रवेश किया और सशस्त्र जातीय समूहों को हथियार संचालन और ड्रोन ऑपरेशन का प्रशिक्षण दिया, आंकड़े बताते हैं कि म्यांमार के साथ कुल 1,643 किमी सीमा में से अब तक केवल 43 किमी की ही बाड़बंदी हुई है।
- The National Investigation Agency (NIA) has accused the foreigners of importing drones from Europe to Myanmar via India for the use of ethnically armed groups (EAGs) in the country.  
राष्ट्रीय जांच एजेंसी (NIA) ने विदेशियों पर आरोप लगाया है कि उन्होंने यूरोप से ड्रोन भारत के माध्यम से म्यांमार भेजे, ताकि उनका उपयोग एथनिकली आर्म्ड ग्रुप्स (EAGs) द्वारा किया जा सके।
- The government recently informed a parliamentary panel that to check illegal migration, trafficking and insurgent activities along the Myanmar border, “coordination with local communities, Myanmar Army and associated security agencies is maintained” and a “joint counter-drone mechanism with monthly reporting has also been instituted”.  
सरकार ने हाल ही में एक संसदीय पैनल को बताया कि म्यांमार सीमा पर अवैध प्रवास, तस्करी और उग्रवादी गतिविधियों को रोकने के लिए “स्थानीय समुदायों, म्यांमार सेना और संबंधित सुरक्षा एजेंसियों के साथ समन्वय बनाए रखा जाता है” और “मासिक रिपोर्टिंग के साथ संयुक्त काउंटर-ड्रोन तंत्र भी स्थापित किया गया है”।
- The fencing project, which includes installation of gates that record biometrics and photographs of people who cross the border, has faced resistance as people on either side share deep ethnic, social and cultural ties.  
बाड़बंदी परियोजना, जिसमें सीमा पार करने वाले लोगों के बायोमेट्रिक्स और फोटो रिकॉर्ड करने वाले गेट्स की स्थापना शामिल है, को विरोध का सामना करना पड़ा है क्योंकि दोनों ओर के लोग गहरे जातीय, सामाजिक और सांस्कृतिक संबंध साझा करते हैं।
- As many as 43 designated exit and entry gates were proposed to regulate the movement of people and biometrics and gate passes were introduced.  
लोगों की आवाजाही को नियंत्रित करने के लिए कुल 43 निर्धारित प्रवेश और निकास द्वार प्रस्तावित किए गए थे और बायोमेट्रिक्स व गेट पास शुरू किए गए थे।
- However, over the past two years, the number of gates has declined to 38 and only 20 are now functional, a government source said.  
हालांकि, पिछले दो वर्षों में गेटों की संख्या घटकर 38 रह गई है और अब केवल 20 ही कार्यरत हैं, एक सरकारी स्रोत ने कहा।
- According to latest data provided by the Ministry to a Parliamentary Standing Committee on Home Affairs, of the total 1,643 km of fencing approved by the government, 390.39 km has been sanctioned and only 43.75 km of fencing has been completed so far; 346.64 km is currently under construction.  
गृह मामलों की संसदीय स्थायी समिति को मंत्रालय द्वारा दिए गए नवीनतम आंकड़ों के अनुसार, सरकार द्वारा स्वीकृत कुल 1,643 किमी बाड़बंदी में से 390.39 किमी को मंजूरी दी गई है और अब तक केवल 43.75 किमी का काम पूरा हुआ है; जबकि 346.64 किमी वर्तमान में निर्माणाधीन है।
- India and Myanmar share an unfenced border and have a unique arrangement called the Free Movement Regime (FMR).  
भारत और म्यांमार के बीच खुली सीमा है और उनके बीच फ्री मूवमेंट रेजिम (FMR) नामक एक विशेष व्यवस्था है।
- While Union Home Minister Amit Shah announced in February 2024 that the FMR was being scrapped, it was only regulated and free movement of people — without visas and passports on either side of the unfenced border — was restricted to 10 km from the earlier 16 km.  
हालांकि केंद्रीय गृह मंत्री अमित शाह ने फरवरी 2024 में FMR को समाप्त करने की घोषणा की थी, लेकिन इसे केवल नियंत्रित किया गया और बिना वीजा और पासपोर्ट के लोगों की आवाजाही — जो पहले 16 किमी तक थी — अब घटाकर 10 किमी तक सीमित कर दी गई।