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CONTACT: 9971932488



# PATRIOTIC IAS

## DAILY CURRENT AFFAIRS

### THE HINDU NEWSPAPER

### 17 FEBRUARY 2026

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2.	Defence personnel in uniform attend private event, spark row वर्दी में रक्षा कर्मियों की निजी कार्यक्रम में मौजूदगी, विवाद खड़ा

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)



PCS

## DGP gets President's Medal for Distinguished Service

The 1997 batch IPS officer Sagar Preet Hooda, Director General of Police, Chandigarh, has been conferred the President's Medal for Distinguished Service, one of the highest recognitions for exemplary and meritorious service in policing. The award was announced on the eve of Independence Day, 2025, and formally presented by the Union Minister of Home and Co-operation Amit Shah on Monday at an investiture ceremony held in New Delhi on the occasion of Delhi Police Raising Day. Mr. Hooda has rendered over 28 years of unblemished and distinguished service in the Indian Police Service.

सोमवार को नई दिल्ली में दिल्ली पुलिस स्थापना दिवस के अवसर पर आयोजित अलंकरण समारोह में औपचारिक रूप से प्रदान किया गया।

- Hooda has rendered over 28 years of unblemished and distinguished service in the Indian Police Service.

श्री हुड्डा ने भारतीय पुलिस सेवा में 28 वर्षों से अधिक की निष्कलंक और विशिष्ट सेवा प्रदान की है।

## DGP gets President's Medal for Distinguished Service

### डीजीपी को विशिष्ट सेवा के लिए राष्ट्रपति पदक

- The 1997 batch IPS officer Sagar Preet Hooda, Director General of Police, Chandigarh, has been conferred the President's Medal for Distinguished Service, one of the highest recognitions for exemplary and meritorious service in policing.

1997 बैच के आईपीएस अधिकारी सागर प्रीत हुड्डा, चंडीगढ़ के पुलिस महानिदेशक, को पुलिसिंग में उत्कृष्ट और सराहनीय सेवा के लिए राष्ट्रपति पदक (विशिष्ट सेवा) से सम्मानित किया गया है, जो सर्वोच्च सम्मानों में से एक है।

- The award was announced on the eve of Independence Day, 2025, and formally presented by the Union Minister of Home and Co-operation Amit Shah on Monday at an investiture ceremony held in New Delhi on the occasion of Delhi Police Raising Day.

यह पुरस्कार स्वतंत्रता दिवस, 2025 की पूर्व संध्या पर घोषित किया गया था और केंद्रीय गृह एवं सहकारिता मंत्री अमित शाह द्वारा



PCS

## Defence personnel in uniform attend private event, spark row

Defence Minister Rajnath Singh on Sunday felicitated awardees at the Bhavya Bharat Bhushan Awards during Sivaratri celebrations in Coimbatore. The awards were instituted by Jaggi Vasudev's Isha Foundation. But the presence of defence personnel in uniform at a private event sparked controversy with several retired officers objecting to it. Major-General B.S. Dhanoa (retd) said military officers can attend private functions "except that they should not be doing so in uniform". Lt. Gen. D.S. Hooda (retd) said, "Political leaders must ensure that uniformed personnel are not invited to functions in which questions can be raised." The ceremony honoured the Indian Armed Forces for Operation Sindoor.

## Defence personnel in uniform attend private event, spark row

### वर्दी में रक्षा कर्मियों की निजी कार्यक्रम में मौजूदगी, विवाद खड़ा

- Defence Minister Rajnath Singh on Sunday felicitated awardees at the Bhavya Bharat Bhushan Awards during Sivaratri celebrations in Coimbatore. रविवार को रक्षा मंत्री राजनाथ सिंह ने कोयंबटूर में शिवरात्रि समारोह के दौरान भव्य भारत भूषण पुरस्कारों में पुरस्कार विजेताओं को सम्मानित किया।

- The awards were instituted by Jaggi Vasudev's Isha Foundation.

ये पुरस्कार जग्गी वासुदेव की ईशा फाउंडेशन द्वारा स्थापित किए गए थे।

- But the presence of defence personnel in uniform at a private event sparked controversy with several retired officers objecting to it.

लेकिन निजी कार्यक्रम में वर्दी में रक्षा कर्मियों की मौजूदगी ने विवाद खड़ा कर दिया, जिस पर कई सेवानिवृत्त अधिकारियों ने आपत्ति जताई।

- Major-General B.S. Dhanoa (retd) said military officers can attend private functions "except that they should not be doing so in uniform".

मेजर-जनरल बी.एस. धनोआ (सेवानिवृत्त) ने कहा कि सैन्य अधिकारी निजी कार्यक्रमों में शामिल हो सकते हैं, "लेकिन उन्हें



वर्दी में ऐसा नहीं करना चाहिए।”

- Lt. Gen. D.S. Hooda (retd) said, “Political leaders must ensure that uniformed personnel are not invited to functions in which questions can be raised.”  
लेफ्टिनेंट जनरल डी.एस. हुड्डा (सेवानिवृत्त) ने कहा, “राजनीतिक नेताओं को यह सुनिश्चित करना चाहिए कि वर्दीधारी कर्मियों को ऐसे कार्यक्रमों में आमंत्रित न किया जाए जिन पर सवाल उठ सकते हों।”
- The ceremony honoured the Indian Armed Forces for Operation Sindoor.  
इस समारोह में ऑपरेशन सिंदूर के लिए भारतीय सशस्त्र बलों को सम्मानित किया गया।

## GS Paper 1: Society

### TOPICS COVERED

17 February 2026

1. Cities of debt  
ऋण के शहर

2. A separate classification for denotified tribes  
विमुक्त जनजातियों के लिए एक अलग वर्गीकरण

PATRIOTIC IAS



GS I: Society

## Cities of debt

ULBs need more administrative capacity before they can tap the market

The government's updated 'Urban Challenge Fund' has rendered the attention of urban local bodies (ULB) an even more precious resource as they struggle to complete unfinished work under other schemes, including AMRUT, Swachh Bharat Mission Urban 2.0, 'Smart Cities', and Pradhan Mantri Awas Yojana, which also suffer from chronic underutilisation. The government has pitched the fund as a move towards "market-linked, reform-driven and outcome-oriented" urban infrastructure, with the Centre covering 25% of project cost if cities raise at least 50% through bonds, loans, and PPPs. This is an attempt to incorporate fiscal discipline in a system that has never properly devolved fiscal powers to ULBs. Many Indian cities cannot credibly borrow without first fixing the political economy of local taxes and transfers, which are shaped by State-level issues and under-investment in municipal capacity. Requiring cities to "earn" their growth risks sidelining weaker ones and shifting the focus from services such as formalising settlements to developing monetisable assets. The ₹5,000 crore guarantee may ease borrowing for smaller cities, but proper accounting and administrative capacity are essential. When a Parliamentary Standing Committee asked about the Fund's eligibility criteria and application process, the Housing and Urban Affairs Ministry said that it was still "under examination", a possible recipe for politically coloured spending.

Across sectors, the Centre has, since 2014, increasingly reduced the share of public support while asking public systems to fill the gap using private finance. The CSIR was among the first casualties and urban development could be the latest. In higher education, the move towards infrastructure loans turned public universities into debt-laden entities that were expected to recover costs by increasing fees, affecting poor students. Studies of the National Health Mission's financial management have documented long delays to move funds through treasuries to implementing agencies, so in practice, hospitals have been asked to maintain services first and receive money later. Audits under the Ujwal DISCOM Assurance Yojana have exposed significant non-adherence and implementation gaps in the power sector. Private capital is not illegitimate and public systems should sometimes raise revenues; the issue is that the Centre increasingly conditions public support on market access instead of ensuring minimum service guarantees first. Thus, while the Fund's instruments are legitimate, it will increase the risk of becoming inordinate to "bankability" if land records are a mishmash, ULBs routinely violate 'master plans', and renters and low-income households do not receive additional protections.

delays in fund flow, forcing hospitals to maintain services first, receive money later.

राष्ट्रीय स्वास्थ्य मिशन के अध्ययन बताते हैं कि धन प्रवाह में देरी से अस्पतालों को पहले सेवाएँ चलानी पड़ती हैं, बाद में धन मिलता है।

- Audits under **Ujwal DISCOM Assurance Yojana** revealed **non-adherence and implementation gaps** in the power sector.

## Cities of debt

### ऋण के शहर

- **ULBs need more administrative capacity** before they can **tap the market**.

शहरी स्थानीय निकायों को बाजार से संसाधन जुटाने से पहले अधिक प्रशासनिक क्षमता की आवश्यकता है।

### Urban Challenge Fund and Urban Governance अर्बन चैलेंज फंड और शहरी शासन

- The government's updated 'Urban Challenge Fund' has made the attention of **urban local bodies (ULBs)** an even more precious resource as they struggle to complete unfinished work under **AMRUT, Swachh Bharat Mission Urban 2.0, Smart Cities, Pradhan Mantri Awas Yojana**.

सरकार के अद्यतन 'अर्बन चैलेंज फंड' ने शहरी स्थानीय निकायों (ULBs) का ध्यान और अधिक मूल्यवान बना दिया है क्योंकि वे **AMRUT, स्वच्छ भारत मिशन अर्बन 2.0, स्मार्ट सिटीज, प्रधानमंत्री आवास योजना** के अधूरे कार्य पूरे करने में संघर्ष कर रहे हैं।

- **These schemes also suffer from chronic underutilisation.**

ये योजनाएँ भी लगातार कम उपयोग की समस्या से ग्रस्त हैं।

- The fund is pitched as "**market-linked, reform-driven, outcome-oriented**" urban infrastructure, with the **Centre covering 25%** of project cost if cities raise **50% through bonds, loans, PPPs**.

इस फंड को "बाजार-आधारित, सुधार-प्रेरित, परिणाम-उन्मुख" शहरी अवसंरचना के रूप में प्रस्तुत किया गया है, जिसमें **केंद्र 25%** लागत देगा यदि शहर **बॉन्ड, ऋण, PPP के माध्यम से 50%** जुटाएँ।

- **Since 2014, the Centre has reduced public support share while pushing systems to use private finance.**

2014 से केंद्र ने सार्वजनिक समर्थन का हिस्सा घटाया और प्रणालियों को निजी वित्त अपनाने को कहा।

- **CSIR was an early casualty; urban development may be the next.**

CSIR पहले प्रभावित हुआ; अब शहरी विकास भी प्रभावित हो सकता है।

- **In higher education, infrastructure loans turned public universities into debt-laden entities, raising fees affecting poor students.**

उच्च शिक्षा में अवसंरचना ऋण ने सार्वजनिक विश्वविद्यालयों को ऋणग्रस्त बना दिया और फीस बढ़ने से गरीब छात्रों पर प्रभाव पड़ा।

- **Studies of National Health Mission show**

delays in fund flow, forcing hospitals to maintain services first, receive money later.

राष्ट्रीय स्वास्थ्य मिशन के अध्ययन बताते हैं कि धन प्रवाह में देरी से अस्पतालों को पहले सेवाएँ चलानी पड़ती हैं, बाद में धन मिलता है।

- Audits under **Ujwal DISCOM Assurance Yojana** revealed **non-adherence and implementation gaps** in the power sector.



उज्ज्वल डिस्कॉम आश्वासन योजना के ऑडिट में बिजली क्षेत्र में अनुपालन की कमी और क्रियान्वयन अंतर सामने आए।

- Private capital is legitimate, but the Centre increasingly links **public support to market access instead of ensuring minimum service guarantees.**

निजी पूंजी वैध है, पर केंद्र अब सार्वजनिक समर्थन को बाजार पहुँच से जोड़ रहा है बजाय न्यूनतम सेवा गारंटी सुनिश्चित करने के।

- The Fund risks becoming subordinate to “bankability” if **land records are unclear, master plans violated, and low-income households lack protections.**

यदि भूमि अभिलेख अस्पष्ट हों, मास्टर प्लान का उल्लंघन हो और निम्न आय वर्ग को सुरक्षा न मिले, तो यह फंड “बैंकबिलिटी” के अधीन हो सकता है।

PATRIOTIC IAS



# A separate classification for denotified tribes

Why were Denotified, Nomadic, and Semi-Nomadic Tribes classified as 'criminal' groups in the colonial era? What did the Idade Commission recommend? What was the problem with the SEED scheme rolled out by the Social Justice Ministry? Why do community leaders demand a separate classification for DNTs?

SS I: Society

EXPLAINER

Abhinav Lakshman

**The story so far:**  
On January 30, the Union government assured community leaders from Denotified, Nomadic, and Semi-Nomadic Tribes (DNTs) that the Office of the Registrar General and Census Commissioner of India had agreed to enumerate these communities in the upcoming second phase of the Census due in 2027. However, with no clarity on how this enumeration will be conducted, leaders of these communities are organising to push for their demand for a "separate column" for DNTs in the Census form. This demand has found support from academics and scholars, who have noted that the demand for a Census count of DNTs has been reiterated time and again by successive Commissions that have been set up to examine their condition in society.

**Who are the DNTs?**

The communities referred to as denotified, nomadic, and semi-nomadic tribes were, at one point, classified as "criminal" by colonial administrators, who had concluded that there were certain communities "addicted" to committing crimes. This was codified in the Criminal Tribes Act (CTA), first introduced in 1871, the same year that synchronous Censuses began in India.

The CTA, 1871, was introduced for the "registration, surveillance and control of certain criminal tribes and eunuchs", describing "criminal tribes" as a "tribe, gang, or class of persons" that are "addicted" to committing non-bailable offences. While introducing the legislation, then Member of Law and Order, T.V. Stephens had said that, "the special feature of India is the caste system... Keeping this in mind, the meaning of professional criminal is clear. It means a tribe whose ancestors were criminals from times immemorial, who are themselves destined by the usages of caste to commit crime and whose descendants will be offenders against law..."

It was only in 1952, that the Government of India officially repealed the CTA, which had by that time been amended a couple of times. The repeal of the Act had led to the denotification of communities classified as "criminal" under the CTA, leading to these groups becoming known as the DNTs.

However, in the same year, India saw the introduction of various habitual offender laws throughout the States, which, while doing away with the hereditary definition of people being compelled to commit crimes, classified certain people as "habitual offenders", leading to the continued targeting of these communities – this time not as "criminal" but as "habitual offenders".

**What is the history of their enumeration?**

While both the CTA and synchronous Censuses in India began in 1871, it was from 1911 onwards that Census reports started discussing "criminal tribes" specifically. Provincial Census reports from 1911 and 1931 provide an insight into the enumeration of these communities, where they were specifically classified as such. The 1931 Census was, however, the last time these communities were accounted for in the Census exercise. Since the repeal of the CTA and the denotification of the communities,



**New group:** A demonstration demanding de-notified tribes community certificate in Dindigul, Tamil Nadu, in 2025. G. KARTHIKEYAN

specific enumeration of these communities was done away with in subsequent Censuses, given the Republic's conclusions at the time that it was not necessary to enumerate castes (apart from Scheduled Castes (SC) and Scheduled Tribes (ST)) in Censuses.

But the state's effort to account for these communities had begun even before their official denotification, with the establishment of the Ayyangar Commission in 1949. Since 1952, by which time the concept of backward classes apart from SCs and STs had been introduced, several of the denotified communities were accommodated in these lists as "Vimukt Jatis". Eventually, the decades after India's Independence saw a majority of the denotified communities being assimilated into the SC, ST, or the Other Backward Classes (OBC) lists.

In 1998, author Mahasweta Devi and scholar G.N. Dey constituted the Denotified, Nomadic, and Semi-Nomadic Tribes-Rights Action Group (DNT-RAG), the work of which had led to a technical advisory group on DNTs, and the eventual formation of the first National Commission for DNTs, headed by B.S. Renke. The Commission submitted its report on recommendations to uplift DNTs in 2008. Following this, another national Commission was set up under the leadership of Bhiku Ramji Idade, which submitted its report in 2017. All Commission reports on the subject of DNTs began with the question of identifying and classifying them, before noting that a full, accurate classification and identification exercise was not possible until a Census count was conducted for these communities.

The latest assessment of the communities in the Idade Commission's report had identified close to 1,200 communities that were DNTs, noting that all of these communities had been assimilated into the existing classifications of SCs, STs, and OBCs. Apart from this, the Commission had identified about 268 other denotified communities that had

not been classified at all. A NITI Aayog-commissioned study conducted by the Anthropological Survey of India on these 268 communities had recommended their classifications. But this report has gone into cold storage.

**What is their status now?**

While in many States, DNTs have been incorporated into backward classes lists, and in SC and ST lists, where certain benefits of policies like reservations may have trickled down to them owing to selective application of sub-classification, State governments have formulated policies specifically targeting them as well. However, community leaders have argued that despite this, the stigma they had been subjected to continued even after their denotification, through the operation of laws like the Habitual Offenders Act. They argue that this led to their continued discrimination, and that they remained largely socially, economically, educationally, and politically backward, except for a few denotified communities that were settled and had used available resources to uplift themselves to a certain extent.

Even though the Idade Commission report had recommended a permanent National Commission for the DNTs, the first Narendra Modi-led government had decided that, since most of these communities had already been included in SC, ST, and OBC lists, a Welfare Board would be sufficient to address their concerns.

The Social Justice Ministry, eventually, also rolled out the SEED scheme for livelihood, education, housing, and health interventions for DNTs. But the government has been able to spend only a fraction of its intended ₹200 crore spending over the last five years. A principal problem with implementing this scheme was that it required an identification of a beneficiary as a DNT, which required them to have a DNT certification that need not be exclusive of the SC, ST, or OBC identities (if they were already included in these lists). The

loudest complaint of the community across States has been that they are not being issued DNT certificates despite continuous reminders and letters from the Central government, with government data showing that only select districts in about half a dozen States issue these certificates.

This has only fed the movement of DNTs across many parts of India seeking a separate Constitutional classification for themselves on par with the SC, ST, and OBC categorisations, arguing that this would then lead to uniform issuance of DNT certificates. Further, this movement has also called for sub-classification within the specific DNT list to recognise uneven backwardness of communities within this grouping.

Moreover, community leaders and associations like the All India Denotified Nomadic Tribes Development Council have been framing their struggle for a separate classification as the need to have their specific discrimination and stigmatisation recognised by the State. In doing so, they have argued that the only reason colonial administrators labelled them "criminal" was because of their insistence on resisting foreign aggressors. Many community leaders have also noted that they had been the first line of defence even before colonialism, and had histories of resisting Islamic rulers as well.

**What now?**

Apart from assurances to community leaders that they will be counted, there has been no indication as to how this enumeration will take place.

DNT associations have made their demand clear that they want a specific column or question in the Census forms to classify people as DNTs. This demand has found support from scholars like Mr. Devy, who have consistently argued for a separate Census for the DNTs.

However, so far, the Union Government's public statements have indicated that it is not considering any proposal for a separate classification for the DNTs.

**THE GIST**

▼ The communities referred to as denotified, nomadic, and semi-nomadic tribes were, at one point, classified as "criminal" by colonial administrators, who had concluded that there were certain communities "addicted" to committing crimes.

▼ In 1998, author Mahasweta Devi and scholar G.N. Dey constituted the Denotified, Nomadic, and Semi-Nomadic Tribes-Rights Action Group (DNT-RAG), the work of which had led to a technical advisory group on DNTs, and the eventual formation of the first National Commission for DNTs.

▼ The Social Justice Ministry, eventually, also rolled out the SEED scheme for livelihood, education, housing, and health interventions for DNTs. But the government has been able to spend only a fraction of its intended ₹200 crore spending over the last five years.

## A separate classification for denotified tribes

विमुक्त जनजातियों के लिए एक अलग वर्गीकरण

### Enumeration of Denotified, Nomadic and Semi-Nomadic Tribes (DNTs)

विमुक्त, घुमंतू और अर्ध-घुमंतू जनजातियों (DNTs) की गणना

- On January 30, the Union government assured community leaders from **Denotified, Nomadic and Semi-Nomadic Tribes (DNTs)** that the **Office of the Registrar General and Census Commissioner of India** had agreed to enumerate these communities in the **second phase of the Census due in 2027**.

30 जनवरी को केंद्र सरकार ने विमुक्त, घुमंतू और अर्ध-घुमंतू जनजातियों (DNTs) के नेताओं को आश्वासन



दिया कि भारत के महापंजीयक एवं जनगणना आयुक्त कार्यालय ने इन समुदायों की गणना 2027 में होने वाली जनगणना के दूसरे चरण में करने पर सहमति दी है।

- However, with **no clarity on how this enumeration will be conducted**, leaders are organising to push for a **“separate column” for DNTs in the Census form**.  
लेकिन गणना कैसे होगी इस पर स्पष्टता न होने के कारण, नेता जनगणना प्रपत्र में DNTs के लिए **“अलग कॉलम”** की मांग को आगे बढ़ाने के लिए संगठित हो रहे हैं।
- This demand has support from **academics and scholars**, who note that the **Census count of DNTs has been repeatedly recommended by successive Commissions**.  
इस मांग को शिक्षाविदों और विद्वानों का समर्थन मिला है, जिन्होंने कहा कि **DNTs की जनगणना की सिफारिश कई आयोगों द्वारा बार-बार की गई है।**

## Who are the DNTs? DNTs कौन हैं?

- The communities called **Denotified, Nomadic and Semi-Nomadic Tribes** were once classified as **“criminal” by colonial administrators**.  
विमुक्त, घुमंतू और अर्ध-घुमंतू जनजातियाँ कभी औपनिवेशिक प्रशासकों द्वारा **“अपराधी”** घोषित की गई थीं।
- This classification was codified in the **Criminal Tribes Act (CTA), 1871**, introduced the same year as the **first synchronous Census in India**.  
यह वर्गीकरण **क्रिमिनल ट्राइब्स एक्ट (CTA), 1871** में शामिल किया गया, जिसे उसी वर्ष लागू किया गया जब भारत में पहली समकालिक जनगणना हुई।
- The **CTA, 1871** aimed at **registration, surveillance and control of certain criminal tribes and eunuchs**.  
**CTA, 1871** का उद्देश्य कुछ अपराधी जनजातियों और हिजड़ों का पंजीकरण, निगरानी और नियंत्रण था।
- It described **“criminal tribes” as groups “addicted” to committing non-bailable offences**.  
इसमें **“अपराधी जनजातियों”** को ऐसे समूह बताया गया जो **गैर-जमानती अपराध करने के “आदी”** हैं।
- While introducing the law, **T.V. Stephens** linked criminality to the **caste system**, claiming such tribes were **destined by caste to commit crimes**.  
कानून प्रस्तुत करते समय **टी.वी. स्टीफेंस** ने अपराध को जाति व्यवस्था से जोड़ते हुए कहा कि ऐसी जनजातियाँ **जाति के कारण अपराध करने के लिए नियत** हैं।
- **In 1952, the Government of India repealed the CTA, leading to the denotification of these communities**.  
**1952** में भारत सरकार ने **CTA** को समाप्त किया, जिससे इन समुदायों का **विमुक्तिकरण** हुआ।
- After this repeal, these communities came to be known as **Denotified Tribes (DNTs)**.  
इस समाप्ति के बाद ये समुदाय **विमुक्त जनजातियाँ (DNTs)** कहलाए।
- **However, the same year saw the introduction of Habitual Offender laws across States, replacing hereditary criminality with the label “habitual offenders”**.  
लेकिन उसी वर्ष राज्यों में **हैबिचुअल ऑफेंडर कानून लागू हुए**, जिन्होंने वंशानुगत अपराध की अवधारणा हटाकर **“आदतन अपराधी”** का लेबल दिया।
- **This resulted in the continued targeting of these communities, no longer as “criminal” but as “habitual offenders”**.  
इससे इन समुदायों को **लगातार निशाना बनाया जाता रहा**, अब **“अपराधी” नहीं बल्कि “आदतन अपराधी”** के रूप में।

## History of their enumeration उनकी गणना का इतिहास

- While both the **CTA** and synchronous **Censuses in India began in 1871**, it was from **1911 onwards** that Census reports started discussing **“criminal tribes”** specifically.  
हालाँकि **CTA** और भारत में समकालिक **जनगणना 1871** में शुरू हुई, लेकिन **1911** से जनगणना रिपोर्टों में विशेष रूप से **“अपराधी जनजातियों”** पर चर्चा शुरू हुई।
- Provincial Census reports from **1911 and 1931** provide insight into enumeration, where these communities were **specifically classified** as such.



1911 और 1931 की प्रांतीय जनगणना रिपोर्टें इन समुदायों की गणना पर प्रकाश डालती हैं, जहाँ इन्हें विशेष रूप से इसी रूप में वर्गीकृत किया गया था।

- The **1931 Census** was the **last time** these communities were accounted for in the Census exercise.
- **1931 की जनगणना** आखिरी बार थी जब इन समुदायों को जनगणना में गिना गया।
- However, the State's effort to account for these communities began earlier with the **Ayyangar Commission in 1949**.
- हालाँकि इन समुदायों की गणना का प्रयास पहले ही **1949 के अय्यंगार आयोग** से शुरू हो गया था।
- **By 1952**, with the introduction of **backward classes apart from SC and ST**, several denotified communities were included as **"Vimukt Jatis"**.
- **1952 तक SC और ST के अलावा पिछड़े वर्गों** की अवधारणा आने पर कई विमुक्त समुदायों को **"विमुक्त जाति"** के रूप में शामिल किया गया।
- **In the decades after Independence**, most denotified communities were **assimilated into SC, ST or OBC lists**.
- स्वतंत्रता के बाद के दशकों में अधिकांश विमुक्त समुदायों को **SC, ST या OBC सूचियों में शामिल** कर लिया गया।
- **In 1998, Mahasweta Devi and G.N. Devy** formed the **DNT-RAG**, leading to a technical advisory group and the **first National Commission for DNTs headed by B.S. Renke**.
- **1998 में महाश्वेता देवी और जी.एन. देवी** ने **DNT-RAG** बनाया, जिसके परिणामस्वरूप तकनीकी सलाहकार समूह और **बी.एस. रेंके की अध्यक्षता में पहला राष्ट्रीय आयोग** बना।
- The **Renke Commission submitted its report in 2008** with recommendations for upliftment of DNTs.
- **रेंके आयोग ने 2008 में अपनी रिपोर्ट** प्रस्तुत की, जिसमें DNTs के उत्थान की सिफारिशें थीं।
- Later, another national Commission under **Bhiku Ramji Idate** submitted its report in **2017**.
- बाद में **भीखू रामजी इदाते** के नेतृत्व में एक और राष्ट्रीय आयोग ने **2017 में रिपोर्ट** प्रस्तुत की।
- All Commission reports began with the need to **identify and classify DNTs**, noting that **accurate classification was impossible without a Census count**.
- सभी आयोगों की रिपोर्टों ने **DNTs की पहचान और वर्गीकरण** की आवश्यकता से शुरुआत की और कहा कि **जनगणना के बिना सही वर्गीकरण संभव नहीं**।
- The **Idate Commission identified about 1,200 DNT communities**, noting most were already in **SC, ST, or OBC categories**.
- **इदाते आयोग ने लगभग 1,200 DNT समुदायों की पहचान की**, जिनमें से अधिकांश पहले से **SC, ST या OBC श्रेणियों में शामिल थे**।
- It also identified **about 268 denotified communities** that had **not been classified at all**.
- इसने लगभग **268 विमुक्त समुदायों की भी पहचान की जो किसी भी श्रेणी में शामिल नहीं थे**।
- A **NITI Aayog-commissioned Anthropological Survey of India study** recommended classification of these **268 communities**, but the report has **gone into cold storage**.
- **नीति आयोग द्वारा कराए गए भारतीय मानवशास्त्रीय सर्वेक्षण** ने इन **268 समुदायों के वर्गीकरण** की सिफारिश की, लेकिन यह रिपोर्ट **ठंडे बस्ते में चली गई**।

**What is their status now?**

**उनकी वर्तमान स्थिति क्या है?**

- Even though the **Idate Commission recommended a permanent National Commission for DNTs**, the first **Narendra Modi government** decided that since most communities were already in **SC, ST, and OBC lists**, a **Welfare Board** would be sufficient.
- हालाँकि **इदाते आयोग ने DNTs के लिए स्थायी राष्ट्रीय आयोग** की सिफारिश की, लेकिन पहली **नरेंद्र मोदी सरकार** ने निर्णय लिया कि चूँकि अधिकांश समुदाय पहले से **SC, ST और OBC सूचियों में हैं**, इसलिए एक **कल्याण बोर्ड** पर्याप्त होगा।
- The **Social Justice Ministry** also launched the **SEED scheme for livelihood, education, housing, and health interventions for DNTs**.
- **सामाजिक न्याय मंत्रालय ने DNTs के लिए SEED योजना शुरू की**, जिसमें **जीविका, शिक्षा, आवास और स्वास्थ्य** से जुड़े प्रावधान हैं।



- However, the government has spent only a fraction of the intended ₹200 crore over the last five years.  
हालाँकि, सरकार पिछले पाँच वर्षों में निर्धारित ₹200 करोड़ का केवल एक छोटा हिस्सा ही खर्च कर सकी है।
- A key problem in implementation was the need to identify a beneficiary as a DNT, requiring a DNT certificate, which could exist alongside SC, ST, or OBC identity.  
कार्यान्वयन की प्रमुख समस्या लाभार्थी को DNT के रूप में पहचानना थी, जिसके लिए DNT प्रमाणपत्र आवश्यक था, जो SC, ST या OBC पहचान के साथ भी हो सकता है।
- The strongest complaint across States is that DNT certificates are not being issued, despite repeated reminders from the Central government.  
राज्यों में सबसे बड़ी शिकायत यह है कि DNT प्रमाणपत्र जारी नहीं किए जा रहे, जबकि केंद्र सरकार द्वारा बार-बार निर्देश दिए गए हैं।
- Government data show that only select districts in about half a dozen States issue these certificates.  
सरकारी आँकड़ों के अनुसार केवल लगभग आधा दर्जन राज्यों के चुनिंदा जिलों में ही ये प्रमाणपत्र जारी किए जाते हैं।
- This has only fed the movement of DNTs across many parts of India seeking a separate Constitutional classification on par with SC, ST, and OBC, arguing that this would lead to uniform issuance of DNT certificates.  
इससे DNTs का आंदोलन भारत के कई हिस्सों में बढ़ा है, जहाँ वे SC, ST और OBC के समान अलग संवैधानिक वर्गीकरण की मांग कर रहे हैं, यह तर्क देते हुए कि इससे DNT प्रमाणपत्रों का समान रूप से जारी होना संभव होगा।
- Further, the movement has also called for sub-classification within the DNT list to recognise uneven backwardness among communities.  
इसके अलावा, आंदोलन ने DNT सूची के भीतर उप-वर्गीकरण की मांग भी की है ताकि समुदायों के बीच असमान पिछड़ेपन को पहचाना जा सके।
- Moreover, community leaders and associations like the All India Denotified Nomadic Tribes Development Council have framed their struggle as a demand to recognise their specific discrimination and stigmatisation by the State.  
साथ ही, समुदाय के नेता और संगठन जैसे All India Denotified Nomadic Tribes Development Council ने अपने संघर्ष को राज्य द्वारा किए गए विशेष भेदभाव और कलंक की पहचान की मांग के रूप में प्रस्तुत किया है।
- They argue colonial administrators labelled them “criminal” because of their resistance to foreign aggressors.  
उनका तर्क है कि औपनिवेशिक शासकों ने उन्हें “अपराधी” इसलिए कहा क्योंकि उन्होंने विदेशी आक्रमणकारियों का विरोध किया था।
- Many leaders also note they were the first line of defence even before colonialism and had resisted Islamic rulers as well.  
कई नेताओं का कहना है कि वे उपनिवेशवाद से पहले भी पहली रक्षा पंक्ति थे और उन्होंने इस्लामी शासकों का भी विरोध किया था।

### What now? अब आगे क्या?

- Apart from assurances that they will be counted, there is no clarity on how the enumeration will take place.  
गणना किए जाने के आश्वासन के अलावा, गणना कैसे होगी इस पर कोई स्पष्टता नहीं है।
- DNT associations have demanded a separate column/question in Census forms to classify people as DNTs.  
DNT संगठनों ने मांग की है कि जनगणना फॉर्म में अलग कॉलम/प्रश्न हो जिससे लोगों को DNT के रूप में वर्गीकृत किया जा सके।
- This demand has found support from scholars like Mr. Devy, who argue for a separate Census for DNTs.  
इस मांग को श्री देवि जैसे विद्वानों का समर्थन मिला है, जो DNTs के लिए अलग जनगणना की वकालत करते हैं।



- However, **Union Government** statements indicate it is **not considering** any proposal for a **separate classification for DNTs**.  
हालाँकि, **केंद्र सरकार** के बयानों से संकेत मिलता है कि वह **DNTs** के लिए **अलग वर्गीकरण** के किसी प्रस्ताव पर **विचार नहीं कर रही है**।

## GS Paper 1: Geography

**TOPICS COVERED**

**17 February 2026**

**1. 'Full Manipur Cabinet, Ministers' portfolio will be decided soon'**  
**'पूर्ण मणिपुर मंत्रिमंडल, मंत्रियों के विभाग शीघ्र तय किए जाएंगे'**

# 'Full Manipur Cabinet, Ministers' portfolio will be decided soon'

Deputy Chief Minister says the rehabilitation of people displaced by the long violence in the State is a priority for the new government; on his colleague Nemcha Kipgen, a Kuki-Zo leader, not being able to travel to Imphal, he says, 'She is supporting us to reach out to the people'; the State government plans to hold a Cabinet meeting in Senapati, a Naga area, and go there via Kangpokpi, a Kuki-Zo area

GS 1: Geography  
Mapping  
INTERVIEW

### Losii Dikho

Vijaita Singh  
NEW DELHI

On February 4, President's Rule was revoked in Manipur and a new Chief Minister, Yumnam Khemchand Singh, a Meitei, was sworn in, along with two deputies — Losii Dikho, a Naga, and Nemcha Kipgen, a Kuki-Zo. Mr. Dikho, from the Naga People's Front, an alliance partner of the Bharatiya Janata Party (BJP), speaks about the priorities of the new government. Edited excerpts:

It has been over 10 days

since the swearing-in ceremony of the Chief Minister and the two Deputy CMs, including you, took place. Why is the full Cabinet not in place and why have portfolios not been allocated yet?

The portfolios will be allocated after the full Cabinet is expanded. I spoke to the Chief Minister, and he agreed with me.

When is it expected?

It should not take much time. And of course, it has to be coordinated with the Centre.

You were the chief guest at a football match organised by the Zomi

Council last week at Churachandpur. What was the outcome?

It was a fruitful trip. The nine tribes under the nomenclature Zomi had organised the event. I had a closed-door meeting with all the tribe leaders, the president, and all of them strongly supported the formation of the government. They invited me again for another festival on February 20.

After the ethnic violence between Meitei and Kuki-Zo people erupted on May 3, 2023, over 60,000 people were displaced from their homes. What is the government's strategy to rehabilitate them?



This is a priority. Money has been distributed among the people and additional money has been provided to the displaced people who are moving back to their homes.

The Litan area in Ukhrul district has witnessed clashes and arson between the Kuki

and Naga communities over the past two weeks? How is the situation now, and what is the government's strategy?

The issue is not between all Nagas and Kukis. Few members of Tangkhul Nagas and

Kukis were involved. But we cannot keep silent and we intervened and involved the United Naga Council and the head of the Tangkhul tribe; we joined hands.

The land dispute between the two communities should be settled and the land ownership and agreement has to be worked out. Both communities have come to an understanding and stopped the fight but till now no agreement has been signed. But it is almost under control. Naga people do not want to have these tensions any more, but the landowners have to be recognised

The other Deputy CM, Nemcha Kipgen, a

Kuki-Zo, has not been able to travel to Imphal yet. So how is the government functioning and how are the three of you communicating?

She is at present at her home in Kangpokpi, and every day, we speak on the phone.

She is supporting us to reach out to the people as she cannot come to Imphal. We do virtual video meetings. So far, two Cabinet meetings under the Chief Minister have taken place where she participated through a video call.

What about the free movement of all vehicles and people

from all communities on National Highway-2? It hasn't started yet.

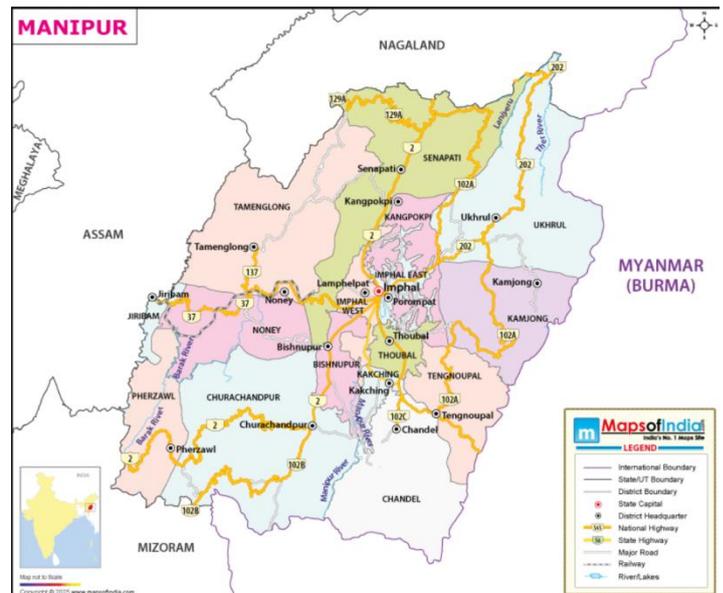
I have spoken to the Deputy CM and our second plan is that we will have a Cabinet meeting in Senapati (Naga area) next. The CM told her that we will go to Senapati by road via Kangpokpi (Kuki-Zo area, NH2 passes through here) and that we have to reach out to people. As the new government has been installed, there is a good response from all the communities. I reached out to the Thadou people in Kangpokpi, and they have invited me to attend the church on Sunday. It is a positive sign.

## 'Full Manipur Cabinet, Ministers' portfolio will be decided soon'

**'पूर्ण मणिपुर मंत्रिमंडल, मंत्रियों के विभाग शीघ्र तय किए जाएंगे'**

- **Senapati, a Naga area, and go there via Kangpokpi, a Kuki-Zo area**  
सेनापति, एक नागा क्षेत्र, कांगपोकपी, एक कुकी-जो क्षेत्र,
- **On February 4, President's Rule was revoked in Manipur and a new Chief Minister, Yumnam Khemchand Singh, a Meitei, was sworn in, along with two deputies — Losii Dikho, a Naga, and Nemcha Kipgen, a Kuki-Zo.**

4 फरवरी को मणिपुर में राष्ट्रपति शासन हटाया गया और नए मुख्यमंत्री युमनाम खेमचंद सिंह, जो मैतेई हैं, ने शपथ ली, साथ ही दो उपमुख्यमंत्री — लोसी डिखो, एक नागा, और नेमचा क्पिगेन, एक कुकी-जो — ने भी शपथ ली।



## GS Paper II: Polity,



TOPICS COVERED		17 February 2026
1.	<b>Constitution Bench to hear pleas against DPDP Act</b> डीपीडीपी अधिनियम के खिलाफ याचिकाओं पर संविधान पीठ सुनवाई करेगी	
2.	<b>SC to hear in April pleas on Sabarimala women entry ruling</b> सबरिमला महिला प्रवेश फैसले पर याचिकाओं की अप्रैल में सुनवाई करेगा सुप्रीम कोर्ट	
3.	<b>Supreme Court allows 1993 Mumbai blasts convict to withdraw appeal on remission</b> सुप्रीम कोर्ट ने 1993 मुंबई धमाकों के दोषी को सजा में छूट पर अपील वापस लेने की अनुमति दी	
4.	<b>India's federalism is in need of a structural reset</b> भारत के संघवाद को संरचनात्मक पुनर्संतुलन की आवश्यकता है	

## Constitution Bench to hear pleas against DPDP Act

GS II: Polity

**Krishnadas Rajagopal**  
NEW DELHI

The Supreme Court on Monday agreed to refer to a Constitution Bench a series of petitions arguing that India's new digital personal data law delivers a "body blow" to citizens' right to a transparent and accountable government under the Right to Information (RTI) Act.

Section 44(3) of the Digital Personal Data Protection (DPDP) Act of 2023 imposes a "blanket ban" on the RTI Act applicants, preventing them from seeking disclosure of 'personal information', the petitioners said.

Chief Justice of India Surya Kant, heading a three-judge Bench, refused a plea to pass an interim order to stay the implementation of Section 44(3), though the top judge said that the petitions raised a



"complex, slightly sensitive and really interesting" question of law.

"We may have to lay down what is meant by 'personal information,'" Chief Justice Kant remarked, issuing notice to the government.

**'Unguided discretion'**

Advocate Vrinda Grover, appearing for petitioner Venkatesh Nayak, submitted that the government, instead of using a chisel, used "hammer to deliver body blows to citizens' right to information".

Ms. Grover argued that Section 44(3) introduced by the DPDP Act has accorded the government "unguided discretion to deny personal information, which is unconstitutional". In fact, the fundamental right to privacy has been extended to the State.

The petitioners argued that Section 44(3) has amended Section 8(1)(j) of the RTI Act.

Originally, the RTI provision had exempted authorities from disclosing personal information to an applicant if the details

sought had no relationship to any public activity or if disclosure would amount to unwarranted invasion of privacy. Even then, the government had to disclose if public interest outweighed privacy.

The decision whether or not to reveal 'personal information' was taken by a Public Information Officer or the First Appellate Authority under the RTI Act after thoroughly weighing privacy and transparency concerns.

"Section 8(1)(j) of the RTI Act had struck the right balance between the right to privacy and the right to information," advocates Prashant Bhushan and Rahul Gupta, appearing for the National Campaign for People's Right to Information, submitted.

Mr. Bhushan argued that a five-judge Constitution Bench in its November 2019 judgment in *Central*

*Public Information Officer versus Supreme Court of India* had examined Section 8(1)(j) of the RTI Act to apply the proportionality test to balance the right to information against the right to privacy.

The 2019 judgment held that personal information should remain in the realm of privacy unless disclosure was necessary in the larger public interest.

"It is an unreasonable restriction on the right under Article 19 (right to free speech). Privacy is not a fundamental right available to the state. It violates Article 14 (right to equal treatment) by equating the privacy of public functionaries to that of ordinary citizens," Mr. Nayak's petition argued.

Mr. Bhushan said the Constitutional consequence of the DPDP provision was both immediate and serious.

### Constitution Bench to hear pleas against DPDP Act

#### डीपीडीपी अधिनियम के खिलाफ याचिकाओं पर संविधान पीठ सुनवाई करेगी

- The **Supreme Court** on Monday agreed to refer to a **Constitution Bench** a series of petitions arguing that India's new **digital personal data law** delivers a "body blow" to citizens' right to a **transparent and accountable government** under the **Right to Information (RTI) Act**.

सुप्रीम कोर्ट ने सोमवार को याचिकाओं की एक श्रृंखला को संविधान पीठ को भेजने पर सहमति जताई, जिनमें तर्क दिया गया कि भारत का नया डिजिटल व्यक्तिगत डेटा कानून सूचना का अधिकार (RTI) अधिनियम के तहत नागरिकों के पारदर्शी और जवाबदेह सरकार के अधिकार पर "गंभीर प्रहार" करता है।

- Section 44(3)** of the **Digital Personal Data Protection (DPDP) Act of 2023** imposes a "blanket ban" on the RTI Act applicants, preventing them from seeking disclosure of 'personal information', the petitioners said.

डिजिटल पर्सनल डेटा प्रोटेक्शन (DPDP) अधिनियम, 2023 की धारा 44(3) आरटीआई आवेदकों पर



“पूर्ण प्रतिबंध” लगाती है, जिससे उन्हें ‘व्यक्तिगत जानकारी’ के प्रकटीकरण की मांग करने से रोका जाता है, याचिकाकर्ताओं ने कहा।

- **Chief Justice of India Surya Kant**, heading a **three-judge Bench**, refused a plea to pass an **interim order** to stay the implementation of **Section 44(3)**, though the top judge said that the petitions raised a “**complex, slightly sensitive and really interesting**” question of law.  
भारत के मुख्य न्यायाधीश सूर्य कांत, तीन-न्यायाधीशीय पीठ की अध्यक्षता करते हुए, धारा 44(3) के क्रियान्वयन पर रोक लगाने के लिए अंतरिम आदेश देने से इनकार किया, हालांकि शीर्ष न्यायाधीश ने कहा कि याचिकाएँ कानून का “जटिल, कुछ हद तक संवेदनशील और वास्तव में दिलचस्प” प्रश्न उठाती हैं।
- “We may have to lay down what is meant by ‘**personal information**’,” **Chief Justice Kant** remarked, **issuing notice to the government**.  
“हमें यह निर्धारित करना पड़ सकता है कि ‘व्यक्तिगत जानकारी’ से क्या तात्पर्य है,” मुख्य न्यायाधीश कांत ने टिप्पणी करते हुए सरकार को नोटिस जारी किया।

### ‘Unguided discretion’ ‘अनियंत्रित विवेकाधिकार’

- **Section 44(3)** introduced by the **DPDP Act** has accorded the government “**unguided discretion to deny personal information, which is unconstitutional**”. In fact, the **fundamental right to privacy** has been extended to the State.  
सुश्री ग्रोवर ने तर्क दिया कि **DPDP अधिनियम** द्वारा लाई गई धारा 44(3) सरकार को “अनियंत्रित विवेकाधिकार” देती है जिससे वह व्यक्तिगत जानकारी देने से इनकार कर सके, जो असंवैधानिक है। वास्तव में, मौलिक निजता का अधिकार राज्य तक विस्तारित कर दिया गया है।
- The petitioners argued that **Section 44(3)** has amended **Section 8(1)(j)** of the **RTI Act**.  
याचिकाकर्ताओं ने तर्क दिया कि धारा 44(3) ने आरटीआई अधिनियम की धारा 8(1)(j) में संशोधन किया है।
- Originally, the RTI provision had exempted authorities from disclosing **personal information** to an applicant if the details sought had no relationship to any **public activity** or if disclosure would amount to **unwarranted invasion of privacy**. Even then, the government had to disclose if **public interest outweighed privacy**.  
मूल रूप से, आरटीआई प्रावधानों के तहत यदि मांगी गई जानकारी का किसी सार्वजनिक गतिविधि से कोई संबंध नहीं होता या उसका खुलासा अनावश्यक निजता हनन होता, तो प्राधिकरणों को व्यक्तिगत जानकारी देने से छूट थी। फिर भी, यदि सार्वजनिक हित निजता से अधिक होता, तो सरकार को जानकारी देनी होती थी।
- The decision whether or not to reveal ‘**personal information**’ was taken by a **Public Information Officer** or the **First Appellate Authority** under the RTI Act after thoroughly weighing **privacy and transparency** concerns.  
‘व्यक्तिगत जानकारी’ उजागर की जाए या नहीं, इसका निर्णय आरटीआई अधिनियम के तहत लोक सूचना अधिकारी या प्रथम अपीलीय प्राधिकारी द्वारा निजता और पारदर्शिता के पहलुओं को तौलने के बाद लिया जाता था।
- “**Section 8(1)(j)** of the RTI Act had struck the **right balance** between the **right to privacy** and the **right to information**,” advocates **Prashant Bhushan** and **Rahul Gupta**, appearing for the **National Campaign for People’s Right to Information**, submitted.  
नेशनल कैम्पेन फॉर पीपल्स राइट टू इन्फॉर्मेशन की ओर से पेश अधिवक्ता प्रशांत भूषण और राहुल गुप्ता ने कहा कि आरटीआई अधिनियम की धारा 8(1)(j) ने निजता के अधिकार और सूचना के अधिकार के बीच सही संतुलन बनाया था।
- Mr. Bhushan argued that a **five-judge Constitution Bench** in its **November 2019** judgment in **Central Public Information Officer versus Supreme Court of India** had examined **Section 8(1)(j)** of the RTI Act to apply the **proportionality test** to balance the right to information against the right to privacy.  
श्री भूषण ने तर्क दिया कि नवंबर 2019 में सेंट्रल पब्लिक इन्फॉर्मेशन ऑफिसर बनाम सुप्रीम कोर्ट ऑफ इंडिया मामले में पांच-न्यायाधीशीय संविधान पीठ ने धारा 8(1)(j) की समीक्षा करते हुए अनुपातिकता परीक्षण लागू किया था।
- The **2019 judgment** held that **personal information** should remain in the realm of **privacy** unless disclosure was necessary in the **larger public interest**.  
2019 के फैसले में कहा गया था कि व्यक्तिगत जानकारी निजता के दायरे में ही रहनी चाहिए, जब तक कि बड़े सार्वजनिक हित में उसका खुलासा आवश्यक न हो।



- "It is an **unreasonable restriction** on the right under **Article 19** (right to free speech). **Privacy** is not a **fundamental right** available to the state. It violates **Article 14** (right to equal treatment) by equating the privacy of **public functionaries** to that of **ordinary citizens**," Mr. Nayak's petition argued.  
"यह **अनुच्छेद 19** (अभिव्यक्ति की स्वतंत्रता) के तहत अधिकार पर **अयुक्तिसंगत प्रतिबंध** है। **निजता** राज्य को उपलब्ध कोई **मौलिक अधिकार** नहीं है। यह **अनुच्छेद 14** (समानता का अधिकार) का उल्लंघन करता है, क्योंकि यह **सार्वजनिक पदाधिकारियों** की निजता को **साधारण नागरिकों** के समान मानता है," श्री नायक की याचिका में कहा गया।
- Mr. Bhushan said the **constitutional consequence** of the **DPDP provision** was both **immediate and serious**.

## SC to hear in April pleas on Sabarimala women entry ruling

GS II: Polity

Krishnadas Rajagopal  
NEW DELHI



The 9-judge Bench would hear the review petitioners challenging the 2018 judgment.

The Supreme Court on Monday scheduled for hearing a series of review and writ petitions on a September 2018 judgment, which allowed women of menstruating age to enter the Sabarimala temple in Kerala, before a nine-judge Constitution Bench from April 7, 2026.

A Bench headed by Chief Justice of India Surya Kant said the maintainability of the review petitions had already been decided by an earlier nine-judge Bench constituted in 2019 by then Chief Justice of India Sharad A. Bobde. The hearings before the Bench had to be aborted abruptly due to the onset of the COVID pandemic.

The Supreme Court gave a brief timeline for the hearing of the case in April 2026. The Bench would hear the review petitioners challenging the 2018 judgment from April 7 to 9. Those opposing them would be heard from April 14 to 16. The rejoinder submissions would be heard on April 21, followed by the concluding submissions from the *amicus curiae* on April 22. Parties have to adhere to the timeline, the court stressed.

In November 2019, a majority judgment by a five-judge Constitution Bench led by then Chief Justice Ranjan Gogoi had referred the Sabarimala review and writ petitions to a seven-judge Bench.

The 2019 majority judg-

ment had also clubbed similar petitions concerning the essentiality of religious practices pending in the Supreme Court, including the right of Muslim women to enter mosque and the issue of female genital mutilation practised by the Dawoodi Bohra community, with the Sabarimala case.

The judgment in 2019 framed legal questions in the case, including whether practices considered essential should be given constitutional protection and the extent to which the judiciary could intervene in an essential religious practice. The nine-judge Bench was constituted as it had to necessarily delve into a 1954 judgment by a seven-judge Bench in the Shirur Mutt case which had for the first time gone into what constituted "essential religious practices". In the 1954 judgment, the top court had held that "what constitutes the essential part of a religion is primarily to be ascertained with reference to the doctrines of that religion itself".

श्री भूषण ने कहा कि **DPDP** प्रावधान का **संवैधानिक परिणाम** तत्काल और गंभीर है।

**SC to hear in April pleas on Sabarimala women entry ruling**  
**सबरिमला महिला प्रवेश फैसले पर याचिकाओं की अप्रैल में सुनवाई करेगा सुप्रीम कोर्ट**

- The **Supreme Court** on Monday scheduled for hearing a series of review and writ petitions on a **September 2018 judgment**, which allowed women of **menstruating age** to enter the **Sabarimala temple** in Kerala, before a **nine-judge Constitution Bench** from **April 7, 2026**.

**सुप्रीम कोर्ट** ने सोमवार को **सितंबर 2018 के फैसले** से जुड़ी पुनर्विचार और रिट याचिकाओं की एक श्रृंखला की सुनवाई **9-न्यायाधीशों की संविधान पीठ** के समक्ष **7 अप्रैल 2026** से तय की, जिसमें **केरल के सबरिमला मंदिर में रजस्वला आयु** की महिलाओं को प्रवेश की अनुमति दी गई थी।

- A Bench headed by **Chief Justice of India Surya Kant** said the maintainability of the review petitions had already been decided by an earlier **nine-judge Bench** constituted in **2019** by then **Chief Justice of India Sharad A. Bobde**.

**मुख्य न्यायाधीश सूर्य कांत** की अध्यक्षता वाली पीठ ने कहा कि पुनर्विचार याचिकाओं की ग्राह्यता पर फैसला पहले ही **2019** में तत्कालीन **मुख्य न्यायाधीश शरद ए. बोबडे** द्वारा गठित **9-न्यायाधीशों की पीठ** कर चुकी है।

- The hearings before the Bench had to be aborted abruptly due to the onset of the **COVID pandemic**.

पीठ के समक्ष सुनवाई को **कोविड महामारी** की शुरुआत के कारण अचानक रोकना पड़ा था।

- The **Supreme Court** gave a brief timeline for the hearing of the case in **April 2026**.

**सुप्रीम कोर्ट** ने **अप्रैल 2026** में मामले की सुनवाई के लिए एक संक्षिप्त समय-सारिणी दी।

- The Bench would hear the review petitioners challenging the **2018 judgment** from **April 7 to 9**.

पीठ **2018 के फैसले** को चुनौती देने वाले पुनर्विचार याचिकाकर्ताओं की सुनवाई **7 से 9 अप्रैल** तक करेगी।

- Those opposing them would be heard from **April 14 to 16**.

उनका विरोध करने वालों की सुनवाई **14 से 16 अप्रैल** के बीच होगी।



- In **November 2019**, a majority judgment by a **five-judge Constitution Bench** led by then **Chief Justice Ranjan Gogoi** had referred the **Sabarimala review and writ petitions** to a **seven-judge Bench**.  
नवंबर 2019 में तत्कालीन मुख्य न्यायाधीश रंजन गोगोई के नेतृत्व वाली 5-न्यायाधीशों की संविधान पीठ के बहुमत फैसले ने सबरिमला से जुड़ी पुनर्विचार और रिट याचिकाओं को 7-न्यायाधीशों की पीठ को भेजा था।
- The **2019 majority judgment** had also clubbed similar petitions concerning the **essentiality of religious practices** pending in the **Supreme Court**, including the **right of Muslim women to enter mosque** and the issue of **female genital mutilation** practised by the **Dawoodi Bohra community**, with the **Sabarimala case**.  
2019 के बहुमत फैसले ने धार्मिक प्रथाओं की अनिवार्यता से संबंधित सुप्रीम कोर्ट में लंबित समान याचिकाओं को भी सबरिमला मामले के साथ जोड़ दिया था, जिनमें **मुस्लिम महिलाओं** के मस्जिद में प्रवेश का अधिकार और **दाऊदी बोहरा समुदाय** में प्रचलित **महिला जननांग विकृति** का मुद्दा शामिल है।
- The **nine-judge Bench** was constituted as it had to necessarily delve into a **1954 judgment** by a **seven-judge Bench** in the **Shirur Mutt case** which had for the first time gone into what constituted **“essential religious practices”**.  
9-न्यायाधीशों की पीठ का गठन इसलिए किया गया क्योंकि उसे **शिरूर मठ मामले** में 1954 के 7-न्यायाधीशों के फैसले की पड़ताल करनी थी, जिसने पहली बार यह स्पष्ट किया था कि **“अनिवार्य धार्मिक प्रथाएँ”** क्या होती हैं।
- In the **1954 judgment**, the top court had held that **“what constitutes the essential part of a religion is primarily to be ascertained with reference to the doctrines of that religion itself”**.

## Supreme Court allows 1993 Mumbai blasts convict to withdraw appeal on remission

GS II: Polity

Krishnadas Rajagopal  
NEW DELHI

The Supreme Court on Monday allowed convicted gangster **Abu Salem** to withdraw his appeal for remission on the ground that he has completed a quarter of a century behind bars in India.

Salem, a convict in the 1993 Mumbai serial blasts, was extradited from Portugal on November 11, 2005, after a prolonged legal battle. He has argued that his sentence could not exceed 25 years as per the assurance given by India to Portugal for his extradition.

Disposing of his appeal, a Bench headed by Justice Vikram Nath left it open to Salem to approach the Bombay High Court for early listing of his pending case.

In the previous hearing, the court had asked Salem's legal team to place on record the Maharashtra



Abu Salem

Prison Rules to see if he had any right to remission following conviction under the **Terrorist and Disruptive Activities (Prevention) Act**.

In July 2022, the apex court, in a judgment, had held that “on the appellant [Salem] completing 25 years of his sentence, the Central Government is bound to advise the President for the exercise of his powers under **Article 72** of the Constitution and to release the appellant in terms of the national com-

mitments and the principles based on the comity of courts”.

The top court had, however, declined to calculate the 25-year timeline from September 18, 2002, when Salem was detained in Portugal for a different offence. “The criminal law of the land does not have extra-territorial application,” the court had reasoned.

Salem's case was built around his argument that his life sentence was illegal, as the then Deputy Prime Minister and Home Minister L. K. Advani had given a “solemn sovereign assurance” to a Portugal court that he would neither be sentenced to death nor serve more than 25 years in prison. However, the Central Bureau of Investigation, which prosecuted the case against the gangster, had maintained that Mr. Advani's assurance was no guarantee.

## Supreme Court allows 1993 Mumbai blasts convict to withdraw appeal on remission

सुप्रीम कोर्ट ने 1993 मुंबई धमाकों के दोषी को सजा में छूट पर अपील वापस लेने की अनुमति दी

The Supreme Court on Monday allowed convicted gangster **Abu Salem** to withdraw his appeal for **remission** on the ground that he has completed a **quarter of a century** behind bars in India.

सुप्रीम कोर्ट ने सोमवार को दोषी गैंगस्टर **अबू सलेम** को **सजा में छूट** के लिए दायर अपनी अपील वापस लेने की अनुमति इस आधार पर दी कि उसने भारत में जेल में **पच्चीस साल** पूरे कर लिए हैं।

Salem, a convict in the **1993 Mumbai serial blasts**, was **extradited from Portugal** on **November 11, 2005**, after a prolonged legal battle. He has argued that **his sentence could not exceed 25 years** as per the assurance given by India to Portugal for his extradition.

**1993 मुंबई सिलसिलेवार धमाकों** का दोषी सलेम, लंबी कानूनी लड़ाई के बाद **11 नवंबर 2005** को **पुर्तगाल** से प्रत्यर्पित किया गया था। उसका तर्क है कि भारत द्वारा पुर्तगाल को प्रत्यर्पण के समय दी गई गारंटी के अनुसार उसकी सजा **25 साल** से अधिक

नहीं हो सकती।

- In the previous hearing, the court had asked Salem's legal team to place on record the **Maharashtra Prison Rules** to see if he had any right to remission following conviction under the **Terrorist and Disruptive Activities (Prevention) Act**.



पिछली सुनवाई में अदालत ने सलेम की कानूनी टीम से **महाराष्ट्र जेल नियमों** को रिकॉर्ड पर रखने को कहा था ताकि यह देखा जा सके कि **आतंकवादी और विघटनकारी गतिविधियां (निवारण) अधिनियम** के तहत दोषसिद्धि के बाद उसे सजा में छूट का कोई अधिकार है या नहीं।

- In **July 2022**, the apex court, in a judgment, had held that “on the appellant [Salem] completing **25 years** of his sentence, the **Central Government** is bound to advise the **President for the exercise of his powers under Article 72 of the Constitution** and to release the appellant in terms of the national commitments and the principles based on the comity of courts”.

**जुलाई 2022** में, शीर्ष अदालत ने एक फैसले में कहा था कि “अपीलकर्ता [सलेम] द्वारा अपनी सजा के **25 साल** पूरे करने पर **केंद्र सरकार** संविधान के **अनुच्छेद 72** के तहत **राष्ट्रपति** को उनकी शक्तियों के प्रयोग के लिए सलाह देने और राष्ट्रीय प्रतिबद्धताओं व न्यायालयों के सौहार्द के सिद्धांतों के अनुसार अपीलकर्ता को रिहा करने के लिए बाध्य है।”

- The top court had, however, declined to calculate the **25-year timeline** from **September 18, 2002**, when Salem was detained in Portugal for a different offence. “The **criminal law of the land does not have extra-territorial application**,” the court had reasoned.

हालांकि शीर्ष अदालत ने **18 सितंबर 2002** से **25 साल की अवधि** की गणना करने से इनकार कर दिया था, जब सलेम को पुर्तगाल में एक अलग अपराध के लिए हिरासत में लिया गया था। अदालत ने तर्क दिया था कि “देश का आपराधिक कानून **अतिरिक्त-क्षेत्रीय लागू नहीं होता।**”

- Salem’s case was built around his argument that his **life sentence** was illegal, as the then **Deputy Prime Minister and Home Minister L. K. Advani** had given a “**solemn sovereign assurance**” to a Portugal court that he would neither be sentenced to death nor serve more than **25 years in prison**. However, the **Central Bureau of Investigation**, which prosecuted the case against the gangster, had maintained that Mr. Advani’s assurance was no guarantee.

सलेम का मामला इस तर्क पर आधारित था कि उसकी **आजीवन सजा** अवैध है, क्योंकि तत्कालीन **उपप्रधानमंत्री और गृहमंत्री एल. के. आडवाणी** ने पुर्तगाल की अदालत को एक “**गंभीर संप्रभु आश्वासन**” दिया था कि उसे न तो मौत की सजा दी जाएगी और न ही वह जेल में **25 साल** से अधिक समय बिताएगा। हालांकि, गैंगस्टर के खिलाफ मुकदमा चलाने वाली **केंद्रीय जांच ब्यूरो** ने कहा था कि श्री आडवाणी का आश्वासन कोई गारंटी नहीं था।



# India's federalism is in need of a structural reset

ISSUE: Polity

MOB

The Constitution of India, while federal in structure, was designed with a pronounced centralising bias. Drawing heavily from the Government of India Act, 1935, it concentrated significant authority in New Delhi while assigning a comparatively modest sphere to the States. This architecture was shaped by the circumstances of its birth – the trauma of Partition, the integration of 14 provinces and over 500 princely States, and the pervasive fear that centrifugal forces might threaten national unity. In that climate, centralisation appeared not merely prudent but also indispensable.

Yet, even in those anxious deliberations, there were voices of rare clarity. K. Santhanam cautioned the Constituent Assembly that the Union's strength lies not in the indiscriminate accumulation of functions, but in the disciplined refusal of responsibilities that do not properly belong at the national level. "It is in this positive as well as negative delimitation of powers that a real federal system rests..." he observed.

In that single formulation lay two enduring principles: first, authority is most effective when exercised closest to knowledge and accountability; and second, excessive centralisation breeds fragility by overburdening a single authority with tasks that it cannot efficiently discharge. A government that attempts to supervise everything – from space exploration to rural sanitation – may expand in reach but this inevitably diminishes its effectiveness.

## Reinforcement of dominance

History demonstrates that power assumed in the name of necessity rarely retreats when necessity fades. In the decades that followed, centralising tendencies were reinforced by the dominance of a single national party at the Union and State levels, fostering a "high command" culture that attenuated the autonomy of State leadership. Later, the emergence of coalition governments at the Union and the rise of regional parties in States led to a more balanced federal order without endangering unity. One may reasonably surmise that had today's politically mature and linguistically consolidated States existed in 1950, the constitutional design might have evolved along a more decentralised path.

Just as an individual cannot remain perpetually captive to the neuroses of childhood, so too a nation cannot forever labour under the anxieties of its formative years. India's unity is no longer fragile, and the idea of India now rests on firm and enduring foundations. Yet, 76 years later, constitutional practice continues to reflect the reflexes of the late 1940s. Centralisation, once defended as a necessity, has hardened into habit.

Through successive constitutional amendments, expansive Union legislation in Concurrent List subjects, conditional Finance Commission transfers, and centrally sponsored schemes with rigid templates, the balance of power has tilted even further toward the Union. Large ministries exist in New Delhi that duplicate



**M.K. Stalin**  
is the Chief Minister of Tamil Nadu

State functions and often attempt to steer State priorities through micromanagement and procedural oversight. In an inversion of democratic hierarchy, the Union Executive is attempting to override plenary State laws in Concurrent List subjects through subordinate legislation.

## It is a principle

Such a drift sits uneasily with constitutional doctrine. In *S.R. Bommai vs Union of India* (1994), the Supreme Court of India declared federalism part of the Constitution's Basic Structure and affirmed that States are not mere appendages of the Centre but are supreme within their allotted spheres. Federalism, the Court held, is a principle rooted in India's history and diversity; not a matter of administrative convenience. Despite this judicial affirmation, State autonomy has continued to erode – through legislative expansion, executive overreach, and certain other judicial interpretations that privilege uniform national solutions over contextual diversity.

Underlying this trajectory is a persistent illusion – that the Union becomes stronger by diminishing the States. In truth, the Union and the States are not competitors in a zero-sum contest; they are partners in a shared constitutional enterprise. India's size and heterogeneity render centralised policy design inherently limited. No authority in New Delhi, however enlightened, can tailor policy with equal sensitivity to every linguistic region, agricultural ecology, industrial cluster, or labour market.

Decentralisation addresses this limitation by enabling parallel experimentation. States can design and test policies at manageable scale, contain failures without national disruption, and allow successful innovations to diffuse horizontally or be adopted nationally. Many of India's most effective programmes followed precisely this path. Tamil Nadu's noon meal scheme, Kerala's achievements in public health and literacy, and Maharashtra's employment guarantee initiative all began as State experiments before informing national policy. Over-centralisation suppresses the very diversity of strategies from which innovation and discovery arise.

Centralists often argue that States lack administrative or technical capacity and, therefore, require Union intervention. Yet, such intervention stunts the very capacity it claims to remedy, creating a self-perpetuating cycle of dependence. Parents who do not entrust their children with responsibility, and leaders who refuse to delegate authority, inevitably breed dependence. Governments are no exception.

Capacity arises from responsibility, accountability, and the freedom to make, and correct, mistakes. To suggest that India's States – many comparable in scale to sovereign nations – are inherently incapable and must, therefore, be subjected to intrusive central control is incompatible with national self-respect.

Centralisation might still be defended if it had delivered superior outcomes. But by comparison with decentralised federations, global benchmarks, or India's own aspirations, the record is unpersuasive. The centralised model has struggled to deliver universal access, sustained quality, genuine equity, or global competitiveness. Instead, it has produced regulatory complexity, chronic underfunding as resources are stretched across expanding mandates, blurred accountability, and gradual erosion of State capacity.

Tamil Nadu recognised these dangers at an early stage. In 1967, C.N. Annadurai observed that the Union must indeed be strong enough to maintain the sovereignty and integrity of India. But that did not mean that it should assume control over every subject, such as health or education, which bore no direct nexus to national defence.

His successor, K. Karunanidhi, advanced this philosophy through the maxim, "Autonomy to the States, Federalism at the Centre", and in 1969 established the first independent Committee on Union-State Relations under Justice P.V. Rajamannar. The Committee's 1971 Report became a landmark in India's federal debate. Later national commissions – the Sarkaria (1983-88) and Punchhi (2007-10) – acknowledged the need for rebalancing, though they stopped short of recommending fundamental structural reform.

## Time to right-size

India now stands at a constitutional juncture that calls for recalibration rather than complacency. The objective is not to weaken the Union but to right-size it, allowing it to concentrate on genuinely national responsibilities while restoring to States the autonomy essential for effective governance. Such recalibration would not diminish national unity; it would deepen it by aligning authority with responsibility.

In this spirit, the Government of Tamil Nadu constituted a High-Level Committee on Union-State Relations in April 2025 under the chairmanship of Justice Kurian Joseph (a retired Supreme Court judge), with K. Ashok Vardhan Shetty (a retired IAS officer) and Dr. M. Naganathan (former State Planning Commission vice-chairman) as members. Thought of as a non-partisan exercise, the Committee undertook a comprehensive review of contemporary federal challenges.

Part I of its Report, which was submitted on February 16, 2026, addresses issues that range from the role of Governors and language policy to delimitation, elections, education, health, and Goods and Services Tax.

The Government of Tamil Nadu presents this report to the public in the hope that it will stimulate informed debate, restore balance to the Union-State relationship, and contribute to a constitutional settlement in which the Union is strong because it is focused, and the States are strong because they are trusted.

There is a need for balanced federalism in the form of autonomous States, an efficient Union, and accountable governance

## India's federalism is in need of a structural reset

### भारत के संघवाद को संरचनात्मक पुनर्संतुलन की आवश्यकता है

- The **Constitution of India**, while **federal in structure**, was designed with a pronounced **centralising bias**. भारतीय संविधान, यद्यपि **संघीय संरचना** वाला है, पर इसमें स्पष्ट **केंद्रीकरण का झुकाव** रखा गया।
- Drawing heavily from the **Government of India Act, 1935**, it concentrated significant authority in **New Delhi** while assigning a comparatively modest sphere to the **States**. इसने **भारत शासन अधिनियम, 1935** से प्रेरणा लेते हुए महत्वपूर्ण अधिकार **नई दिल्ली** में केंद्रित किए और **राज्यों** को अपेक्षाकृत सीमित क्षेत्र दिया।
- This architecture was shaped by **Partition trauma**, integration of **14 provinces and 500+ princely States**, and fear of **centrifugal forces threatening unity**. यह संरचना **विभाजन की त्रासदी**, **14 प्रांतों और 500 से अधिक रियासतों के एकीकरण**, तथा **केंद्रीय विघटनकारी शक्तियों** के भय से प्रभावित थी।
- In that climate, **centralisation** appeared prudent and indispensable. उस समय **केंद्रीकरण** आवश्यक और अनिवार्य प्रतीत हुआ।



- **K. Santhanam** warned that Union strength lies not in accumulating functions but in refusing responsibilities not suited to the national level.  
के. संतानम ने चेताया कि संघ की शक्ति सभी कार्य अपने पास रखने में नहीं बल्कि अनुचित जिम्मेदारियों को न लेने में है।
- He observed that a real federal system rests on proper delimitation of powers.  
उन्होंने कहा कि वास्तविक संघीय व्यवस्था शक्तियों के उचित विभाजन पर आधारित होती है।
- Two principles emerged: authority works best closest to knowledge and accountability, and excessive centralisation breeds fragility.  
दो सिद्धांत उभरे: अधिकार ज्ञान और उत्तरदायित्व के निकट प्रभावी होता है और अत्यधिक केंद्रीकरण कमजोरी उत्पन्न करता है।
- A government supervising everything from space exploration to rural sanitation expands reach but reduces effectiveness.  
जो सरकार अंतरिक्ष अनुसंधान से ग्रामीण स्वच्छता तक सब देखती है, उसका विस्तार तो बढ़ता है पर प्रभावशीलता घटती है।

### Reinforcement of dominance प्रभुत्व का सुदृढीकरण

- History shows power assumed in necessity rarely retreats when necessity fades.  
इतिहास बताता है कि आवश्यकता में प्राप्त शक्ति आवश्यकता समाप्त होने पर भी वापस नहीं जाती।
- Centralisation was reinforced by dominance of a single national party and a high command culture weakening State autonomy.  
एक राष्ट्रीय दल के प्रभुत्व और हाई कमांड संस्कृति ने केंद्रीकरण को मजबूत किया और राज्यों की स्वायत्तता कम की।
- Later, coalition governments and rise of regional parties created a more balanced federal order without threatening unity.  
बाद में गठबंधन सरकारों और क्षेत्रीय दलों के उदय ने बिना एकता को खतरे में डाले संतुलित संघीय व्यवस्था बनाई।
- Through constitutional amendments, Union laws on Concurrent List, Finance Commission conditional transfers, and rigid centrally sponsored schemes, power has tilted further toward the Union.  
संवैधानिक संशोधनों, समवर्ती सूची पर संघीय कानून, वित्त आयोग की सशर्त निधि, तथा कठोर केंद्रीय प्रायोजित योजनाओं से शक्ति और अधिक संघ की ओर झुक गई है।
- Large ministries in New Delhi duplicate State functions and try to steer State priorities via micromanagement and procedural oversight.  
नई दिल्ली के बड़े मंत्रालय राज्य कार्यों की पुनरावृत्ति करते हैं और सूक्ष्म प्रबंधन व प्रक्रियात्मक नियंत्रण से राज्य प्राथमिकताओं को प्रभावित करते हैं।
- In an inversion of democratic hierarchy, the Union Executive attempts to override State laws in Concurrent List through subordinate legislation.  
लोकतांत्रिक पदानुक्रम के उलट, संघ कार्यपालिका समवर्ती सूची के राज्य कानूनों को अधीनस्थ विधान द्वारा निरस्त करने का प्रयास करती है।

### It is a principle यह एक सिद्धांत है

- In **S.R. Bommai vs Union of India (1994)**, the **Supreme Court of India** declared federalism part of the Constitution's **Basic Structure** and affirmed that **States are not mere appendages** of the Centre but are supreme within their allotted spheres.  
एस.आर. बोम्मई बनाम भारत संघ (1994) में भारत के सर्वोच्च न्यायालय ने संघवाद को संविधान की मूल संरचना का हिस्सा बताया और कहा कि राज्य केंद्र के अधीन मात्र अंग नहीं बल्कि अपने क्षेत्र में सर्वोच्च हैं।
- Federalism, the Court held, is rooted in India's **history and diversity**, not administrative convenience.  
न्यायालय ने कहा कि संघवाद भारत के इतिहास और विविधता में निहित है, न कि प्रशासनिक सुविधा में।
- Despite this **judicial affirmation**, **State autonomy** has continued to erode through **legislative expansion, executive overreach, and certain judicial interpretations** favouring



uniform national solutions over diversity.

इस न्यायिक पुष्टि के बावजूद राज्य स्वायत्तता लगातार घटती रही है — विधायी विस्तार, कार्यपालिका के अतिक्रमण और कुछ न्यायिक व्याख्याओं के कारण, जो विविधता पर एकरूप राष्ट्रीय समाधान को प्राथमिकता देती हैं।

- Underlying this trajectory is an illusion that the **Union becomes stronger by weakening States.**

इस प्रवृत्ति के पीछे यह भ्रम है कि राज्यों को कमजोर करने से संघ मजबूत होता है।

- In truth, **Union and States are partners, not competitors in a zero-sum contest.** वास्तव में संघ और राज्य साझेदार हैं, शून्य-योग प्रतिस्पर्धी नहीं।
- **India's size and heterogeneity make centralised policy inherently limited.** भारत का विशाल आकार और विविधता केंद्रीकृत नीति को स्वाभाविक रूप से सीमित बनाते हैं।
- **No authority in New Delhi can design equally sensitive policies for every linguistic region, agricultural ecology, industrial cluster, and labour market.** नई दिल्ली की कोई भी सत्ता हर भाषाई क्षेत्र, कृषि पारिस्थितिकी, औद्योगिक समूह और श्रम बाजार के लिए समान संवेदनशील नीति नहीं बना सकती।

- **Decentralisation enables parallel experimentation and addresses this limitation.** विकेंद्रीकरण समानांतर प्रयोग को संभव बनाकर इस सीमा को दूर करता है।

- Many effective programmes followed this path — **Tamil Nadu noon meal scheme, Kerala public health and literacy, Maharashtra employment guarantee.**

कई सफल कार्यक्रम इसी मार्ग से आए — तमिलनाडु मध्याह्न भोजन योजना, केरल जनस्वास्थ्य और साक्षरता, महाराष्ट्र रोजगार गारंटी।

- **Capacity grows from responsibility, accountability, and freedom to correct mistakes.** क्षमता जिम्मेदारी, उत्तरदायित्व और गलतियों को सुधारने की स्वतंत्रता से विकसित होती है।

- **Centralisation could be defended if it delivered superior outcomes, but evidence is unpersuasive.**

यदि केंद्रीकरण बेहतर परिणाम देता तो उसका समर्थन किया जा सकता था, पर प्रमाण कमजोर हैं।

- Instead, it has produced **regulatory complexity, underfunding, blurred accountability, and erosion of State capacity.**

इसके बजाय इसने नियामकीय जटिलता, वित्तीय कमी, अस्पष्ट उत्तरदायित्व और राज्य क्षमता का क्षरण उत्पन्न किया है।

- In 1967, **C.N. Annadurai** said the Union must be strong to preserve **sovereignty and integrity, but need not control every subject like health or education** unrelated to national defence.

1967 में सी.एन. अन्नादुरै ने कहा कि संघ को संप्रभुता और अखंडता बनाए रखने के लिए मजबूत होना चाहिए, पर उसे हर विषय जैसे स्वास्थ्य या शिक्षा पर नियंत्रण नहीं करना चाहिए जो राष्ट्रीय रक्षा से सीधे संबंधित नहीं हैं।

- His successor, **Kalaignar M. Karunanidhi**, advanced this philosophy through the maxim, **“Autonomy to the States, Federalism at the Centre”**, and in 1969 established the first independent **Committee on Union-State Relations** under **Justice P.V. Rajamannar.**

उनके उत्तराधिकारी कलैग्र एम. करुणानिधि ने इस दर्शन को “राज्यों को स्वायत्तता, केंद्र में संघवाद” के सिद्धांत के माध्यम से आगे बढ़ाया और 1969 में न्यायमूर्ति पी.वी. राजामन्नार के नेतृत्व में पहला स्वतंत्र संघ-राज्य संबंध समिति स्थापित किया।

- The **Committee's 1971 Report** became a landmark in India's **federal debate.**

समिति की 1971 रिपोर्ट भारत की संघीय बहस में एक मील का पत्थर बनी।

- Later **national commissions — the Sarkaria (1983-88) and Punchhi (2007-10) —** acknowledged the need for **rebalancing**, though they stopped short of recommending **fundamental structural reform.**

बाद के राष्ट्रीय आयोग — सरकारिया (1983-88) और पंची (2007-10) — ने पुनर्संतुलन की आवश्यकता को स्वीकार किया, हालांकि उन्होंने मौलिक संरचनात्मक सुधार की सिफारिश नहीं की।

## Time to right-size

### सही आकार देने का समय

- In this spirit, the **Government of Tamil Nadu** constituted a **High-Level Committee on Union-State Relations** in April 2025 under **Justice Kurian Joseph**, with **K. Ashok Vardhan**



**Shetty and Dr. M. Naganathan as members.**

इसी भावना से तमिलनाडु सरकार ने अप्रैल 2025 में न्यायमूर्ति कुरियन जोसेफ की अध्यक्षता में संघ-राज्य संबंधों पर उच्चस्तरीय समिति गठित की, जिसमें के. अशोक वर्धन शेट्टी और डॉ. एम. नागनाथन सदस्य थे।

- Thought of as a **non-partisan exercise**, the Committee undertook a **comprehensive review** of contemporary federal challenges.  
इसे एक **गैर-पक्षपाती पहल** माना गया और समिति ने समकालीन संघीय चुनौतियों की **व्यापक समीक्षा** की।
- Part I of its Report**, submitted on **February 16, 2026**, addresses issues from **role of Governors, language policy, delimitation, elections, education, health, and Goods and Services Tax**.

रिपोर्ट का भाग I, जो 16 फरवरी 2026 को प्रस्तुत हुआ, में राज्यपाल की भूमिका, भाषा नीति, परिसीमन, चुनाव, शिक्षा, स्वास्थ्य और वस्तु एवं सेवा कर से जुड़े मुद्दों पर चर्चा है।

## GS Paper II: International Relations

TOPICS COVERED	17 February 2026
1. <b>J&amp;K plans to harness river waters as IWT is in abeyance</b> आईडब्ल्यूटी स्थगन के बीच जम्मू-कश्मीर की नदी जल उपयोग की योजना	
2. <b>Centre silent on Pannun case; officials await U.S. court documents after Gupta pleads guilty</b> पन्नून मामले पर केंद्र चुप; गुप्ता के दोषी मानने के बाद अमेरिकी अदालत के दस्तावेजों का इंतज़ार	
3. <b>Araghchi in Geneva for talks as IRGC begins drills near the Strait of Hormuz</b> जिनेवा में वार्ता के लिए अराघची, होरमुज़ जलडमरूमध्य के पास IRGC ने अभ्यास शुरू किया	



## J&K plans to harness river waters as IWT is in abeyance

GS II: IR  
Peeerzaada Asmiq

SRINAGAR

The Jammu & Kashmir government is mulling to take advantage of the suspended Indus Waters Treaty (IWT) by diverting, for the first time, water from the Ravi river in Punjab to the Jammu region, and push for the revival of the Tulbul Navigation Barrage project in the Kashmir region.

Sources said Chief Minister Omar Abdullah has raised the issue with the Centre. The Tulbul project hit a dead end when Pakistan raised objections in 1987 under the IWT. However, the Centre put the treaty in abeyance after the Pahalgam attack. The government has also made a proposal to enable year-round navigation on the Wular lake by maintaining a minimum depth of water, which was not possible because of the IWT. Officials said the Shahpur Kandi dam adjacent to Punjab is likely to be completed this year and will stop the flow of excess water from the Ravi into Pakistan.

### J&K plans to harness river waters as IWT is in abeyance

#### आईडब्ल्यूटी स्थगन के बीच जम्मू-कश्मीर की नदी जल उपयोग की योजना

- The **Jammu & Kashmir government** is mulling to take advantage of the suspended **Indus Waters Treaty (IWT)** by diverting, for the **first time**, water from the **Ravi river** in **Punjab** to the **Jammu region**, and push for the revival of the **Tulbul Navigation Barrage project** in the **Kashmir region**.

जम्मू-कश्मीर सरकार निलंबित सिंधु जल संधि (IWT) का लाभ उठाने पर विचार कर रही है, जिसके तहत पहली बार पंजाब की रावी नदी से पानी को जम्मू क्षेत्र की ओर मोड़ा जाएगा और कश्मीर क्षेत्र में तुलबुल नेविगेशन बैराज परियोजना को पुनर्जीवित करने पर जोर दिया जाएगा।

- The **Tulbul project** hit a dead end when **Pakistan** raised objections in **1987** under the **IWT**.

तुलबुल परियोजना तब ठप हो गई थी जब पाकिस्तान ने 1987 में IWT के तहत आपत्तियां उठाईं।

- However, the **Centre** put the treaty in **abeyance** after the **Pahalgam attack**.

हालांकि, पहलगाम हमले के बाद केंद्र ने संधि को स्थगन में डाल दिया।

- The government has also made a proposal to enable **year-round navigation on the Wular lake** by maintaining a **minimum depth of water**, which was not possible because of the **IWT**.

सरकार ने वुलर झील में न्यूनतम जल गहराई बनाए रखकर सालभर नौवहन सक्षम करने का प्रस्ताव भी रखा है, जो IWT के कारण संभव नहीं था।

- Officials said the **Shahpur Kandi dam** adjacent to **Punjab** is likely to be completed **this year** and will stop the flow of **excess water** from the **Ravi** into **Pakistan**.

अधिकारियों ने कहा कि पंजाब से सटा शाहपुर कांडी बांध इस वर्ष पूरा होने की संभावना है और इससे रावी से पाकिस्तान की ओर जाने वाले अतिरिक्त पानी के प्रवाह को रोका जाएगा।



# Centre silent on Pannun case; officials await U.S. court documents after Gupta pleads guilty

GS II: IR

Suhasini Haidar  
NEW DELHI

Three days after Indian citizen Nikhil Gupta pleaded "guilty" in a court in New York to charges of murder, conspiracy, and money laundering in order to assassinate Khalistani activist Gurpatwant Singh Pannun, the government has yet to comment on the case.

According to investigators in the United States, Mr. Gupta, an Indian businessman, worked with an Indian "government employee" Vikash Yadav, believed to have been associated with India's Research and Analysis Wing (RAW), to hire a hitman to carry out Pannun's murder for a sum of \$100,000. Mr. Yadav, who was arrested in December 2023 in Delhi in a separate case of kidnapping and extortion, has been out on bail since April 2024, and is



Indian national Nikhil Gupta being extradited to the United States, from Prague, Czech Republic in June 2024. PTI

expected to appear for his next hearing later this week on February 20, according to his lawyers.

In court last Friday, Mr. Gupta, who had thus far pleaded "not guilty", made an unexpected appearance, and pleaded guilty to the three counts — murder-for-hire, conspiracy to commit murder-for-hire, and conspiracy to commit money laundering.

The External Affairs Ministry refused to comment on the developments in the New York court.

**Gupta's consular access** Officials indicated that they would await court documents, and confirmed that the Indian Consulate-General in New York had been granted consular access to Mr. Gupta, an Indian citizen, and were prepared to

assist him with any consular requirements.

In his pleadings, Mr. Gupta told the judge in the Southern District of New York court that in 2023 he "agreed with another person" to murder a person in the U.S., and delivered \$15,000 as an advance for the job. Mr. Gupta will face the court again on May 29 for sentencing. It is unclear, however, whether he has confessed his guilt in lieu of a lesser sentence as part of a larger agreement with the U.S. Attorney's office, which would involve his cooperation in the investigation or as an "approver".

"The FBI will continue to aggressively defend the homeland against any foreign adversaries who target our citizens for exercising their constitutionally protected rights," FBI Assistant Director in-charge James Barnacle said in a statement after the guilty

plea, and said Mr. Gupta facilitated a "foreign adversary's unlawful effort to silence a vocal critic of the Indian government".

The government has denied any knowledge or involvement in the plot to kill Pannun, which Canadian officials say is linked to the murder of Hardeep Singh Nijjar in Canada in June 2023.

With Mr. Gupta choosing to waive the requirement of a trial in the U.S., the focus of investigators would turn next to the prosecution of Mr. Yadav, who has an FBI "wanted" notice out for him.

According to a second indictment filed by the U.S. Attorney's office in October 2024, Mr. Gupta took orders from Mr. Yadav, and exchanged messages on organising the killing of Pannun, who is wanted in India on terror charges.

(With inputs from Vijaita Singh)

## Centre silent on Pannun case; officials await U.S. court documents after Gupta pleads guilty

### पन्नून मामले पर केंद्र चुप; गुप्ता के दोषी मानने के बाद अमेरिकी अदालत के दस्तावेजों का इंतज़ार

- Three days after Indian citizen **Nikhil Gupta** pleaded "guilty" in a court in **New York** to charges of **murder**, **conspiracy**, and **money laundering** in order to assassinate **Khalistani activist Gurpatwant Singh Pannun**, the government has yet to comment on the case.  
भारतीय नागरिक **निखिल गुप्ता** द्वारा **न्यूयॉर्क** की एक अदालत में **हत्या**, **षड्यंत्र** और **धन शोधन** के आरोपों में **दोषी** मानने के तीन दिन बाद भी, **खालिस्तानी कार्यकर्ता गुरपतवंत सिंह पन्नून** की हत्या की साजिश से जुड़े इस मामले पर सरकार ने अब तक कोई टिप्पणी नहीं की है।
- According to investigators in the **United States**, **Mr. Gupta**, an **Indian businessman**, worked with an **Indian "government employee" Vikash Yadav**, believed to have been associated with **India's Research and Analysis Wing (RAW)**, to hire a hitman to carry out Pannun's murder for a sum of **\$100,000**.  
**संयुक्त राज्य अमेरिका** के जांचकर्ताओं के अनुसार, भारतीय कारोबारी श्री गुप्ता ने एक भारतीय "सरकारी कर्मचारी" **विकाश यादव** के साथ काम किया, जिनके बारे में माना जाता है कि वे भारत की **रिसर्च एंड एनालिसिस विंग (RAW)** से जुड़े थे, और **1,00,000 डॉलर** में पन्नून की हत्या के लिए एक हिटमैन को नियुक्त किया।
- Mr. Yadav, who was arrested in **December 2023** in **Delhi** in a separate case of **kidnapping and extortion**, has been out on **bail** since **April 2024**, and is expected to appear for his next hearing later this week on **February 20**, according to his lawyers.  
**विकाश यादव**, जिन्हें **दिसंबर 2023** में **दिल्ली** में **अपहरण और जबरन वसूली** के एक अलग मामले में गिरफ्तार किया गया था, **अप्रैल 2024** से **जमानत** पर हैं और उनके वकीलों के अनुसार वे इस सप्ताह **20 फरवरी** को अगली सुनवाई में पेश होंगे।
- In court last Friday, Mr. Gupta, who had thus far pleaded "**not guilty**", made an unexpected appearance, and pleaded guilty to the three counts — **murder-for-hire**, **conspiracy to commit murder-for-hire**, and **conspiracy to commit money laundering**.



पिछले शुक्रवार को अदालत में, अब तक “दोषी नहीं” कहने वाले श्री गुप्ता ने अचानक पेश होकर तीन आरोपों — सुपारी देकर हत्या, सुपारी देकर हत्या की साजिश, और धन शोधन की साजिश — में दोषी मान लिया।

- The **External Affairs Ministry** refused to comment on the developments in the **New York court**.

विदेश मंत्रालय ने न्यूयॉर्क अदालत में हुई इन घटनाओं पर टिप्पणी करने से इनकार कर दिया।

## Gupta's consular access

### गुप्ता को कांसुलर पहुंच

- In his pleadings, Mr. Gupta told the judge in the **Southern District of New York** court that in **2023** he “**agreed with another person**” to murder a person in the **U.S.**, and delivered **\$15,000** as an advance for the job.  
अपनी दलीलों में, श्री गुप्ता ने न्यूयॉर्क के साउदर्न डिस्ट्रिक्ट की अदालत में न्यायाधीश को बताया कि **2023** में उन्होंने अमेरिका में एक व्यक्ति की हत्या के लिए “**किसी अन्य व्यक्ति से सहमति**” जताई थी और इसके लिए अग्रिम रूप में **15,000 डॉलर** दिए थे।
- Mr. Gupta will face the court again on **May 29** for **sentencing**.  
श्री गुप्ता **29 मई** को सजा के लिए फिर से अदालत के सामने पेश होंगे।
- It is unclear, however, whether he has confessed his guilt in lieu of a **lesser sentence** as part of a larger agreement with the **U.S. Attorney's office**, which would involve his **cooperation** in the investigation or as an “**approver**”.  
हालांकि यह स्पष्ट नहीं है कि क्या उन्होंने अमेरिकी अटॉर्नी कार्यालय के साथ किसी बड़े समझौते के तहत **कम सजा** के बदले अपना अपराध स्वीकार किया है, जिसमें जांच में उनका **सहयोग** या “**अपूवर**” के रूप में भूमिका शामिल हो सकती है।
- “The **FBI** will continue to aggressively defend the **homeland** against any **foreign adversaries** who target our citizens for exercising their **constitutionally protected rights**,” **FBI Assistant Director in-charge James Barnacle** said in a statement after the guilty plea, and said Mr. Gupta facilitated a “**foreign adversary's unlawful effort** to silence a vocal critic of the **Indian government**”.  
“**एफबीआई** उन सभी विदेशी विरोधियों के खिलाफ देश की आक्रामक रूप से रक्षा करता रहेगा जो हमारे नागरिकों को उनके **संवैधानिक अधिकारों** का प्रयोग करने के लिए निशाना बनाते हैं,” दोष स्वीकार करने के बाद जारी बयान में **एफबीआई सहायक निदेशक (प्रभारी) जेम्स बार्नेकल** ने कहा और बताया कि श्री गुप्ता ने **भारतीय सरकार** के एक मुखर आलोचक को चुप कराने के लिए एक “**विदेशी विरोधी के अवैध प्रयास**” में मदद की।
- The government has denied any **knowledge or involvement** in the plot to kill Pannun, which **Canadian officials** say is linked to the **murder of Hardeep Singh Nijjar in Canada in June 2023**.  
सरकार ने पन्नून की हत्या की साजिश में किसी भी **जानकारी या संलिप्तता** से इनकार किया है, जिसे **कनाडाई अधिकारी जून 2023** में **कनाडा** में **हरदीप सिंह निज्जर** की हत्या से जुड़ा बताते हैं।
- With Mr. Gupta choosing to **waive the requirement of a trial** in the **U.S.**, the focus of investigators would turn next to the prosecution of Mr. Yadav, who has an **FBI “wanted” notice** out for him.  
श्री गुप्ता द्वारा अमेरिका में **मुकदमे की आवश्यकता से छूट** चुनने के बाद, जांचकर्ताओं का ध्यान अब **विकाश यादव** के अभियोजन पर केंद्रित होगा, जिनके खिलाफ **एफबीआई का “वांछित” नोटिस** जारी है।
- According to a second **indictment** filed by the **U.S. Attorney's office** in **October 2024**, Mr. Gupta took orders from Mr. Yadav, and exchanged messages on organising the killing of Pannun, who is **wanted in India on terror charges**.  
**अक्टूबर 2024** में अमेरिकी अटॉर्नी कार्यालय द्वारा दायर दूसरे आरोप-पत्र के अनुसार, श्री गुप्ता ने श्री यादव से निर्देश लिए और पन्नून की हत्या की व्यवस्था को लेकर संदेशों का आदान-प्रदान किया, जो **भारत में आतंकवाद के आरोपों में वांछित** हैं।



# Araghchi in Geneva for talks as IRGC begins drills near the Strait of Hormuz

GS II: IR

**Stanly Johny**

Iran's Foreign Minister Abbas Araghchi arrived in Geneva for a second round of nuclear talks with the U.S. and technical discussions with the International Atomic Energy Agency (IAEA) amid heightened tensions in the Persian Gulf, as Washington has sent a second aircraft carrier to the region, threatening to use force against the Islamic Republic if diplomacy fails.

While the U.S. and Iran are expected to hold talks, mediated by Oman, in the Swiss city on Tuesday, the naval forces of the Islamic Revolutionary Guard Corps (IRGC) have started military drills near the Strait of Hormuz, a key chokepoint that connects the Persian Gulf with the Arabian Sea through the Gulf of Oman.



Iranian mockup imitating a U.S. aircraft carrier being encircled by speedboats during a drill near the Strait of Hormuz. FILE PHOTO

"I am in Geneva with real ideas to achieve a fair and equitable deal. What is not on the table: submission before threats," Mr. Araghchi wrote in a social media post. IAEA chief Rafael Grossi later said he had "in-depth technical discussions" with Mr. Araghchi ahead of Tuesday's "important negotiations".

Iran suspended access for the IAEA to its key nuclear

facilities after Israel and the U.S. bombed them in June 2025.

Mr. Araghchi had met Steve Witkoff, U.S. President Donald Trump's West Asia envoy, and other officials for nuclear talks on February 6 in Muscat, Oman's capital, and agreed to continue discussions.

Meanwhile, the IRGC on Monday started "live-fire intensive drills" named

'Smart Control of Hormuz Strait' under the supervision of chief commander Major General Mohammed Pakpour.

The drills aim to test the readiness of the IRGC Navy's operational units and review support programmes and scenarios in the face of "possible security and military threats" in the strategic Strait of Hormuz, reported state-run Press TV.

"A rapid, decisive, and comprehensive response by the IRGC's operational forces in the face of anti-security plots in the maritime arena is at the core of the operational exercises of the units participating in the drill," it said.

This is the second military exercise the IRGC Navy is conducting since tensions started rising between Iran and the U.S. last month.

## Araghchi in Geneva for talks as IRGC begins drills near the Strait of Hormuz जिनेवा में वार्ता के लिए अराघची, होरमुज़ जलडमरूमध्य के पास IRGC ने अभ्यास शुरू किया

- Iran's Foreign Minister **Abbas Araghchi** arrived in **Geneva** for a second round of nuclear talks with the **United States** and technical discussions with **the International Atomic Energy Agency (IAEA)** amid heightened tensions in the **Persian Gulf**, as Washington has sent a second aircraft carrier to the region, threatening to use force against the **Islamic Republic** if diplomacy fails.

ईरान के विदेश मंत्री **अब्बास अराघची** जिनेवा पहुँचे, जहाँ **संयुक्त राज्य अमेरिका** के साथ परमाणु वार्ता का दूसरा दौर और **अंतरराष्ट्रीय परमाणु ऊर्जा एजेंसी (IAEA)** के साथ तकनीकी चर्चाएँ होनी हैं, यह सब **फ़ारस की खाड़ी** में बढ़ते तनाव के बीच हो रहा है, क्योंकि **वॉशिंगटन** ने क्षेत्र में दूसरा विमानवाहक पोत भेजा है और कूटनीति विफल होने पर **इस्लामिक रिपब्लिक** के खिलाफ़ बल प्रयोग की चेतावनी दी है।

- While the **U.S. and Iran** are expected to hold talks, mediated by **Oman**, in the **Swiss city** on Tuesday, the naval forces of the **Islamic Revolutionary Guard Corps (IRGC)** have started **military drills near the Strait of Hormuz**, a key chokepoint that connects the Persian Gulf with the **Arabian Sea** through the **Gulf of Oman**.

जहाँ मंगलवार को **स्विस शहर** में **ओमान** की मध्यस्थता से अमेरिका और ईरान के बीच वार्ता होने की उम्मीद है, वहीं **इस्लामिक रिवोल्यूशनरी गार्ड कॉर्प्स (IRGC)** की नौसैनिक इकाइयों ने **होरमुज़ जलडमरूमध्य** के पास सैन्य अभ्यास शुरू कर दिए हैं, जो **फ़ारस की खाड़ी** को **अरब सागर** से **ओमान की खाड़ी** के ज़रिये जोड़ने वाला एक महत्वपूर्ण मार्ग है।

- "I am in Geneva with real ideas to achieve a fair and equitable deal. What is not on the table: submission before threats," Mr. Araghchi wrote in a social media post. **IAEA chief Rafael Grossi** later said he had "in-depth technical discussions" with Mr. Araghchi ahead of Tuesday's "important negotiations".



“मैं एक निष्पक्ष और न्यायसंगत समझौते के लिए वास्तविक विचारों के साथ जिनेवा में हूँ। जो मेज़ पर नहीं है: धमकियों के सामने आत्मसमर्पण,” श्री अराघची ने सोशल मीडिया पोस्ट में लिखा। बाद में IAEA प्रमुख **राफ़ेल ग़्रोसी** ने कहा कि मंगलवार की “महत्वपूर्ण वार्ताओं” से पहले उनकी श्री अराघची के साथ “गहन तकनीकी चर्चाएँ” हुईं।

- Iran suspended access for the IAEA to its key nuclear facilities after **Israel** and the U.S. bombed them in **June 2025**.

**जून 2025** में **इज़राइल** और अमेरिका द्वारा बमबारी के बाद ईरान ने अपनी प्रमुख परमाणु सुविधाओं तक IAEA की पहुँच निलंबित कर दी थी।

- Mr. Araghchi had met **Steve Witkoff**, U.S. President **Donald Trump**'s West Asia envoy, and other officials for nuclear talks on **February 6** in **Muscat**, **Oman**'s capital, and agreed to continue discussions.

श्री अराघची ने **6 फ़रवरी** को **ओमान** की राजधानी **मस्कट** में अमेरिकी राष्ट्रपति **डोनाल्ड ट्रंप** के पश्चिम एशिया दूत **स्टीव विटकोफ़** और अन्य अधिकारियों से परमाणु वार्ता की और चर्चाएँ जारी रखने पर सहमति बनी।

- Meanwhile, the **IRGC on Monday started “live-fire intensive drills”** named **‘Smart Control of Hormuz Strait’** under the supervision of chief commander **Mohammed Pakpour**.

इस बीच, IRGC ने सोमवार को मुख्य कमांडर **मोहम्मद पाकपुर** की निगरानी में **‘स्मार्ट कंट्रोल ऑफ़ होरमुज़ स्ट्रेट’** नाम से **“लाइव-फ़ायर गहन अभ्यास”** शुरू किया।

- The drills aim to test the readiness of the IRGC Navy's operational units and review support programmes and scenarios in the face of “possible security and military threats” in the strategic Strait of Hormuz, reported state-run **Press TV**.

राज्य संचालित **प्रेस टीवी** के अनुसार, इन अभ्यासों का उद्देश्य रणनीतिक **होरमुज़ जलडमरूमध्य** में “संभावित सुरक्षा और सैन्य खतरों” के मद्देनज़र IRGC नौसेना की परिचालन इकाइयों की तैयारी की जाँच और समर्थन कार्यक्रमों व परिदृश्यों की समीक्षा करना है।

- “A rapid, decisive, and comprehensive response by the IRGC's operational forces in the face of anti-security plots in the maritime arena is at the core of the operational exercises of the units participating in the drill,” it said.

“समुद्री क्षेत्र में सुरक्षा-विरोधी साज़िशों के सामने IRGC की परिचालन सेनाओं द्वारा त्वरित, निर्णायक और व्यापक प्रतिक्रिया इन अभ्यासों का मूल है,” रिपोर्ट में कहा गया।

- This is the second military exercise the IRGC Navy is conducting since tensions started rising between Iran and the U.S. last month.

यह दूसरा सैन्य अभ्यास है जो IRGC नौसेना पिछले महीने ईरान और अमेरिका के बीच तनाव बढ़ने के बाद से कर रही है।

## GS Paper III: Economy,

### TOPICS COVERED

17 February 2026

- |    |                                                                                                                                             |
|----|---------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | <b>A budgetary signal as banks cannot bear it all</b><br>एक बजटीय संकेत क्योंकि बैंक सब कुछ वहन नहीं कर सकते                                |
| 2. | <b>Can India overtake Bangladesh in EU textile exports?</b><br>क्या भारत यूरोपीय संघ को वस्त्र निर्यात में बांग्लादेश को पीछे छोड़ सकता है? |
| 3. | <b>Copper is pricing scarcity at a time of plenty</b><br>प्रचुरता के समय तांबा कमी की कीमत तय कर रहा है                                     |



# A budgetary signal as banks cannot bear it all

CS III: Economy

MOB

**B**udget 2026 has initiated, albeit limited, some important shifts in India's approach to financial-sector reform. There are proposals to introduce a market-making framework for corporate bonds, develop total-return swaps and bond-index derivatives, establish an Infrastructure Risk Guarantee Fund, and recycle CPSE real estate assets through dedicated Real Estate Investment Trusts (REIT). But all these reflect an implicit recognition of a deeper structural problem: Indian banks are shouldering risks that functioning markets absorb elsewhere



**Saumitra Bhaduri**  
is Professor, Madras School of Economics

about 30% in the U.S. and 40% in Europe. The difference is not managerial skill or prudence; it is architecture. Where markets can price and redistribute credit risk, banks lend selectively. Where they cannot, banks become the default warehouse for risk.

## Vulnerability and recapitalisation

This is not what banks are designed for. Banks fund themselves largely through short-term deposits and are sensitive to confidence. Yet, they are expected to finance projects such as highways, power plants, ports, and telecom networks that take 15 years or 20 years to generate cash flows. This mismatch in duration forces banks into extreme maturity transformation, increasing vulnerability to shocks.

The consequences have been visible and costly. When projects stalled or cash flows disappointed, losses were not absorbed gradually by markets. They landed abruptly on bank balance sheets. The fiscal cost followed. Since 2017, the government has injected more than ₹3.2 lakh crore into public sector banks. These recapitalisations stabilised the system, but they also quietly transferred private credit losses onto the public balance sheet. This is the hidden tax of a bank-centric financial system.

There is also a less visible opportunity cost. Capital tied up in long-term corporate loans is capital that is not available to small firms, exporters or first-time borrowers. This helps explain a familiar paradox that even after repeated clean-ups and capital injections, bank credit to small and medium enterprises remains constrained.

India's corporate bond market remains shallow by international standards. Bonds outstanding amount to less than 15% of GDP, compared with over 80% in the U.S., around 55%-60% in Germany, and 45%-50% in China. Issuance is overwhelmingly through private placements,

ownership is concentrated among a narrow set of institutional investors, and secondary market liquidity is weak. Households and foreign investors play only a marginal role, and issuance is heavily skewed toward top-rated firms. With such limited depth and participation, the bond market cannot meaningfully absorb or price credit risk.

The concentration of risk in the balance sheets of banks also weakens monetary policy transmission. When interest rates rise, banks already burdened with long-term credit exposures are reluctant to pass on higher costs fully; when rates fall, impaired balance sheets constrain fresh lending. The uneven adjustment of long-term borrowing costs despite changes in policy rates reflects this distortion. In contrast, deep bond markets transmit policy signals more smoothly as yields reprice across maturities and portfolios rebalance.

## No corporate debt market

The core issue stems from the absence of a corporate debt market that can effectively distribute long-term credit risk. Without a deep bond market to distribute exposure across institutional and long-term investors, credit risk remains concentrated on bank balance sheets.

Thus, the measures announced in Budget 2026 are an attempt to correct a long-standing structural imbalance. By improving corporate bond market liquidity, introducing hedging instruments such as total-return swaps, providing partial credit guarantees through the Infrastructure Risk Guarantee Fund, and expanding the stock of market-ready assets through REITs, the Budget gestures towards reallocating risks away from banks and into markets. Whether this shift gathers momentum will determine whether India's financial system becomes more resilient or continues to rely on banks as the economy's shock absorber of last resort.

## Overburdened balance sheets

When Indian banks struggle, weak governance, political interference, and poor risk management are the usual explanations. Each contains some truth. Taken together, however, they miss the larger issue. Over time, India has asked its banks to bear risks that, in more mature systems, are priced, traded, and distributed through markets. This has quietly overburdened bank balance sheets and made the financial system more fragile than it needs to be.

The problem begins with a structural imbalance. India has built a reasonably deep government bond market, supported by the Reserve Bank of India and a predictable issuance framework. Government securities outstanding are close to 90% of GDP, comparable to many large economies. The same cannot be said of corporate bonds. At around 15%-16% of GDP, India's corporate bond market is less than half the size of China's and barely a quarter of that in the United States or Germany.

This gap matters because economies do not stop needing long-term finance simply because markets are missing. When bond markets are shallow, someone else must step in. In India, that "someone" has been banks.

Today, banks carry roughly 60%-65% of all non-financial corporate debt, compared with

There is an attempt in Budget 2026 to rebalance India's financial system by moving risks away from banks and into markets

## A budgetary signal as banks cannot bear it all एक बजटीय संकेत क्योंकि बैंक सब कुछ वहन नहीं कर सकते

- Budget 2026 has initiated, albeit limited, some important shifts in India's approach to **financial-sector reform**.  
बजट 2026 ने भारत के वित्तीय क्षेत्र सुधार के दृष्टिकोण में सीमित लेकिन महत्वपूर्ण बदलाव शुरू किए हैं।
- There are proposals to introduce a **market-making framework for corporate bonds**, develop **total-return swaps and bond-index derivatives**, establish an **Infrastructure Risk Guarantee Fund**, and recycle **CPSE real estate assets** through **REIT**.  
इसमें कॉर्पोरेट बॉन्ड के लिए मार्केट-मेकिंग ढांचा, टोटल-रिटर्न स्वैप और बॉन्ड-इंडेक्स डेरिवेटिव, इन्फ्रास्ट्रक्चर रिस्क गारंटी फंड, तथा CPSE रियल एस्टेट परिसंपत्तियों को REIT के माध्यम से पुनर्चक्रित करने के प्रस्ताव शामिल हैं।
- But all these reflect an implicit recognition of a deeper **structural problem**: Indian banks are **shouldering risks** that functioning markets absorb elsewhere.  
लेकिन ये सभी एक गहरे संरचनात्मक समस्या की स्वीकृति दर्शाते हैं कि भारतीय बैंक उन जोखिमों को उठा रहे हैं जिन्हें अन्य जगहों पर बाजार वहन करते हैं।

## Overburdened balance sheets अतिभारित बैलेंस शीट

- When Indian **banks struggle**, weak governance, **political interference**, and **poor risk management** are the usual explanations.  
जब भारतीय बैंक संघर्ष करते हैं, तो कमजोर शासन, राजनीतिक हस्तक्षेप और खराब जोखिम प्रबंधन सामान्य कारण बताए जाते हैं।
- Each contains some truth, but together they miss the larger issue.  
इनमें कुछ सच्चाई है, परंतु मिलकर भी ये बड़े मुद्दे को नहीं पकड़ते।



- Over time, India has asked its **banks to bear risks** that in mature systems are **priced, traded, and distributed through markets**.  
समय के साथ भारत ने अपने बैंकों से उन जोखिमों को वहन करने को कहा जिन्हें विकसित प्रणालियों में बाजार के माध्यम से मूल्यांकित, व्यापारित और वितरित किया जाता है।
- This has quietly **overburdened bank balance sheets** and made the **financial system more fragile**.  
इससे चुपचाप बैंकों की बैलेंस शीट पर बोझ बढ़ा और वित्तीय प्रणाली अधिक कमजोर हो गई।
- The problem begins with a **structural imbalance**.  
समस्या की शुरुआत एक **संरचनात्मक असंतुलन** से होती है।
- India has built a reasonably deep **government bond market**, supported by the **RBI** and a predictable issuance framework.  
भारत ने **सरकारी बॉन्ड बाजार** को काफी गहरा बनाया है, जिसे **आरबीआई** और स्थिर निर्गम ढांचे का समर्थन प्राप्त है।
- **Government securities outstanding are close to 90% of GDP**, comparable to many large economies.  
**सरकारी प्रतिभूतियाँ** लगभग **GDP के 90%** के बराबर हैं, जो कई बड़ी अर्थव्यवस्थाओं के समान है।
- The same cannot be said of **corporate bonds, which are around 15%-16% of GDP**.  
लेकिन **कॉर्पोरेट बॉन्ड** के लिए ऐसा नहीं कहा जा सकता, जो लगभग **GDP के 15%-16%** हैं।
- **India's corporate bond market is less than half of China's and barely a quarter of the U.S. or Germany**.  
भारत का कॉर्पोरेट बॉन्ड बाजार **चीन के आधे से भी कम** और **अमेरिका या जर्मनी के लगभग एक चौथाई** के बराबर है।
- **This gap matters because economies still need long-term finance even if markets are missing**.  
यह अंतर महत्वपूर्ण है क्योंकि बाजार कमजोर होने पर भी अर्थव्यवस्था को **दीर्घकालिक वित्त** की आवश्यकता रहती है।
- **When bond markets are shallow, someone else must step in — in India, banks**.  
जब बॉन्ड बाजार उथला होता है, तो **किसी और को आगे आना पड़ता है — भारत में बैंक**।
- Today, **banks carry roughly 60%-65% of all non-financial corporate debt, compared with 30% in the U.S. and 40% in Europe**.  
आज बैंक लगभग **60%-65%** गैर-वित्तीय कॉर्पोरेट ऋण वहन करते हैं, जबकि **अमेरिका में 30%** और **यूरोप में 40%** है।
- The difference is not **managerial skill**, but **financial architecture**.  
यह अंतर **प्रबंधन कौशल** का नहीं बल्कि **वित्तीय संरचना** का है।
- Where markets can **price and redistribute credit risk**, banks lend selectively; where they cannot, banks become the **default warehouse for risk**.  
जहाँ बाजार **क्रेडिट जोखिम का मूल्यांकन और पुनर्वितरण** कर सकते हैं वहाँ बैंक चयनात्मक ऋण देते हैं, और जहाँ नहीं कर सकते वहाँ बैंक **जोखिम का मुख्य भंडार** बन जाते हैं।

## Vulnerability and recapitalisation

### संवेदनशीलता और पुनर्पूजीकरण

- This is not what **banks are designed for**.  
यह वह काम नहीं है जिसके लिए **बैंक बनाए गए हैं**।
- **Banks fund themselves largely through short-term deposits and are sensitive to confidence**.  
बैंक मुख्यतः **अल्पकालिक जमा** से वित्तपोषित होते हैं और **विश्वास** के प्रति संवेदनशील होते हैं।
- **Yet they are expected to finance projects such as highways, power plants, ports, and telecom networks that take 15–20 years to generate cash flows**.  
फिर भी उनसे **राजमार्ग, बिजली संयंत्र, बंदरगाह और दूरसंचार नेटवर्क** जैसे प्रोजेक्ट्स को वित्त देने की अपेक्षा की जाती है, जिनमें नकदी प्रवाह आने में **15–20 वर्ष** लगते हैं।
- They landed abruptly on **bank balance sheets**.  
वे सीधे **बैंक बैलेंस शीट** पर आ गिरे।
- The **fiscal cost** followed.  
इसके बाद **राजकोषीय लागत** आई।



- Since **2017**, the government has injected more than **₹3.2 lakh crore** into **public sector banks**.  
2017 से सरकार ने सार्वजनिक क्षेत्र के बैंकों में ₹3.2 लाख करोड़ से अधिक डाले हैं।
- These **recapitalisations stabilised** the system but transferred **private credit losses onto the public balance sheet**.  
इन पुनर्पूजीकरणों ने प्रणाली को स्थिर किया लेकिन निजी ऋण हानि को सार्वजनिक बैलेंस शीट पर स्थानांतरित कर दिया।
- This is the **hidden tax of a bank-centric financial system**.  
यह बैंक-केंद्रित वित्तीय प्रणाली का छिपा हुआ कर है।
- There is also a less visible **opportunity cost**.  
एक कम दिखाई देने वाली अवसर लागत भी है।
- Capital tied in **long-term corporate loans** is not available to **small firms, exporters, or first-time borrowers**.  
दीर्घकालिक कॉर्पोरेट ऋणों में फंसी पूंजी छोटी कंपनियों, निर्यातकों और नए उधारकर्ताओं के लिए उपलब्ध नहीं रहती।
- This explains why **even after clean-ups and capital injections, bank credit to MSMEs remains constrained**.  
यही कारण है कि सुधारों और पूंजी निवेश के बाद भी MSME को बैंक ऋण सीमित रहता है।
- India's **corporate bond market remains shallow** by global standards.  
वैश्विक मानकों के अनुसार भारत का कॉर्पोरेट बॉन्ड बाजार अभी भी उथला है।
- **Bonds outstanding are less than 15% of GDP, compared with 80%+ in the U.S., 55–60% in Germany, and 45–50% in China**.  
बॉन्ड कुल GDP के 15% से कम हैं, जबकि अमेरिका में 80%+, जर्मनी में 55–60%, और चीन में 45–50% हैं।
- Issuance is mainly through **private placements**, ownership is **concentrated**, and **secondary market liquidity is weak**.  
जारीकरण मुख्यतः प्राइवेट प्लेसमेंट से होता है, स्वामित्व संकेंद्रित है और द्वितीयक बाजार की तरलता कमजोर है।
- **Households and foreign investors play only a marginal role**.  
घरेलू निवेशक और विदेशी निवेशक केवल सीमित भूमिका निभाते हैं।
- Issuance is heavily skewed toward **top-rated firms**.  
जारीकरण मुख्यतः उच्च रेटिंग वाली कंपनियों तक सीमित है।
- With such limited depth, the bond market cannot effectively **absorb or price credit risk**.  
इतनी सीमित गहराई के साथ बॉन्ड बाजार क्रेडिट जोखिम का सही मूल्यांकन या अवशोषण नहीं कर सकता।
- The **concentration of risk on bank balance sheets weakens monetary policy transmission**.  
बैंक बैलेंस शीट पर जोखिम का संकेंद्रण मौद्रिक नीति के प्रसारण को कमजोर करता है।
- The core issue is the absence of a **corporate debt market** capable of distributing **long-term credit risk**.  
मुख्य समस्या एक ऐसे कॉर्पोरेट ऋण बाजार की अनुपस्थिति है जो दीर्घकालिक क्रेडिट जोखिम को वितरित कर सके।
- Without a deep bond market, **credit risk remains concentrated on bank balance sheets**.  
गहरे बॉन्ड बाजार के बिना क्रेडिट जोखिम बैंक बैलेंस शीट पर केंद्रित रहता है।
- Thus, **Budget 2026 measures aim to correct this structural imbalance**.  
इसलिए बजट 2026 के उपाय इस संरचनात्मक असंतुलन को सुधारने का प्रयास हैं।
- **Measures include improving corporate bond liquidity, introducing total-return swaps, partial guarantees via Infrastructure Risk Guarantee Fund, and expanding REIT assets**.  
इनमें कॉर्पोरेट बॉन्ड तरलता बढ़ाना, टोटल-रिटर्न स्वैप, इन्फ्रास्ट्रक्चर रिस्क गारंटी फंड, और REIT परिसंपत्तियों का विस्तार शामिल है।
- **These steps aim to shift risk from banks to markets**.  
इनका उद्देश्य जोखिम को बैंकों से बाजारों की ओर स्थानांतरित करना है।



- Whether this shift succeeds will determine if India's financial system becomes resilient or continues relying on banks as the shock absorber of last resort.  
यह बदलाव सफल होता है या नहीं, इससे तय होगा कि भारत की वित्तीय प्रणाली अधिक मजबूत बनेगी या बैंकों पर अंतिम झटका सहने वाले के रूप में निर्भर रहेगी।

## Can India overtake Bangladesh in EU textile exports?

As Bangladesh prepares to lose its Least Developed Country trade advantage, India's new EU deal could help level the tariff playing field in the sector

GS III: Economy

MCB

### DATA POINT

Anwesha Basu  
Arnab Chakrabarti

India's textile sector has been steadily losing ground in global export markets. In contrast, Bangladesh has woven together a remarkable export success. Given the recently signed India-EU Free Trade Agreement (FTA), and with Bangladesh poised to lose its Least Developed Country (LDC) status, this is an opportune moment for India's textile industry.

Within the textile value chain, India's exports to the EU remain concentrated in intermediate products – particularly yarns and fabrics – rather than in finished garments such as T-shirts, shirts, and trousers. Bangladesh's exports far exceed India's in two readymade garment categories in particular – knitted or crocheted garments (such as T-shirts, jerseys, pullovers, sweaters, and cardigans) and woven garments (such as suits, jackets, trousers, dresses, and shirts). For knitted/crocheted garments, India's share of the EU's total imports declined from nearly 6.5% in 2009 to about 4.4% in 2023 (Chart 1A). Bangladesh's share rose from just 6% in 2000 to 13% in 2009 and 26% by 2023.

A similar pattern is seen in the woven garments trade too (Chart 1B). For woven garments, India's nominal export value to the EU fell in absolute numbers from a peak of about \$3.5 billion to \$2.9 billion.

To understand why Indian garments have not been able to compete with Bangladesh in the EU market, we compared the average per-unit price of Bangladesh's major export commodities. From Table 2, it is clear that India's unit values are consistently higher across all products. This may indicate the following: First, India may be exporting more value-added, better-quality garments, which allows it to charge higher prices. However,

its low market share reveals that the EU's demand for such products is limited relative to mass-market apparel, suggesting that 'premium positioning' (if at all) alone cannot drive volume. Second, and more likely, is that higher prices may reflect structural disadvantages: higher production costs, less integrated supply chains and logistical inefficiencies.

Furthermore, the tariffs faced by Indian and Bangladeshi products are radically different (Chart 3). Bangladesh, as a LDC, has enjoyed duty-free, quota-free access to the EU under the Everything But Arms (EBA) scheme. Crucially, this zero-tariff access applies even when garments do not meet the EU's standard 'double transformation' requirement. This means Bangladesh can import fabric from anywhere in the world, stitch garments domestically, and export them to the EU at zero duty. India, lacking such preferential treatment, has faced EU Most Favoured Nation (MFN) tariffs of around 12%.

Internal factors also matter. Over the past three decades, Bangladesh has unilaterally and consistently promoted the garment sector. India's approach, by contrast, has been fragmented. Yet, the balance may be poised to shift. Two major structural breaks are on the horizon.

First, Bangladesh is set to lose its EBA benefits in 2029. This would mean the end of automatic duty-free access to the EU, with apparel exports potentially facing MFN tariffs of around 12%. Bangladesh is then expected to seek entry into the EU's Generalised Scheme of Preferences Plus (GSP+), which offers zero tariffs on roughly two-thirds of tariff lines, including textiles. However, GSP+ comes with stricter rules of origin (RoO) and safeguard provisions. As Bangladesh is heavily reliant on other countries (including India) for fabrics, this could mean that Bangladesh's garments may not satisfy GSP+ RoO for duty free entry. Bangladesh, will of course, try its

best to negotiate its way out of this clause. Historically, EU has maintained its stance on the double transformation criteria. In case it continues to do so, Bangladesh will be at a serious disadvantage. If competition is price-driven, then Bangladesh may lose its market share. If, on the other hand, Bangladesh's primary advantage comes from supply-chain integration, then it could still retain dominance in the face of higher tariffs.

The recently finalised agreement grants India duty-free access to the EU's textile markets, subject to the double-stage processing requirement. Since India's textile industry is already relatively vertically integrated – most of the yarn and fabric used in apparel production is manufactured domestically – the double-stage requirement is not likely to be an impediment for Indian textile exports. As a result, Indian exporters are well-positioned to meet stricter rules of origin without major restructuring.

Taken together, these changes create a rare window of opportunity: narrowing of Bangladesh's preferential advantage and reduction of India's tariff disadvantage. Textiles remain one of the largest employers in Indian manufacturing, spanning both formal and informal enterprises, yet the sector has failed to create employment opportunities in recent years. Reviving textile exports, particularly to high-income markets like the EU, could act as a much-needed tonic for India's employment crisis. The question is whether India is finally ready to tailor a strategy that fits, capturing market share with cost-competitive production, vertical integration, and a coherent industrial policy. The recent experience of Vietnam's apparel exports, which saw a surge post the signing of the EU-Vietnam FTA in 2020, is indicative of the opportunities on the horizon for India.

Anwesha Basu and Arnab Chakrabarti are Assistant Professors in the Department of Economics, FLAME University

### A looming shift?

The data for the charts were sourced from the World Integrated Trade Solution by the World Bank



CHARTS 1A & 1B: India's and Bangladesh's shares in the EU's import basket for knitted/crocheted garments (1A) and woven garments (1B) (in %)

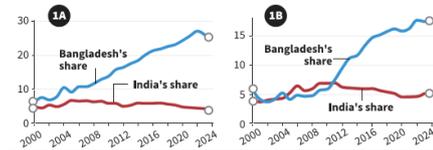
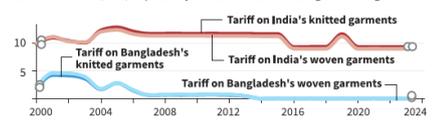


TABLE 2: Unit value comparisons of major export commodities (in \$ per unit)

Commodities	Year	Bangladesh	India
T-shirts (knitted/crocheted)	2023	2.6	3.35
T-shirts (knitted/crocheted)	2024	2.4	2.9
Jerseys (knitted/crocheted)	2023	6.4	7.5
Jerseys (knitted/crocheted)	2024	6.02	6.3
Men's suits, jackets, trousers (woven)	2023	9	13.4
Men's suits, jackets, trousers (woven)	2024	9.2	12.5
Women's suits, jackets, dresses (woven)	2023	7.5	9.5
Women's suits, jackets, dresses (woven)	2024	7.5	9.6
Men's shirts (woven)	2023	7.5	10.4
Men's shirts (woven)	2024	7.4	10.14

CHART 3: Tariffs (in %) imposed by the EU on India and Bangladesh for garments



## Can India overtake Bangladesh in EU textile exports?

क्या भारत यूरोपीय संघ को वस्त्र निर्यात में बांग्लादेश को पीछे छोड़ सकता है?

- As Bangladesh prepares to lose its Least Developed Country trade advantage, India's new EU deal could help level the tariff playing field in the sector.  
जैसे ही बांग्लादेश अपने अल्पविकसित देश व्यापार लाभ को खोने की तैयारी कर रहा है, भारत का नया यूरोपीय संघ समझौता इस क्षेत्र में शुल्क प्रतिस्पर्धा को संतुलित करने में मदद कर सकता है।

### India's textile sector and global export markets

भारत का वस्त्र क्षेत्र और वैश्विक निर्यात बाज़ार

- India's textile sector has been steadily losing ground in global export markets.  
भारत का वस्त्र क्षेत्र वैश्विक निर्यात बाज़ारों में लगातार अपना स्थान खो रहा है।
- In contrast, Bangladesh has woven together a remarkable export success.  
इसके विपरीत बांग्लादेश ने उल्लेखनीय निर्यात सफलता हासिल की है।



- Within the **textile value chain**, India's exports to the **EU** remain concentrated in **intermediate products — yarns and fabrics** rather than **finished garments such as T-shirts, shirts, trousers**.

वस्त्र मूल्य श्रृंखला में भारत का ईयू को निर्यात मुख्यतः मध्यवर्ती उत्पाद — धागा और कपड़ा में केंद्रित है, न कि तैयार परिधान जैसे टी-शर्ट, शर्ट, ट्राउज़र में।

- Bangladesh's exports far exceed India's in two **readymade garment categories — knitted or crocheted garments and woven garments**.

तैयार परिधान की दो श्रेणियों — बुने/क्रोशे परिधान और बुने हुए कपड़ों में बांग्लादेश का निर्यात भारत से कहीं अधिक है।

- For **knitted/crocheted garments**, India's share of EU imports declined from **6.5% (2009)** to about **4.4% (2023)**.

बुने/क्रोशे परिधान में भारत की ईयू आयात हिस्सेदारी 2009 में 6.5% से घटकर 2023 में 4.4% रह गई।

- Bangladesh's share rose from **6% (2000)** to **13% (2009)** and **26% (2023)**.

बांग्लादेश की हिस्सेदारी 2000 में 6% से बढ़कर 2009 में 13% और 2023 में 26% हो गई।

- A similar pattern is seen in **woven garments trade**.

बुने हुए परिधान व्यापार में भी ऐसा ही पैटर्न देखा गया।

- India's **export value to EU** for woven garments fell from **\$3.5 billion** to **\$2.9 billion**.

बुने हुए परिधानों के लिए भारत का ईयू को निर्यात मूल्य 3.5 अरब डॉलर से घटकर 2.9 अरब डॉलर हो गया।

- India's **per-unit price** is consistently **higher across products**.

भारत का प्रति इकाई मूल्य सभी उत्पादों में लगातार अधिक है।

- This may indicate India exports more **value-added, higher-quality garments** allowing **higher prices**.

यह संकेत दे सकता है कि भारत अधिक मूल्य वर्धित और उच्च गुणवत्ता वाले परिधान निर्यात करता है जिससे उच्च कीमत मिलती है।

- However, **low market share** shows EU demand for such products is limited relative to **mass-market apparel**.

लेकिन कम बाज़ार हिस्सेदारी दिखाती है कि ईयू में ऐसे उत्पादों की मांग जनसामान्य परिधान की तुलना में सीमित है।

- More likely, higher prices reflect **structural disadvantages — higher production costs, less integrated supply chains, logistical inefficiencies**.

अधिक संभावना है कि उँची कीमतें संरचनात्मक कमियों — अधिक उत्पादन लागत, कम एकीकृत आपूर्ति श्रृंखला, लॉजिस्टिक अक्षमता को दर्शाती हैं।

- Tariffs faced by India and Bangladesh are **radically different**.

भारत और बांग्लादेश पर लगने वाले शुल्क पूरी तरह अलग हैं।

- Bangladesh, as an **LDC**, enjoyed **duty-free, quota-free access to EU under EBA scheme**. **LDC** होने के कारण बांग्लादेश को **EBA योजना के तहत ईयू में शुल्क-मुक्त और कोटा-मुक्त पहुंच** मिली।

- This **zero-tariff access applies even without meeting double transformation rule**.

यह शून्य शुल्क सुविधा डबल ट्रांसफॉर्मेशन नियम पूरा किए बिना भी लागू होती है।

- Bangladesh can import **fabric globally**, stitch garments domestically, and export to EU at **zero duty**.

बांग्लादेश दुनिया से कपड़ा आयात, देश में सिलाई और शून्य शुल्क पर ईयू निर्यात कर सकता है।

- India faces **EU MFN tariffs around 12%**.

भारत को ईयू का लगभग 12% एमएफएन शुल्क देना पड़ता है।

- **Internal factors also matter — Bangladesh has consistently promoted garment sector over three decades**.

आंतरिक कारक भी महत्वपूर्ण हैं — बांग्लादेश ने तीन दशकों से परिधान क्षेत्र को लगातार बढ़ावा दिया है।

- India's approach has been **fragmented**.

भारत का दृष्टिकोण विखंडित रहा है।

- Yet, the balance may shift with **two major structural breaks ahead**.

फिर भी आने वाले दो बड़े संरचनात्मक बदलावों से स्थिति बदल सकती है।

- First, **Bangladesh** is set to lose its **EBA benefits in 2029**.

पहला, बांग्लादेश 2029 में अपने EBA लाभ खो देगा।

- This would mean the end of automatic **duty-free access to the EU**, with apparel exports potentially facing **MFN tariffs of around 12%**.



इसका अर्थ होगा ईयू में स्वतः शुल्क-मुक्त प्रवेश का अंत, और परिधान निर्यात पर लगभग 12% एमएफएन शुल्क लग सकता है।

- Bangladesh is then expected to seek entry into the **EU's Generalised Scheme of Preferences Plus (GSP+)**, which offers **zero tariffs on roughly two-thirds tariff lines including textiles**.  
इसके बाद बांग्लादेश ईयू की GSP+ योजना में प्रवेश का प्रयास करेगा, जो लगभग दो-तिहाई टैरिफ लाइनों पर शून्य शुल्क प्रदान करती है, जिसमें वस्त्र भी शामिल हैं।
- However, **GSP+ comes with stricter Rules of Origin (RoO) and safeguard provisions**.  
लेकिन GSP+ के साथ कड़े मूल नियम (RoO) और सुरक्षा प्रावधान आते हैं।
- **As Bangladesh is heavily reliant on other countries including India for fabrics, its garments may not satisfy GSP+ RoO for duty-free entry**.  
क्योंकि बांग्लादेश कपड़े के लिए भारत सहित अन्य देशों पर निर्भर है, उसके परिधान GSP+ के मूल नियमों को पूरा नहीं कर पाएंगे।
- Bangladesh will try to **negotiate its way out**, but historically the **EU has maintained the double transformation criteria**.  
बांग्लादेश इससे बचने के लिए वार्ता करेगा, लेकिन ऐतिहासिक रूप से ईयू ने डबल ट्रांसफॉर्मेशन नियम बनाए रखा है।
- If this continues, Bangladesh will face a **serious disadvantage**.  
यदि ऐसा जारी रहा तो बांग्लादेश को गंभीर नुकसान होगा।
- If competition is **price-driven**, Bangladesh may **lose market share**.  
यदि प्रतिस्पर्धा कीमत आधारित रही तो बांग्लादेश बाज़ार हिस्सेदारी खो सकता है।
- If its advantage comes from **supply-chain integration**, it may still **retain dominance despite higher tariffs**.  
यदि उसका लाभ आपूर्ति श्रृंखला एकीकरण से है, तो वह उच्च शुल्क के बावजूद प्रभुत्व बनाए रख सकता है।
- The **recently finalised India-EU agreement grants India duty-free access to EU textile markets subject to double-stage processing requirement**.  
हाल ही में अंतिम भारत-ईयू समझौते से भारत को ईयू वस्त्र बाजार में शुल्क-मुक्त प्रवेश मिला है, बशर्ते डबल-स्टेज प्रोसेसिंग नियम पूरा हो।
- India's textile industry is already **vertically integrated**, with most **yarn and fabric produced domestically**.  
भारत का वस्त्र उद्योग पहले से ही ऊर्ध्वाधर रूप से एकीकृत है और अधिकांश धागा व कपड़ा देश में ही बनता है।
- Thus, the **double-stage requirement is not likely to be an impediment** for Indian exports.  
इसलिए डबल-स्टेज नियम भारतीय निर्यात के लिए बाधा नहीं बनेगा।
- Indian exporters are **well-positioned to meet stricter Rules of Origin** without major restructuring.  
भारतीय निर्यातक कड़े मूल नियमों को बिना बड़े बदलाव के पूरा करने में सक्षम हैं।
- Together, these changes create a **rare window of opportunity** — narrowing Bangladesh's **preferential advantage** and reducing India's **tariff disadvantage**.  
ये परिवर्तन मिलकर दुर्लभ अवसर पैदा करते हैं — बांग्लादेश के विशेष लाभ को कम करना और भारत की शुल्क हानि को घटाना।
- **Textiles remain one of the largest employers in Indian manufacturing, across formal and informal sectors**.  
वस्त्र उद्योग भारतीय विनिर्माण का सबसे बड़ा रोजगार प्रदाता है, जो औपचारिक और अनौपचारिक दोनों क्षेत्रों में फैला है।
- Yet, the sector has **failed to create employment opportunities in recent years**.  
फिर भी हाल के वर्षों में यह क्षेत्र रोजगार सृजन में असफल रहा है।
- Reviving textile exports to **high-income markets like the EU** could act as a **tonic for India's employment crisis**.  
ईयू जैसे उच्च आय वाले बाज़ारों में वस्त्र निर्यात बढ़ाना भारत के रोजगार संकट के लिए औषधि बन सकता है।
- The key question is **whether India is ready to capture market share through cost-competitive production, vertical integration and coherent industrial policy**.



मुख्य प्रश्न यह है कि क्या भारत कम लागत उत्पादन, ऊर्ध्वाधर एकीकरण और स्पष्ट औद्योगिक नीति से बाज़ार हिस्सेदारी हासिल करने के लिए तैयार है।

- Vietnam's apparel exports surged after the EU-Vietnam FTA (2020), indicating opportunities ahead for India.

ईयू-वियतनाम मुक्त व्यापार समझौता 2020 के बाद वियतनाम के परिधान निर्यात में तेजी आई, जो भारत के लिए भविष्य के अवसरों का संकेत है।

## Copper is pricing scarcity at a time of plenty

**IGS III: Economy**  
**Reuters**  
LONDON

Don't panic. The world hasn't run out of copper, despite the many warnings of imminent shortfall that have accompanied its rally to all-time highs.

Indeed, the amount of copper held by the world's big three metal exchanges is above the 1.1 million metric ton mark for the first time since early 2003.

While the tariff trade ensured CME warehouses in the United States accounted for much of the inventory increase last year, both London Metal Exchange and the Shanghai Futures Exchange warehouses are also experiencing accelerated inflows.

Global exchange inventory has surged by 3,00,000 tons since the



**Precious metal:** U.S. imports of refined copper reached 1.45 million tons in the first eleven months of 2025. AP

start of January, indicating that copper's supercharged price rally has curbed manufacturing demand. The gap between speculators' great expectations and current reality yawns ever wider.

CME copper stocks registered a net decline on Thursday for the first time

since late October in a sign that last year's relentless build has lost momentum.

The threat of U.S. import tariffs on refined copper, deferred until June, led the CME duty-paid copper price to trade at a wide premium over the LME's international price at times in 2025. Traders shipped

massive amounts of physical copper to the United States to lock in the easy profits from what was an unprecedented arbitrage opportunity.

U.S. imports of refined copper reached 1.45 million tons in the first eleven months of 2025, a year-on-year increase of over 600,000 tons.

Much of that metal found its way to CME warehouses, lifting exchange stocks from 85,000 tons at the start of 2025 to 5,36,000 tons today.

The momentum is stalling, however.

### **Tariff threat**

The CME premium has evaporated as the market re-assesses the likelihood of U.S. import tariffs. The rationale of U.S. import dependency looks less con-

vincing now the country has so much inventory.

U.S. arrivals continue, but are being redirected to LME warehouses in Baltimore and New Orleans, where registered stocks have risen from zero to 4,950 and 21,075 tons respectively over the last month.

Another 6,450 and 20,665 tons of copper sit in off-warrant LME storage at the two ports.

The gravitational pull of the U.S. premium last year sucked in 200,000 tons of copper from China's bonded warehouse zones but no one seems to have missed it.

Shanghai Futures Exchange stocks have risen by 1,27,000 tons to 2,72,475 tons since the start of January. The Yangshan premium, an indicator of import

demand assessed by local data provider Shanghai Metal Market, touched an 18-month low of \$22 per ton last month.

Sure, rising inventory and weak import appetite are the norm around China's lunar new year holiday period.

### **Year of the Horse**

But the Year of the Horse only starts next week and Shanghai exchange stocks are already higher than last year's seasonal peak.

Moreover, China seems to have enough surplus metal to help replenish LME stocks.

Chinese brands of copper accounted for 70% of LME-warranted stocks at the end of January and arrivals are taking place daily at LME warehouses in South Korea and Taiwan.

## Copper is pricing scarcity at a time of plenty प्रचुरता के समय तांबा कमी की कीमत तय कर रहा है

- Don't panic. The world hasn't run out of **copper**, despite the many warnings of imminent shortfall that have accompanied its rally to **all-time highs**.  
घबराएँ नहीं। दुनिया में तांबे की कमी नहीं हुई है, भले ही रिकॉर्ड ऊँचाइयों तक इसकी कीमतों की तेजी के साथ आसन्न कमी की कई चेतावनियाँ आई हों।
- Indeed, the amount of **copper** held by the world's big three metal exchanges is above the **1.1 million metric ton** mark for the first time since **early 2003**.  
वास्तव में, दुनिया के तीन सबसे बड़े धातु एक्सचेंजों के पास मौजूद तांबे की मात्रा **2003 की शुरुआत** के बाद पहली बार **1.1 मिलियन मीट्रिक टन** से ऊपर है।
- While the tariff trade ensured **CME** warehouses in the **United States** accounted for much of the inventory increase last year, both **London Metal Exchange** and the **Shanghai Futures Exchange** warehouses are also experiencing accelerated inflows.  
जहाँ शुल्क व्यापार ने यह सुनिश्चित किया कि पिछले वर्ष भंडार वृद्धि का बड़ा हिस्सा **संयुक्त राज्य अमेरिका** के **CME** गोदामों में रहा, वहीं **लंदन मेटल एक्सचेंज** और **शंघाई फ्यूचर्स एक्सचेंज** के गोदामों में भी तेज़ी से आवक हो रही है।
- Global exchange inventory has surged by **3,00,000 tons** since the start of **January**, indicating that copper's supercharged price rally has curbed **manufacturing demand**. The gap between **speculators'** great expectations and current reality yawns ever wider.  
**जनवरी** की शुरुआत से वैश्विक एक्सचेंज भंडार **3,00,000 टन** बढ़ गया है, जो दर्शाता है कि तांबे की तेज़ कीमतों की तेजी ने **उत्पादन मांग** को सीमित किया है। **सट्टेबाजों** की बड़ी अपेक्षाओं और वर्तमान वास्तविकता के बीच का अंतर और बढ़ गया है।
- **CME** copper stocks registered a net decline on **Thursday** for the first time since **late October** in a sign that last year's relentless build has lost momentum.  
**CME** के तांबा भंडार में **गुरुवार** को **अक्टूबर के अंत** के बाद पहली बार शुद्ध गिरावट दर्ज की गई, जो संकेत है कि पिछले वर्ष की निरंतर बढ़ोतरी की गति थम रही है।



## Top 5 Producers of Copper

### 1. Chile

- World's largest copper producer (dominates global supply)
- Produces about **25–27% of world copper**
- Major mines — Escondida (largest copper mine in world), Chuquibambilla
- Located in **Atacama Desert region**

### 2. Peru

- Second largest producer globally
- Major mines — Cerro Verde, Las Bambas
- **Andes Mountains major copper belt**

### 3. Democratic Republic of Congo (DRC)

- Third largest producer
- **Copperbelt region (Katanga)** very rich in copper-cobalt deposits

### 4. China

- Fourth largest producer
- **Also world's largest copper consumer and refiner**

### 5. United States (USA)

- Fifth largest producer
- Major region — Arizona (Morenci mine one of largest in North America)

<b>GS Paper III: S&amp;T,</b>	
<b>TOPICS COVERED</b>	<b>17 February 2026</b>
1.	<b>India's flagship AI summit opens to massive crowds; matter of pride, says Modi</b> भारत का प्रमुख एआई शिखर सम्मेलन भारी भीड़ के साथ शुरू; गर्व की बात, मोदी बोले
2.	<b>Single genome-editing strategy can help treat multiple disorders</b> एकल जीनोम-संपादन रणनीति कई विकारों के उपचार में मदद कर सकती है
3.	<b>QUIZ</b>



# India's flagship AI summit opens to massive crowds; matter of pride, says Modi

GS III: S&T  
The Hindu Bureau  
NEW DELHI

After months of promotion as India's flagship artificial intelligence event, the five-day AI Impact Summit was inaugurated by Prime Minister Narendra Modi on Monday, drawing overwhelming crowds and packing Bharat Mandapam to capacity as thousands thronged the venue.

Officials had widely publicised the summit, hosting pre-event programmes across several Indian cities and abroad. Those efforts appeared to pay off on Monday, with nearly every accessible part of the sprawling 100-acre complex filled with attendees.

"We have more than 2.5 lakh registrations," Ministry of Electronics and Information Technology (MeitY) Secretary S. Krishnan said on the sidelines. Entry to the event is free upon registration, and visitor passes have been oversubscribed, Mr. Krishnan said.

In a post on X, Prime Minister Modi said, "The AI Impact Summit will enrich global discourse on diverse aspects of AI, such as innovation, collaboration, responsible use and more. I am confident that the outcomes of the summit will help shape a future that is progressive, innovative and opportunity-driven."

Mr. Modi visited the exhibition, posting on X afterward that it was "a matter of immense pride for us that people from all over the world are coming to India for the India AI Impact Summit," and that the "occasion is further proof that



Prime Minister Narendra Modi during the inaugural event of AI Impact Summit at Bharat Mandapam in New Delhi on Monday. ANI

our country is progressing rapidly in the field of science and technology"

The summit featured over 100 events, excluding those that were not livestreamed. In the long exhibition hall complex, over 400 booths were active, spanning industry, academia, startups, and global tech giants.

## Logistical challenges

However, the event was not without hitches – many attendees complained online about overcrowding, long queues at food courts, where some vendors reportedly refused digital payments. Some outlets ran out of ingredients and could not restock quickly enough to meet demands. Some visitors said drinking water was difficult to access.

In the afternoon, parts of the venue were cleared for security sanitisation, leading to exhibitors being asked to vacate at short notice. One exhibitor complained online that wearable devices brought for display were stolen. Access to several areas was also restricted later in the day, resulting in long queues at

entry and exit points.

There were, however, some novel arrangements. A quick-commerce platform set up grocery and snack drop-off points across Bharat Mandapam, while an online food ordering and delivery company facilitated food deliveries within the complex. Digi Yatra was piloted at entry gates, enabling attendees to use facial recognition for automated access.

Mr. Modi is scheduled to address the plenary session on Thursday, when the event will be closed to general visitors. Keynote speakers that day include OpenAI CEO Sam Altman, Microsoft president Brad Smith, and Google DeepMind CEO Demis Hassabis.

While NVIDIA CEO Jensen Huang's highly anticipated visit was cancelled, it is unclear if there were any other cancellations. Former Microsoft CEO Bill Gates was pulled from an online speakers' list, but officials did not respond to queries on whether Mr. Gates, who was in Amaravati earlier on Monday, would attend.

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**India's flagship AI summit opens to massive crowds; matter of pride, says Modi**  
भारत का प्रमुख एआई शिखर सम्मेलन भारी भीड़ के साथ शुरू; गर्व की बात, मोदी बोले

- **AI Impact Summit** will enrich global discourse on diverse aspects of AI, such as **innovation, collaboration, responsible use.**

- The summit featured **over 100 events**, excluding those that were not livestreamed.

शिखर सम्मेलन में **100 से अधिक कार्यक्रम** शामिल थे, उन कार्यक्रमों को छोड़कर जो लाइवस्ट्रीम नहीं किए गए थे।

- **In the long exhibition hall complex, over 400 booths** were active, spanning **industry, academia, startups, and global tech giants.**

**Digi Yatra** was piloted at entry gates, enabling attendees to use **facial recognition** for automated access.

प्रवेश द्वारों पर **डिजी यात्रा** का पायलट किया गया, जिससे उपस्थित लोग **फेशियल रिकग्निशन** के माध्यम से स्वचालित प्रवेश कर सके।

- Mr. Modi is scheduled to address the **plenary session** on Thursday, when the event will be **closed to general visitors.**

श्री मोदी गुरुवार को **पूर्ण सत्र** को संबोधित करने वाले हैं, जब कार्यक्रम **सामान्य आगंतुकों के लिए बंद** रहेगा।

- **Keynote speakers** that day include **OpenAI CEO Sam Altman, Microsoft president Brad Smith, and Google DeepMind CEO Demis Hassabis.**

उस दिन **मुख्य वक्ताओं में ओपनएआई के सीईओ सैम ऑल्टमैन, माइक्रोसॉफ्ट के अध्यक्ष**

**ब्रैड स्मिथ, और गूगल डीपमाइंड के सीईओ डेमिस हासाबिस** शामिल हैं।

- While **NVIDIA CEO Jensen Huang's** highly anticipated visit was **cancelled**, it is unclear if there were any other cancellations.



हालांकि एनवीडिया के सीईओ जेनसन हुआंग की बहुप्रतीक्षित यात्रा रद्द कर दी गई, यह स्पष्ट नहीं है कि कोई अन्य रद्दीकरण हुआ या नहीं।

- Former Microsoft CEO Bill Gates was pulled from an online speakers' list, but officials did not respond to queries on whether Mr. Gates, who was in Amaravati earlier on Monday, would attend.

पूर्व माइक्रोसॉफ्ट सीईओ बिल गेट्स को ऑनलाइन वक्ताओं की सूची से हटा दिया गया, लेकिन अधिकारियों ने इस पर सवालों का जवाब नहीं दिया कि सोमवार को पहले अमरावती में मौजूद रहे श्री गेट्स कार्यक्रम में शामिल होंगे या नहीं।

## Single genome-editing strategy can help treat multiple disorders

Nonsense mutations account for about a quarter of all known disease-causing genetic changes; each one halts a different protein at a different point, creating a range of disorders; developing a separate treatment for each is a slow and expensive process; a new study has found a way around this

**Manjeera Gowravaram**

Genetic disorders often stem from small errors in the DNA sequence with major consequences. Many diseases like cystic fibrosis and Batten disease can be traced to changes disrupting the cell's ability to build a complete, functional protein. One particularly common culprit is the nonsense mutation, where a single incorrect DNA letter inserts a premature stop signal. When the cell encounters it, protein production ends too early, leaving the body without important enzymes, transporters or structural components.

Nonsense mutations account for about a quarter of all known disease-causing genetic changes. Each one halts a different protein at a different point, creating a wide range of disorders that, at present, require separate treatments. Each therapy needs to be designed, tested and approved on its own. This is a slow and expensive process.

A study in *Nature* recently revealed a way around this challenge. Instead of crafting a therapy for every mutation, researchers from the Broad Institute, Harvard University, and the University of Minnesota have developed a method to address many nonsense mutation diseases using a single genome-editing strategy. Their approach, called Prime-editing-mediated readthrough of premature Termination codons (PERT), reprogrammes one of the cell's own genes into a tool to override premature stop signals, allowing the cell to ignore the faulty instruction and complete the protein.

**Repurposing genes**  
Cells make proteins by transcribing the DNA into mRNA, written in a sequence of three nucleotides at a time; each set of three is called a codon. Then tRNA acts like a translator: each one recognises a specific codon and transports the matching amino acid, like making a photograph from its negative. Finally, a cellular machine called the ribosome strings these amino acids together, one by one, to make proteins.

The tRNA genes number in the hundreds. Many of them are redundant because they perform overlapping functions, so the loss or alteration of one of them is often harmless.

The researchers used this redundancy to test whether a non-essential tRNA gene could be edited into a suppressor tRNA – a molecule that reads through premature stop signals and inserts an amino acid there instead. Laboratories have used natural suppressor tRNAs for decades but they have been unsuitable for therapies thus far due to concerns about their safety and durability.

Using a precise genome-editing approach called prime editing, the team



Nonsense mutations account for about a quarter of all known disease-causing genetic changes. GETTY IMAGES

showed that a human tRNA gene can be rewritten to permanently operate as a suppressor tRNA while also producing tRNA at safe, natural levels. This allowed the edited cell to override premature stop codons and make full-length proteins without disrupting global protein production.

**Finding effective candidates**  
Human cells contain 418 tRNA genes. With the help of prime editing, the researchers found that four tRNAs – called leucine, arginine, tyrosine, and serine – showed promise to suppress a premature stop codon called TAG. However, the natural versions of these tRNAs weren't good enough for therapeutic use.

To increase their effectiveness, the researchers engineered thousands of variants of the four tRNA by adjusting their DNA sequences and by making small changes to the tRNA structure itself. These improvements made the tRNAs more stable and better at decoding premature stop signals. This multi-step engineering effort produced several optimised suppressor tRNAs.

The next challenge was to install them efficiently into the genome. However, editing a tRNA gene is difficult because that part of the DNA is often compact and tightly folded, making it harder for genome-editing enzymes to access it.

To overcome this, the researchers turned to the specifics of prime editing. This technique uses a specialised molecule called a prime-editing guide RNA, or pegRNA, to lead the editing machinery to the correct spot on the DNA and hold the template needed to write the new genetic code.

Because the success of this process depends heavily on the precise design of the pegRNA, the team created a library of more than 17,000 different ones and tested various configurations to identify the ones that could successfully access

The authors present strong laboratory evidence showing that their engineered tRNA approach can restore protein function in multiple models, which is an important advance

**DEBOJYOTI CHAKRABORTY**  
Senior principal scientist at CSIR-Institute of Genomics and Integrative Biology

the tightly folded DNA and rewrite the native tRNA gene into its optimised suppressor form. Based on the results of this screen, the team identified a prime-editing enzyme that they named PE5c. It proved especially effective at rewriting the targeted DNA sequence, and became more efficient when paired with a strategy called PE3 – which uses an additional guide RNA to steer the cell's repair machinery to adopt the edited sequence.

In cultured human cells, this combination had 60-80% editing efficiency, which is unusually high for multi-base genomic edits. To compare the standard matching for precise gene insertion, called homology-directed repair, is typically 10-20% efficient, or below, in similar contexts.

Safety tests indicated the process didn't accidentally alter unrelated parts of the DNA, didn't disturb the cell's overall activity or normal protein production, and it distinguished between faulty and correct instructions. In particular, it ignored the premature stop signals causing the disease while still respecting the natural stop signals that mark the actual end of a protein.

The researchers called this complete package PERT. To evaluate its therapeutic potential, they tested the method in cell models of Batten disease, Tay-Sachs disease, and Niemann-Pick C1 disease, all caused by premature stop codons.

After installing the engineered suppressor tRNA, enzyme activity in the

Batten and Tay-Sachs models rose to 17-70% of their normal levels. In Niemann-Pick C1 models, cells produced measurable amounts of full-length NPC1 protein, which is otherwise absent when there's a nonsense mutation.

**Results in mice**  
To evaluate PERT in a living organism, the team used AAV9 to deliver the prime-editing components into newborn mice. AAV9 is a common gene-therapy vector, a harmless virus repurposed as a microscopic delivery vehicle to ferry genetic cargo into cells. The goal was to use it to convert a natural mouse tRNA gene into a suppressor tRNA *in vivo* and assess its ability to restore protein production.

In the Hurler syndrome mouse model, PERT restored 1.7% of normal enzyme activity in the brain, heart, and liver. While modest, these levels are known to meaningfully reduce disease severity. Treated mice also showed better cellular pathology and no signs of toxicity.

The authors present strong laboratory evidence showing that their engineered tRNA approach can restore protein function in multiple models, which is an important advance," Dr. Chakraborty said. But he also emphasised the practical limitations: "Key challenges remain, particularly around delivery, long-term safety, and performance across different tissues, before this strategy can realistically move toward patients."

Yet these early successes have offered some momentum. The first clinical use of base editing in an individual reported earlier this year involved a TAG stop codon. The case showed that established delivery methods like viral vectors can carry genome-editing tools into the necessary tissues. This means PERT has a viable path to the clinic.

(Manjeera Gowravaram has a PhD in RNA biochemistry and works as a freelance science writer. [gmanjeera@gmail.com](mailto:gmanjeera@gmail.com))

**Single genome-editing strategy can help treat multiple disorders**  
**एकल जीनोम-संपादन रणनीति कई विकारों के उपचार में मदद कर सकती है**

- Nonsense mutations account for about a quarter of all known disease-causing genetic changes; each one halts a different protein at a different point, creating a range of disorders; developing a separate treatment for each is a slow and expensive process; a new study has found a way around this.



नॉनसेंस म्यूटेशन सभी ज्ञात रोग-कारक आनुवंशिक परिवर्तनों का लगभग एक-चौथाई हिस्सा हैं; प्रत्येक अलग-अलग प्रोटीन को अलग बिंदु पर रोक देता है, जिससे विभिन्न विकार उत्पन्न होते हैं; प्रत्येक के लिए अलग उपचार विकसित करना एक धीमी और महंगी प्रक्रिया है; एक नए अध्ययन ने इसका समाधान खोज लिया है।

- Genetic disorders often stem from small errors in the **DNA sequence** with major consequences.  
आनुवंशिक विकार अक्सर **डीएनए अनुक्रम** की छोटी त्रुटियों से उत्पन्न होते हैं जिनके बड़े परिणाम होते हैं।
- Many diseases like **cystic fibrosis** and **Batten disease** can be traced to changes disrupting the cell's ability to build a complete, functional **protein**.  
कई रोग जैसे **सिस्टिक फाइब्रोसिस** और **बैटन रोग** उन परिवर्तनों से जुड़े हैं जो कोशिका की पूर्ण और कार्यात्मक **प्रोटीन** बनाने की क्षमता को बाधित करते हैं।
- One particularly common culprit is the **nonsense mutation**, where a single incorrect DNA letter inserts a premature **stop signal**.  
एक प्रमुख कारण **नॉनसेंस म्यूटेशन** है, जिसमें डीएनए का एक गलत अक्षर समय से पहले **स्टॉप संकेत** जोड़ देता है।
- When the cell encounters it, **protein production ends too early**, leaving the body without important enzymes, transporters or structural components.  
जब कोशिका इसका सामना करती है तो **प्रोटीन निर्माण समय से पहले रुक जाता है**, जिससे शरीर महत्वपूर्ण एंजाइम, ट्रांसपोर्टर या संरचनात्मक घटकों से वंचित रह जाता है।
- Nonsense mutations account for about one-quarter of all known disease-causing genetic changes.**  
नॉनसेंस म्यूटेशन सभी ज्ञात रोग उत्पन्न करने वाले आनुवंशिक परिवर्तनों का लगभग **एक-चौथाई** होते हैं।
- Each one halts a different protein at a different point, creating a **wide range of disorders** requiring separate treatments.  
हर एक अलग प्रोटीन को अलग बिंदु पर रोक देता है, जिससे **विभिन्न प्रकार के विकार** उत्पन्न होते हैं जिनके लिए अलग उपचार आवश्यक है।
- Each therapy needs to be designed, tested and approved separately, making it a **slow and expensive process**.  
प्रत्येक उपचार को अलग-अलग तैयार, परीक्षण और स्वीकृत करना पड़ता है, जिससे यह **धीमी और महंगी प्रक्रिया** बन जाती है।
- A study in **Nature** revealed a way around this challenge using a single **genome-editing strategy**.  
नेचर में प्रकाशित अध्ययन ने एकल **जीनोम संपादन रणनीति** से इस चुनौती का समाधान प्रस्तुत किया।
- Researchers from **Broad Institute, Harvard University, and University of Minnesota** developed a method to address many nonsense mutation diseases together.  
**ब्रॉड संस्थान, हार्वर्ड विश्वविद्यालय और मिनेसोटा विश्वविद्यालय** के शोधकर्ताओं ने कई नॉनसेंस म्यूटेशन रोगों के लिए एक साथ कार्य करने वाली विधि विकसित की।
- Their approach, called **PERT**, reprogrammes a cell gene to override premature stop signals and complete the **protein**.  
उनकी विधि **PERT** कोशिका के जीन को पुनःप्रोग्राम कर समयपूर्व स्टॉप संकेत को अनदेखा कर **प्रोटीन** को पूरा करने देती है।
- The study offers proof of concept for a **gene-agnostic therapy** that may benefit many **rare diseases**.  
यह अध्ययन एक **जीन-स्वतंत्र उपचार** की अवधारणा प्रस्तुत करता है जो कई **दुर्लभ रोगों** में सहायक हो सकता है।

## Repurposing genes जीन का पुनःउपयोग

- Cells make proteins by transcribing DNA into mRNA, arranged in sequences of three nucleotides called codons.**  
कोशिकाएँ **डीएनए से एमआरएनए** बनाकर प्रोटीन बनाती हैं, जिसमें तीन न्यूक्लियोटाइड का क्रम **कोडॉन** कहलाता है।
- Then tRNA recognises a codon and brings the matching amino acid.**  
इसके बाद **टीआरएनए** कोडॉन को पहचानकर संबंधित **अमीनो अम्ल** लाता है।



- Finally, the **ribosome** joins amino acids to build **proteins**.  
अंत में **राइबोसोम** अमीनो अम्लों को जोड़कर **प्रोटीन** बनाता है।
- The **tRNA genes number in the hundreds**, many redundant and overlapping in function.  
**टीआरएनए जीन सैकड़ों में होते हैं**, जिनमें कई एक-दूसरे के कार्य को पूरा करते हैं।
- Researchers edited a non-essential tRNA gene into a **suppressor tRNA** that reads through premature stop signals and inserts an amino acid.  
शोधकर्ताओं ने एक गैर-आवश्यक टीआरएनए जीन को **सप्रेसर टीआरएनए** में बदल दिया जो समयपूर्व स्टॉप संकेत को पढ़कर अमीनो अम्ल जोड़ देता है।
- Natural suppressor tRNAs were known for decades but unsuitable due to **safety and durability concerns**.  
प्राकृतिक सप्रेसर टीआरएनए दशकों से ज्ञात थे पर **सुरक्षा और स्थायित्व समस्याओं** के कारण उपयोगी नहीं थे।
- Using precise **prime editing**, researchers rewrote a human tRNA gene to permanently act as a suppressor at safe natural levels.  
सटीक **प्राइम एडिटिंग** द्वारा मानव टीआरएनए जीन को स्थायी रूप से सप्रेसर के रूप में सुरक्षित स्तर पर कार्य करने के लिए पुनर्लिखित किया गया।
- This enabled cells to override premature stop codons and produce **full-length proteins** without disrupting global protein production.  
इससे कोशिकाएँ समयपूर्व स्टॉप कोडॉन को अनदेखा कर **पूर्ण लंबाई के प्रोटीन** बना सकीं बिना सामान्य प्रोटीन निर्माण को बाधित किए।

### Finding effective candidates

#### प्रभावी उम्मीदवारों की खोज

- **Human cells contain 418 tRNA genes**.  
मानव कोशिकाओं में **418 tRNA जीन** होते हैं।
- With the help of **prime editing**, the researchers found that **four tRNAs — leucine, arginine, tyrosine, and serine — showed promise to suppress a premature stop codon called TAG**.  
**प्राइम एडिटिंग** की सहायता से शोधकर्ताओं ने पाया कि चार tRNA — **ल्यूसीन, आर्जिनिन, टायरोसिन और सेरीन** — समयपूर्व स्टॉप कोडॉन **TAG** को दबाने की क्षमता दिखाते हैं।
- However, the natural versions of these tRNAs weren't good enough for **therapeutic use**.  
हालाँकि इन tRNA के प्राकृतिक रूप **चिकित्सीय उपयोग** के लिए पर्याप्त नहीं थे।
- To increase their effectiveness, the researchers engineered **thousands of variants** of the four tRNA by adjusting their **DNA sequences** and making small structural changes.  
उनकी प्रभावशीलता बढ़ाने के लिए शोधकर्ताओं ने **हजारों वैरिएंट** तैयार किए, उनके **डीएनए अनुक्रम** और संरचना में छोटे परिवर्तन किए।
- These improvements made the tRNAs **more stable** and better at decoding premature stop signals.  
इन सुधारों ने tRNA को **अधिक स्थिर** बनाया और समयपूर्व स्टॉप संकेत पढ़ने में बेहतर किया।
- This multi-step engineering produced several **optimised suppressor tRNAs**.  
इस बहु-चरणीय प्रक्रिया से कई **अनुकूलित सप्रेसर tRNA** बने।
- The next challenge was to install them efficiently into the **genome**.  
अगली चुनौती इन्हें **जीनोम** में प्रभावी रूप से स्थापित करना था।
- Editing a tRNA gene is difficult because that DNA region is **compact and tightly folded**.  
tRNA जीन का संपादन कठिन है क्योंकि वह डीएनए भाग **संकुचित और कसकर मुड़ा हुआ** होता है।
- To overcome this, researchers used **prime editing** with a specialised molecule called **pegRNA**.  
इसे हल करने के लिए शोधकर्ताओं ने **प्राइम एडिटिंग** और विशेष अणु **pegRNA** का उपयोग किया।
- pegRNA guides editing machinery to the correct DNA site and provides the template to write the **new genetic code**.  
pegRNA संपादन प्रणाली को सही डीएनए स्थान तक ले जाता है और **नया आनुवंशिक कोड** लिखने का नमूना देता है।
- Because success depends on pegRNA design, the team created **17,000+ variants** and tested multiple configurations.



क्योंकि सफलता pegRNA डिजाइन पर निर्भर करती है, टीम ने **17,000 से अधिक वैरिएंट** बनाए और परीक्षण किए।

- They identified a prime-editing enzyme named **PE6c** which efficiently rewrote targeted DNA. उन्होंने **PE6c** नामक प्राइम-एडिटिंग एंजाइम पहचाना जिसने लक्षित डीएनए को प्रभावी रूप से बदला।
- Efficiency increased further when combined with **PE3 strategy** using an additional guide RNA.

**PE3 रणनीति** के साथ अतिरिक्त गाइड RNA उपयोग करने पर दक्षता और बढ़ी।

- In cultured human cells, this combination achieved **60–80% editing efficiency**. संस्कृत मानव कोशिकाओं में इस संयोजन ने **60–80% संपादन दक्षता** प्राप्त की।
- By comparison, homology-directed repair typically achieves **10–20% efficiency** or lower. तुलना में, होमोलॉजी-डायरेक्टेड रिपेयर सामान्यतः **10–20% दक्षता** या उससे कम होती है।
- Safety tests showed no unintended DNA changes and no disruption to **normal protein production**. सुरक्षा परीक्षणों में कोई अनचाहा डीएनए परिवर्तन नहीं मिला और **सामान्य प्रोटीन निर्माण** प्रभावित नहीं हुआ।
- The system ignored disease-causing premature stop signals while respecting **natural stop signals**. प्रणाली ने रोग उत्पन्न करने वाले समयपूर्व स्टॉप संकेतों को अनदेखा किया जबकि **प्राकृतिक स्टॉप संकेतों** का पालन किया।
- Researchers called this complete system **PERT**. शोधकर्ताओं ने इस पूर्ण प्रणाली को **PERT** नाम दिया।
- They tested it in cell models of **Batten disease, Tay-Sachs disease, and Niemann-Pick C1 disease**. इसे **बैटन रोग, टे-सैक्स रोग और नीमन-पिक C1 रोग** के कोशिका मॉडल में परीक्षण किया गया।
- After installing engineered suppressor tRNA, enzyme activity rose to **17–70% of normal levels** in Batten and Tay-Sachs models. इंजीनियर किए गए सप्रेसर tRNA लगाने के बाद बैटन और टे-सैक्स मॉडल में एंजाइम गतिविधि **सामान्य स्तर के 17–70%** तक बढ़ गई।
- In Niemann-Pick C1 models, cells produced measurable **full-length NPC1 protein**, previously absent due to nonsense mutation. नीमन-पिक C1 मॉडल में कोशिकाओं ने मापनीय **पूर्ण लंबाई का NPC1 प्रोटीन** बनाया, जो पहले नॉनसेंस म्यूटेशन के कारण अनुपस्थित था।

## Results in mice चूहों में परिणाम

- To evaluate **PERT** in a living organism, the team used **AAV9** to deliver the prime-editing components into **newborn mice**. जीवित जीव में **PERT** का मूल्यांकन करने के लिए टीम ने **AAV9** का उपयोग कर प्राइम-एडिटिंग घटकों को **नवजात चूहों** में पहुँचाया।
- **AAV9** is a common **gene-therapy vector**, a harmless virus repurposed to ferry genetic cargo into cells. **AAV9** एक सामान्य **जीन-थेरेपी वेक्टर** है, एक हानिरहित वायरस जिसे कोशिकाओं में आनुवंशिक सामग्री पहुँचाने के लिए उपयोग किया जाता है।
- The goal was to convert a natural mouse **tRNA gene** into a **suppressor tRNA in vivo** and assess restoration of **protein production**. उद्देश्य प्राकृतिक चूहे के **tRNA जीन** को **इन-विवो सप्रेसर tRNA** में बदलना और **प्रोटीन निर्माण** की पुनर्स्थापना का मूल्यांकन करना था।
- In the **Hurler syndrome mouse model**, PERT restored **1.7–7%** of normal enzyme activity in the **brain, heart, and liver**. **हर्लर सिंड्रोम चूहा मॉडल** में PERT ने **1.7–7%** सामान्य एंजाइम गतिविधि को **मस्तिष्क, हृदय और यकृत** में पुनर्स्थापित किया।
- While modest, these levels are known to **reduce disease severity** meaningfully. हालाँकि कम, यह स्तर **रोग की गंभीरता कम करने** में महत्वपूर्ण माने जाते हैं।
- Treated mice showed improved **cellular pathology** and no signs of **toxicity**. उपचारित चूहों में बेहतर **कोशिकीय स्थिति** और **विषाक्तता** के कोई संकेत नहीं दिखे।



- Dr. Chakraborty said the study provides strong evidence that engineered **tRNA approach restores protein function** in multiple models.  
डॉ. चक्रवर्ती ने कहा कि अध्ययन दर्शाता है कि इंजीनियर किया गया tRNA तरीका कई मॉडलों में प्रोटीन कार्य बहाल करता है।
- He also noted challenges: **delivery, long-term safety, and performance across tissues** must be resolved before clinical use.  
उन्होंने यह भी बताया कि **डिलीवरी, दीर्घकालिक सुरक्षा और विभिन्न ऊतकों में प्रदर्शन** जैसी चुनौतियाँ क्लिनिकल उपयोग से पहले हल करनी होंगी।
- Early successes have provided momentum for further research.  
प्रारंभिक सफलताओं ने आगे के अनुसंधान को गति दी है।
- The first clinical use of **base editing** reported earlier this year involved a **TAG stop codon**.  
इस वर्ष रिपोर्ट किए गए **बेस एडिटिंग** के पहले क्लिनिकल उपयोग में **TAG स्टॉप कोडॉन** शामिल था।
- The case showed that **viral vectors** can deliver gene-editing tools to required tissues.  
इस मामले ने दिखाया कि **वायरल वेक्टर** आवश्यक ऊतकों तक जीन-संपादन उपकरण पहुँचा सकते हैं।
- This suggests **PERT has a viable path to the clinic**.  
यह संकेत देता है कि **PERT के पास क्लिनिक तक पहुँचने का व्यावहारिक मार्ग** है।

### Answers to February 12 quiz:

1. What Darwin originally studied at University of Edinburgh – **Ans: Medicine**
  2. Vessel onboard which Darwin developed his scientific ideas – **Ans: Beagle**
  3. Author of essay on population that inspired Darwin – **Ans: Thomas Malthus**
  4. Scholar who independent arrived at idea of natural selection – **Ans: Alfred Russel Wallace**
  5. 1871 book where Darwin introduced idea of sexual selection – **Ans: The Descent of Man**
- Visual: **Julia Margaret Cameron**  
First contact: Tamal Biswas | K.N. Viswanathan | Kanakpriya Verma | Prem Raj P. | Appa Rao M.V.

### QUIZ: Medicine

#### HMS Beagle

- Charles Darwin developed many of his foundational scientific ideas while sailing aboard **HMS Beagle** during its historic voyage from **1831 to 1836**.
- As a naturalist, he studied geology, fossils, plants, and animals across South America and the **Galápagos Islands**, observing variations among species. These observations later helped him formulate the theory of **evolution by natural selection**, which he presented in his landmark book *On the Origin of Species* in **1859**.

#### Thomas Malthus

- **Thomas Robert Malthus**, an English economist and demographer, wrote *An Essay on the Principle of Population* in **1798**, arguing that population grows geometrically while food supply increases arithmetically, leading to struggle for survival.
- When Charles Darwin read Malthus in **1838**, he realised that competition for limited resources could drive natural selection, shaping evolution.
- Malthus's ideas thus became a key intellectual influence on Darwin's formulation of evolutionary theory.

#### Alfred Russel Wallace

- **Alfred Russel Wallace**, a British naturalist, independently conceived the theory of **natural selection** while conducting field research in the **Malay Archipelago** during the **1850s**.
- In **1858**, he sent his manuscript outlining evolution by natural selection to **Charles Darwin**, prompting their joint presentation at the **Linnean Society of London**.

#### The Descent of Man



- Charles Darwin introduced the concept of **sexual selection** in his **1871** book *The Descent of Man, and Selection in Relation to Sex*.
- In this work, he explained how traits such as bright colours, elaborate displays, and courtship behaviours evolve because they improve mating success rather than survival.
- Darwin applied these ideas to both animals and humans, arguing that sexual selection played a major role in shaping human evolution and secondary sexual characteristics.

<b>GS Paper III: Environment,</b>	
<b>TOPICS COVERED</b>	<b>17 February 2026</b>
1.	<b>NGT gives clearance to Great Nicobar project</b> एनजीटी ने ग्रेट निकोबार परियोजना को मंजूरी दी
2.	<b>SC to take a fresh look at pleas on ex post facto eco clearance regime</b> एक्स पोस्ट फैक्टो पर्यावरणीय मंजूरी व्यवस्था पर याचिकाओं की फिर से समीक्षा करेगा सुप्रीम कोर्ट
3.	<b>'Godless' lake in Japan warns of climate crisis</b> जापान की 'ईश्वर-विहीन' झील जलवायु संकट की चेतावनी देती है
	<b>Transitioning to green steel</b> हरित इस्पात की ओर संक्रमण
	<b>How district cooling can ease India's climate and urban planning troubles</b> जिला शीतलन कैसे भारत की जलवायु और शहरी नियोजन की समस्याओं को कम कर सकता है



# NGT gives clearance to Great Nicobar project

The ₹92,000-crore mega project is of 'strategic, defence and national importance', says Centre

Tribunal disposes batch of applications over environmental clearance for the infra project

'Adequate safeguards' provided in EC norms, no good ground to interfere, finds Bench

GS III: Environment  
Abhinav Lakshman  
NEW DELHI

A Bench of the National Green Tribunal (NGT) on Monday cleared the way for the ₹92,000-crore Great Nicobar Island mega-infrastructure project, noting that "considering the strategic importance" of it and "other relevant considerations", "we do not find any good ground to interfere".

It disposed of applications related to the environment clearance (EC) for the project, with a direction to authorities "to ensure full and strict compliance of EC conditions".

The project includes a transshipment port, an airport, a power plant, and a township.

The Bench was hearing a batch of applications related to the EC, which was granted in 2022. An earlier NGT Bench had in 2023 called for the formation of a high-powered committee

(HPC) to address certain issues concerning the protection of coral reef colonies, nesting sites of leatherback turtles, and the allegation that parts of the project are located in ecologically protected zones.

The applicants argued that the government had erred in limiting the terms of reference for the HPC to three issues and that the terms were "factually incorrect". They said the issues had not been properly examined.

The NGT said "adequate safeguards" had been provided in the conditions specified in the EC, which the Tribunal had already refused to interfere with in its 2023 order. It said the remaining issues had "been dealt with" by the HPC.

**'Balanced move'**  
"A balanced approach is required to be adopted while considering the issue



of allowing development of the port on a strategic location and taking adequate steps to carry out the activity strictly in terms of the ICZ Notification, 2019 instead of prohibiting the activity if the objection is based on apprehension," the NGT said in its order.

The NGT Bench, headed by its Chairperson Justice Prakash Shrivastava, noted that it found no error in the drafting of the terms of re-

ference for the HPC, adding that the applicants did not point out "any other substantial issue" that should have been examined by the HPC.

Further, noting the Union government's stance against public disclosure of the HPC report, given that it is "of strategic, defence and national importance and has confidential and privileged information", the NGT said, "The above

disclosures reveal that the project is very important for India."

The NGT order said that to ensure "full and effective" compliance with the EC conditions, the Environment Ministry "will undertake all measures to protect the coral reefs along the coastal stretch and will also ensure coral regeneration through proved scientific method for regeneration of coral in appropriate identified areas abutting the project areas".

On erosion of shorelines of the Great Nicobar Island, the NGT said it "will be the responsibility" of the Environment Ministry to "ensure that on account of proposed constructions which includes foreshore development, there is no erosion/shoreline change abutting the project area and all along the islands".

"The shoreline of the island will be protected ensuring no loss of sandy

beaches as these beaches provide nesting sites for turtles, bird nesting site apart from protecting the islands," the NGT said.

The applicants had also submitted that the Environmental Impact Assessment for the project was conducted for just one season, as opposed to three seasons as mandated by regulations.

On this, the NGT noted the government's submissions that "since there is no high erosion site in Andaman & Nicobar, therefore, three-season data is not required".

Further, on the issue that parts of the project enter the Coastal Regulation Zone-1A, the NGT took note of submissions that ground truthing of the project areas had been conducted and that the "High Powered Committee, after due verification, has found that no part of the Project area is in CRZ-1A area". The NGT also ruled that the

"doubt" expressed by the applicant is "expelled" by the conditions already present in the EC.

While the project's environmental clearance was under challenge before the NGT, aspects of the project's forest clearance are currently under challenge before the Calcutta High Court.

#### Local opposition

The locals – the Nicobarese and the Shompen (both Scheduled Tribes) – have alleged that their rights on forest lands which are supposed to be used for the project had not been settled, and have more recently accused the Andaman and Nicobar Islands administration of "coercing" them to surrender their ancestral lands.

Referring to the proceedings underway before the Calcutta High Court, Mr. Jairam Ramesh said, "that now is the only beacon of hope".

## NGT gives clearance to Great Nicobar project एनजीटी ने ग्रेट निकोबार परियोजना को मंजूरी दी

- The ₹92,000-crore mega project is of '**strategic, defence and national importance**', says Centre
- Tribunal disposes batch of applications over **environmental clearance** for the infra project
- '**Adequate safeguards**' provided in **EC norms**, no good ground to interfere, **finds Bench**
- A Bench of the **National Green Tribunal (NGT)** on Monday cleared the way for the **₹92,000-crore Great Nicobar Island mega-infrastructure project**, noting that "considering the **strategic importance**" of it and "other relevant considerations", "we do not find any good ground to interfere".

राष्ट्रीय हरित अधिकरण (एनजीटी) की एक पीठ ने सोमवार को ₹92,000 करोड़ की ग्रेट निकोबार द्वीप मेगा-इंफ्रास्ट्रक्चर परियोजना के लिए रास्ता साफ़ किया और कहा कि इसकी रणनीतिक अहमियत और "अन्य प्रासंगिक पहलुओं" को देखते हुए "हस्तक्षेप का कोई ठोस आधार नहीं है।"

- It disposed of applications related to the **environment clearance (EC)** for the project, with a direction to authorities "to ensure **full and strict compliance** of EC conditions".  
परियोजना की **पर्यावरणीय मंजूरी (ईसी)** से जुड़ी याचिकाओं का निपटारा करते हुए अधिकारियों को **ईसी शर्तों का पूर्ण और कड़ाई से पालन** सुनिश्चित करने का निर्देश दिया गया।
- The project includes a **transshipment port, an airport, a power plant, and a township**.  
इस परियोजना में **ट्रांसशिपमेंट पोर्ट, हवाई अड्डा, बिजली संयंत्र और एक टाउनशिप** शामिल हैं।
- The Bench was hearing a batch of applications related to the EC, which was granted in **2022**.  
पीठ **2022** में दी गई ईसी से जुड़ी याचिकाओं के समूह की सुनवाई कर रही थी।
- An earlier NGT Bench had in **2023** called for the formation of a **high-powered committee (HPC)** to address certain issues concerning the **protection of coral reef colonies, nesting sites of leatherback turtles, and the allegation that parts of the project are located in ecologically protected zones**.  
**2023** में एनजीटी की एक पूर्व पीठ ने **कोरल रीफ कॉलोनियों की सुरक्षा, लेदरबैक कछुओं के घोंसला स्थलों, और परियोजना के कुछ हिस्सों के पारिस्थितिक रूप से संरक्षित क्षेत्रों** में होने के आरोपों से जुड़े मुद्दों के समाधान के लिए **उच्चस्तरीय समिति (एचपीसी)** के गठन का निर्देश दिया था।
- The applicants argued that the government had erred in limiting the **terms of reference** for the HPC to three issues and that the terms were "**factually incorrect**". They said the issues had not been properly examined.



आवेदकों ने तर्क दिया कि सरकार ने एचपीसी के **कार्यादेश** को तीन मुद्दों तक सीमित कर गलती की और ये शर्तें **“तथात्मक रूप से गलत”** थीं; मुद्दों की समुचित जांच नहीं हुई।

- The NGT said **“adequate safeguards”** had been provided in the conditions specified in the EC, which the Tribunal had already refused to interfere with in its **2023 order**. It said the remaining issues had **“been dealt with”** by the HPC.  
एनजीटी ने कहा कि इसी में निर्धारित शर्तों में **“पर्याप्त सुरक्षा उपाय”** दिए गए हैं, जिनमें **2023 के आदेश** में हस्तक्षेप से पहले ही इनकार किया जा चुका है; शेष मुद्दों को एचपीसी ने **“निपटा दिया है।”**

### ‘Balanced move’ ‘संतुलित कदम’

- “A **balanced approach** is required to be adopted while considering the issue of allowing development of the port on a **strategic location** and taking **adequate steps** to carry out the activity strictly in terms of the **ICRZ Notification, 2019** instead of prohibiting the activity if the objection is based on apprehension,” the NGT said in its order.  
एनजीटी ने अपने आदेश में कहा कि **रणनीतिक स्थान** पर बंदरगाह के विकास की अनुमति पर विचार करते समय **संतुलित दृष्टिकोण** अपनाना आवश्यक है और केवल आशंका के आधार पर गतिविधि पर रोक लगाने के बजाय **ICRZ अधिसूचना, 2019** के तहत **पर्याप्त कदम** उठाए जाने चाहिए।
- The NGT Bench, headed by its **Chairperson Justice Prakash Shrivastava**, noted that it found no error in the drafting of the **terms of reference** for the HPC, adding that the applicants did not point out **“any other substantial issue”** that should have been examined by the HPC.  
**अध्यक्ष न्यायमूर्ति प्रकाश श्रीवास्तव** की अध्यक्षता वाली एनजीटी पीठ ने कहा कि एचपीसी के **कार्यादेश** के मसौदे में कोई त्रुटि नहीं पाई गई और आवेदकों ने ऐसा **“कोई अन्य महत्वपूर्ण मुद्दा”** नहीं बताया जिसे एचपीसी को जांचना चाहिए था।
- Further, noting the **Union government’s stance** against public disclosure of the HPC report, given that it is **“of strategic, defence and national importance** and has **confidential and privileged information”**, the NGT said, **“The above disclosures reveal that the project is very important for India.”**  
एचपीसी रिपोर्ट के सार्वजनिक खुलासे के विरुद्ध **केंद्र सरकार के रुख** का उल्लेख करते हुए—क्योंकि यह **“रणनीतिक, रक्षा और राष्ट्रीय महत्व”** की है और इसमें **“गोपनीय और विशेषाधिकार प्राप्त जानकारी”** है—एनजीटी ने कहा, **“इन तथ्यों से स्पष्ट है कि यह परियोजना भारत के लिए बहुत महत्वपूर्ण है।”**
- The NGT order said that to ensure **“full and effective”** compliance with the EC conditions, the **Environment Ministry** **“will undertake all measures to protect the coral reefs along the coastal stretch and will also ensure coral regeneration through proved scientific method for regeneration of coral in appropriate identified areas abutting the project areas”**.  
एनजीटी आदेश में कहा गया कि इसी शर्तों के **“पूर्ण और प्रभावी”** पालन के लिए **पर्यावरण मंत्रालय** तटीय क्षेत्र में **कोरल रीफ्स** की सुरक्षा हेतु सभी उपाय करेगा और परियोजना क्षेत्रों से सटे उपयुक्त चिह्नित इलाकों में **सिद्ध वैज्ञानिक पद्धति** से **कोरल पुनर्जनन** सुनिश्चित करेगा।
- “The shoreline of the island will be protected ensuring **no loss of sandy beaches** as these beaches provide **nesting sites for turtles, bird nesting site** apart from protecting the islands,” the NGT said.  
एनजीटी ने कहा, **“द्वीप की तटरेखा की रक्षा की जाएगी ताकि रेतीले समुद्र तटों का नुकसान न हो, क्योंकि ये तट कछुओं के घोंसला स्थल और पक्षियों के घोंसला स्थल प्रदान करते हैं, साथ ही द्वीपों की सुरक्षा भी करते हैं।”**
- The applicants had also submitted that the **Environmental Impact Assessment** for the project was conducted for just **one season**, as opposed to **three seasons** as mandated by regulations.  
आवेदकों ने यह भी कहा कि परियोजना के लिए **पर्यावरण प्रभाव आकलन** नियमों के अनुसार **तीन मौसमों** के बजाय केवल **एक मौसम** के लिए किया गया।
- On this, the NGT noted the government’s submissions that **“since there is no high erosion site in Andaman & Nicobar, therefore, three-season data is not required”**.  
इस पर एनजीटी ने सरकार की दलील का उल्लेख किया कि **अंडमान और निकोबार में उच्च कटाव स्थल नहीं है, इसलिए तीन-मौसम का डेटा** आवश्यक नहीं है।
- Further, on the issue that parts of the project enter the **Coastal Regulation Zone-1A**, the NGT took note of submissions that **ground truthing** of the project areas had been conducted



and that the “High Powered Committee, after due verification, has found that **no part of the Project area is in CRZ-IA area**”.

इसके अलावा, परियोजना के कुछ हिस्सों के कोस्टल रेगुलेशन ज़ोन-1ए में आने के मुद्दे पर एनजीटी ने कहा कि परियोजना क्षेत्रों की ग्राउंड ड्रथिंग की गई और “उच्चस्तरीय समिति ने सत्यापन के बाद पाया कि परियोजना का कोई हिस्सा सीआरज़ेड-आईए क्षेत्र में नहीं है।”

- The locals — the **Nicobarese and the Shompen (both Scheduled Tribes)** — have alleged that their rights on forest lands which are supposed to be used for the project had not been settled., and have more recently accused the **Andaman and Nicobar Islands administration** of “coercing” them to surrender their **ancestral lands**.

## SC to take a fresh look at pleas on *ex post facto* eco clearance regime

**GS III: Environment**

The Hindu Bureau  
NEW DELHI

A three-judge Bench of the Supreme Court on Monday decided to take a fresh look at writ petitions and appeals concerning ***ex post facto* environmental clearance** of construction and public projects across the country.

The Bench headed by Chief Justice of India (CJI) Surya Kant scheduled the case for a detailed hearing on February 25. The CJI said the court would not tolerate any adjournments on that day.

A Division Bench of the Supreme Court had struck down the Centre’s grant of ***ex post facto* or retrospective environmental clearances (ECs)** as a “gross illegality” and an “anathema” in a judgment on May 16, 2025.

However, a subsequent three-judge Bench of the



The CJI said the court would not tolerate any adjournments on February 25.

court had recalled the May 16 judgment in a majority verdict delivered in November 2025.

The majority opinion for the three-judge Bench authored by Chief Justice (now retired) B.R. Gavai had concluded that the continued operation of the May 16 judgment would have a “devastating effect” and “thousands of crores of rupees” invested in building and infrastructure

projects would “go to waste”. Justice K. Vinod Chandran had backed his view, forming the majority on the Bench.

Justice Ujjal Bhuyan, the third member of the Bench, had however recorded a sharp dissent. He had termed the majority view as an “innocent expression of opinion” which overlooked the “very fundamentals of environmental jurisprudence”.

The majority opinion of Chief Justice Gavai and Justice Chandran had, while recalling the May 16 judgment, ordered the writ petitions, to be “restored to file”. On Monday, petitioners, led by senior advocates Sanjay Parikh and Gopal Sankaranarayanan, argued that the majority opinion of November 2025 authored by Justice Gavai had only recalled the May 2025 judgment without expressly giving an authorita-

tive finding on the validity of the two Office Memorandums (OMs) of 2017 and 2021, which had formed the bedrock on which the government had worked the *ex-post facto* environmental clearance regime.

The majority judgment in November 2025 had recorded that the Division Bench which struck down the OMs did not have the benefit of several judicial precedents before pronouncing their verdict on May 16.

Solicitor General Tushar Mehta, appearing for the Steel Authority of India, submitted that the May 2025 had put several significant public projects on hold, including an airport in Karnataka. Senior advocate P. Wilson and Tamil Nadu Advocate General P.S. Raman submitted that a 218-crore cancer hospital project was also halted abruptly.

### SC to take a fresh look at pleas on *ex post facto* eco clearance regime

एक्स पोस्ट फैक्टो पर्यावरणीय मंजूरी व्यवस्था पर याचिकाओं की फिर से समीक्षा करेगा सुप्रीम कोर्ट

- A three-judge Bench of the **Supreme Court** on Monday decided to take a fresh look at writ petitions and appeals concerning ***ex post facto* environmental clearance** of construction and public projects across the country.

सुप्रीम कोर्ट की तीन-न्यायाधीशों की पीठ ने सोमवार को देश भर में निर्माण और सार्वजनिक परियोजनाओं को दी गई **एक्स पोस्ट फैक्टो पर्यावरणीय मंजूरी** से संबंधित रिट याचिकाओं और अपीलों पर फिर से विचार करने का निर्णय लिया।

- A Division Bench of the **Supreme Court** had struck down the Centre’s grant of ***ex post facto* or retrospective environmental clearances (ECs)** as a “gross illegality” and an “anathema” in a judgment on **May 16, 2025**.



सुप्रीम कोर्ट की एक डिवीजन बेंच ने 16 मई 2025 के फैसले में केंद्र द्वारा दी गई एक्स पोस्ट फैक्टो या पूर्वव्यापी पर्यावरणीय मंजूरी (ECs) को “गंभीर अवैधता” और “अस्वीकार्य” करार देते हुए रद्द कर दिया था।

## ‘Godless’ lake in Japan warns of climate crisis

GS III: Environment  
Agence France-Presse

The Japanese priest and his parishioners gathered before dawn, hoping that climate change had not robbed them of the chance to experience an increasingly rare communion with the sacred.

The few dozen men, most in their sixties, were headed to Nagano’s Lake Suwa in search of a phenomenon called “God’s Crossing” that has gone from reliable to elusive in recent decades.

Known as “miwatari” in Japanese, it occurs when a crack opens up in the frozen lake surface, allowing shards of thinner ice to break through and form a ridge where local deities are believed to cross.

For centuries, the priest of the nearby Yatsurugi Shrine has led an annual watch for the crossing, contributing to a unique record of a changing climate.

This year’s watch began on January 5, with Kiyoshi Miyasaka – a priest in Japan’s Shinto religion – leading the flock. One man carried a worn flag, another a giant

**The God’s Crossing has not appeared since 2018, and a study indicates that this is because morning temperatures have failed to fall enough for the lake to freeze over**

axe. They set out with hope, despite a seven-year stretch in which the God’s Crossing has not appeared once.

“This is the start of the decisive 30 days,” Miyasaka told them.

But as they neared the water, dark and choppy in the pre-dawn light, Miyasaka’s staple smile disappeared. “How pitiful,” he said, lowering a thermometer into the water.

Miyasaka’s predecessors noted when the entire lake surface froze, and when the miwatari appeared. More recently, priests have added temperature readings and ice thickness. Consecutive records date all the way back to 1443.

जाता है।

- For centuries, the priest of Yatsurugi Shrine has led an annual watch, creating a unique climate record.

सदियों से Yatsurugi Shrine के पुजारी इस वार्षिक निगरानी का नेतृत्व करते रहे हैं, जिससे एक अनोखा जलवायु अभिलेख बना है।

“The chronicle shows data taken at a single location over hundreds of years, and thanks to it, we can now see what the climate was like centuries ago,” said Naoko Hasegawa, a geographer at Tokyo’s Ochanomizu University. “We find no other meteorological archive comparable to it.”

The God’s Crossing has not appeared since 2018, an absence that both scientists and believers attribute to climate change.

Traditionally, the ice ridges were believed to represent the path of a god crossing the lake to visit his goddess wife. Scientists explain them a little differently: they appear if the lake surface freezes entirely, which requires several days below minus 10°C.

The ice lid contracts and expands with temperature fluctuations between night and day, opening cracks that fill with shards of newly frozen lake water. They crash against each other, producing a distinctive roaring sound, and sometimes rise to eye level.

Takehiko Mikami, who has studied the phenomenon with Hasegawa, remembers seeing it in 1998: “The surface froze completely to about 15 cm thick. We could walk all the way across the lake to the other shore,” said the professor emeritus at Tokyo Metropolitan University.

His research shows the crossing appeared almost every winter until the 1980s, but since then morning temperatures have often failed to fall enough for the lake to freeze over.

For a time, this year’s season brought hope. On January 26, after weeks of frigid dawn observations, Miyasaka and his flock recorded a full freeze, smiling in delight as a chunk of ice was carved for the priest to measure. But the surface melted days later before the God’s Crossing could appear.

**‘Godless’ lake in Japan warns of climate crisis**  
जापान की ‘ईश्वर-विहीन’ झील जलवायु संकट की चेतावनी देती है

**God’s Crossing at Lake Suwa**  
लेक सुवा में ईश्वर का मार्ग (God’s Crossing)

- The Japanese priest and his parishioners gathered before dawn, hoping climate change had not robbed them of a rare sacred experience. जापानी पुजारी और उनके अनुयायी भोर से पहले एकत्र हुए, यह आशा करते हुए कि जलवायु परिवर्तन ने उनसे यह दुर्लभ पवित्र अनुभव नहीं छीना है।

- The men were headed to Nagano’s Lake Suwa to search for the phenomenon called “God’s Crossing”. वे लोग नागानो की लेक सुवा जा रहे थे ताकि “God’s Crossing” नामक घटना को देख सकें।

- Known as “miwatari”, it occurs when a crack opens in the frozen lake surface, forming a ridge believed to be crossed by local deities.

“miwatari” कहलाने वाली यह घटना तब होती है जब जमी हुई झील की सतह में दरार बनती है और एक उभार बनता है जिसे स्थानीय देवताओं का मार्ग माना



- This year's watch began on **January 5** led by **Kiyoshi Miyasaka**, a priest of **Shinto religion**. इस वर्ष की निगरानी **5 जनवरी** को **कियोशी मियासाका**, जो **शिंग्तो धर्म** के पुजारी हैं, के नेतृत्व में शुरू हुई।
- They carried a **flag** and a **giant axe**, despite a **seven-year absence** of the crossing. वे एक **झंडा** और एक **विशाल कुल्हाड़ी** लेकर चले, जबकि पिछले **सात वर्षों** से यह घटना नहीं हुई थी।
- Miyasaka called it the start of the **decisive 30 days**. मियासाका ने इसे **निर्णायक 30 दिनों** की शुरुआत कहा।
- Near the water, he measured the temperature and said "**How pitiful**" seeing the dark unfrozen lake. पानी के पास पहुँचकर उन्होंने तापमान मापा और झील को जमी न देखकर "**कितना दुखद**" कहा।
- Records of freezing and **miwatari** date back to **1443**, later including **temperature and ice thickness**. झील के जमने और **miwatari** के अभिलेख **1443** तक जाते हैं, बाद में इसमें **तापमान और बर्फ की मोटाई** भी जोड़ी गई।
- Researchers say this chronicle provides a unique **centuries-long climate dataset**. शोधकर्ताओं के अनुसार यह अभिलेख **सदियों का अनोखा जलवायु डेटा** प्रदान करता है।
- The crossing has not appeared since **2018**, linked by both believers and scientists to **climate change**. यह घटना **2018** से नहीं हुई है, जिसे श्रद्धालु और वैज्ञानिक दोनों **जलवायु परिवर्तन** से जोड़ते हैं।
- Traditionally, the ridge symbolised a **god crossing to visit his goddess wife**. परंपरागत रूप से यह उभार **देवता के अपनी देवी पत्नी से मिलने के मार्ग** का प्रतीक माना जाता था।
- Scientifically, it forms only if the lake freezes fully after several days below **-10°C**. वैज्ञानिक रूप से यह तभी बनता है जब कई दिनों तक तापमान **-10°C** से नीचे रहने पर झील पूरी तरह जम जाए।
- Ice expands and contracts with temperature changes, creating cracks filled with **newly frozen shards** that collide and roar. तापमान परिवर्तन से बर्फ फैलती और सिकुड़ती है, जिससे दरारें बनती हैं जिनमें **नई जमी बर्फ के टुकड़े** भरकर टकराते हैं और गर्जना करते हैं।
- Professor **Takehiko Mikami** recalled seeing it in **1998** when ice was **15 cm thick** and people could walk across the lake. प्रोफेसर **टेकहिको मिकामी** ने **1998** की घटना याद की जब बर्फ **15 सेमी मोटी** थी और लोग झील पार कर सकते थे।
- His research shows it appeared almost every winter until the **1980s**, but warming reduced freezing. उनके शोध के अनुसार यह **1980 के दशक** तक लगभग हर सर्दी में दिखाई देता था, लेकिन तापमान बढ़ने से जमना कम हो गया।
- On **January 26**, observers recorded a **full freeze**, but it melted before the crossing formed. **26 जनवरी** को पूरी तरह जमाव दर्ज किया गया, लेकिन **God's Crossing** बनने से पहले ही बर्फ पिघल गई।



# Transitioning to green steel

GS III: Environment

MOB

India's path to net-zero emissions by 2070 will depend heavily on how quickly it scales production and consumption of green steel, as steel remains one of India's largest industrial sources of emissions. The materials we use to build our future must strengthen our progress, not undermine it.

With this in mind, the Ministry of Steel constituted 14 task forces bringing together industry leaders and technical experts to systematically map the sector's decarbonisation levers. Their work covered the full spectrum of transition pathways, which helped create a roadmap for accelerating low-carbon steel production.

But many members saw a barrier: the "green premium." Producing green steel carries high upfront costs for manufacturers. Bridging this gap requires targeted fiscal support for producers in the early years. GST rationalisation and time-bound fiscal incentives can help producers manage the transition. Does this mean that using public procurement to boost demand for premium green steel is an unworkable strategy?

## A manageable increment

It is important to distinguish between the producer's additional cost and the actual burden on public procurement. Our analysis showed that even when green steel carries a premium, the effect on large infrastructure projects is minimal. Steel typically accounts for about 18% of large infrastructure projects, which form the bulk of public sector capex in India. As a result, even a 30% premium on green steel, and exclusive use of green steel by public sector infrastructure, translates into an increase of roughly 5.5% in overall project costs. As not all public infrastructure projects will switch to green steel in the medium term, assuming a 20% rise only results in a 1.1% rise in the budgets of public works such as highways.

This is a manageable increment, especially when seen



**Nagendra Nath Sinha**

Former Secretary,  
Ministry of Steel



**Alfahad Sorathia**

Policy analyst

India possesses a clear opportunity: the technology exists, the green premium is manageable, and the market is ready

as insurance for national economic security. India faces dual pressures from the EU Carbon Border Adjustment Mechanism and volatile prices of coking coal imports, which exceed 50 million tonnes annually and expose us to price shocks that affect trade balance and industrial stability. Transitioning to green steel helps bypass carbon tariffs while insulating national projects from fossil fuel price volatility.

Global experience offers a clear template for aligning policy with market reality. Japan's Green Purchasing framework shows that green procurement must work alongside fiscal incentives, pairing demand mandates with production support so industry can respond at scale. California's Buy Clean model highlights how strict carbon benchmarks and verified disclosures create traceability and reduce administrative risk. Building on these lessons, India has introduced a dedicated Green Steel Taxonomy with a 3-, 4-, and 5-star rating system that ranks steel by emission intensity, providing the carbon "nutrition label" the market lacked.

Building on the taxonomy and stakeholder consultations, the Ministry undertook initial steps to institutionalise green steel public procurement mandates. However, the proposal awaits final approval from key stakeholders, including the Ministry of Finance, largely due to concerns around the green premium and verifiability.

## The way forward

At the heart of this delay is a trust deficit. Today, a procurement officer has no reliable way to distinguish a certified green TMT bar from a conventional one. Addressing this challenge is possible. By leveraging the existing Made in India QR code infrastructure alongside the Quality Council of India's accreditation system, Green Star ratings could be embedded into product verification. This would allow procurement officers to

instantly confirm the carbon credentials of a product.

Other administrative hurdles can be addressed through targeted reform. For example, procurement frameworks should shift the focus from the lowest upfront price to a broader definition of value for money that recognises sustainability and national economic interest. In parallel, the Schedule of Rates, which guides public works estimates, must explicitly include certified low-carbon steel. Today, green steel may be treated as a deviation because carbon intensity is not recognised as a standard quality parameter. Codifying it would enable officers to procure sustainable materials without administrative risk. Building the capacities of the procurement official, handholding them and evangelising the need for GPP with the States are critical.

Second, our Production Linked Incentives and green hydrogen missions must be aligned with procurement tenders. If the state is subsidising the production of green steel, it must also act as the anchor customer for that output. This alignment ensures that private incentives are harmonised with the public for good.

While a 3-star benchmark provides a practical starting point for adoption, procurement policy should also clearly signal a shift towards 4- and 5-star steel over time. A roadmap that progressively tightens standards after 2030 would encourage industry to invest in higher-grade low-carbon production.

India possesses a window of opportunity: the technology exists, the green premium is manageable, and the market is ready. A practical strategy is to launch focused pilots through centralised purchasers such as the Indian Railways. The procurement scale can create a living lab for green steel. Now, the Ministries of Steel, Finance, and Environment must coordinate to link climate ambition with financial and procurement power.

## Transitioning to green steel हरित इस्पात की ओर संक्रमण

- India's path to net-zero emissions by 2070 will depend heavily on how quickly it scales production and consumption of green steel, as steel remains one of India's largest industrial sources of emissions.  
भारत का 2070 तक नेट-ज़ीरो उत्सर्जन का मार्ग इस बात पर निर्भर करेगा कि वह कितनी तेजी से ग्रीन स्टील का उत्पादन और उपयोग बढ़ाता है, क्योंकि स्टील भारत के सबसे बड़े औद्योगिक उत्सर्जन स्रोतों में से एक है।
- Producing green steel carries high upfront costs for manufacturers.  
ग्रीन स्टील उत्पादन में निर्माताओं के लिए उच्च प्रारंभिक लागत आती है।
- Bridging this gap requires targeted fiscal support in early years.  
इस अंतर को पाटने के लिए शुरुआती वर्षों में लक्षित राजकोषीय सहायता आवश्यक है।



- **GST rationalisation and time-bound fiscal incentives** can help producers manage the transition.  
**GST तर्कसंगतता और समयबद्ध राजकोषीय प्रोत्साहन** उत्पादकों को संक्रमण प्रबंधन में मदद कर सकते हैं।
- Does this mean public procurement for green steel is unworkable?  
क्या इसका अर्थ है कि ग्रीन स्टील के लिए सार्वजनिक खरीद व्यावहारिक नहीं है?

## A manageable increment एक प्रबंधनीय वृद्धि

- It is important to distinguish between the **producer's additional cost** and the **actual burden on public procurement**.  
उत्पादक की **अतिरिक्त लागत** और सार्वजनिक खरीद पर **वास्तविक बोझ** में अंतर समझना आवश्यक है।
- Analysis showed that even with a premium, the effect on **large infrastructure projects is minimal**.  
विश्लेषण से पता चला कि प्रीमियम होने पर भी **बड़े बुनियादी ढांचा परियोजनाओं पर प्रभाव न्यूनतम** है।
- **Steel accounts for about 18% of large infrastructure project costs**.  
स्टील बड़े बुनियादी ढांचा प्रोजेक्ट लागत का लगभग **18%** होता है।
- **Even a 30% green steel premium raises overall project costs by only about 5.5%**.  
यहां तक कि **30% ग्रीन स्टील प्रीमियम** से कुल परियोजना लागत केवल लगभग **5.5%** बढ़ती है।
- Assuming only **20% adoption**, public works budgets such as highways rise by about **1.1%**.  
यदि केवल **20% अपनाया जाए**, तो राजमार्ग जैसे सार्वजनिक कार्यों का बजट केवल **1.1%** बढ़ता है।
- This is a **manageable increment** and acts as insurance for **economic security**.  
यह एक **प्रबंधनीय वृद्धि** है और **आर्थिक सुरक्षा** के लिए बीमा जैसा है।
- **India faces pressure from EU Carbon Border Adjustment Mechanism and volatile coking coal imports exceeding 50 million tonnes annually**.  
भारत पर **EU कार्बन बॉर्डर एडजस्टमेंट मैकेनिज्म** और **वार्षिक 50 मिलियन टन से अधिक कोकिंग कोल आयात** की अस्थिर कीमतों का दबाव है।
- **India introduced a Green Steel Taxonomy with 3-, 4-, and 5-star rating system ranking steel by emission intensity**.  
भारत ने **ग्रीन स्टील टैक्सोनॉमी** लागू की जिसमें **3-, 4-, और 5-स्टार रेटिंग प्रणाली** उत्सर्जन तीव्रता के आधार पर स्टील को रैंक करती है।
- This provides a carbon "**nutrition label**" for the market.  
यह बाजार के लिए कार्बन "**पोषण लेबल**" प्रदान करता है।
- The **Ministry initiated steps to institutionalise green steel public procurement mandates**.  
मंत्रालय ने **ग्रीन स्टील सार्वजनिक खरीद अनिवार्यता** को संस्थागत बनाने के कदम उठाए।
- Today, a **procurement officer has no reliable way to distinguish a certified green TMT bar from a conventional one**.  
आज एक खरीद अधिकारी के पास **प्रमाणित ग्रीन TMT बार** और सामान्य बार में अंतर करने का कोई विश्वसनीय तरीका नहीं है।
- Addressing this challenge is possible.  
इस चुनौती का समाधान संभव है।
- **By leveraging the existing Made in India QR code infrastructure alongside the Quality Council of India accreditation system, Green Star ratings could be embedded into product verification**.  
**मौजूदा मेड इन इंडिया QR कोड अवसंरचना** और **क्वालिटी काउंसिल ऑफ इंडिया मान्यता प्रणाली** का उपयोग कर **ग्रीन स्टार रेटिंग** को उत्पाद सत्यापन में शामिल किया जा सकता है।
- **Production Linked Incentives and green hydrogen missions must align with procurement tenders**.  
**प्रोडक्शन लिंक्ड इंसेंटिव** और **ग्रीन हाइड्रोजन मिशन** को **खरीद निविदाओं** के साथ समन्वित होना चाहिए।
- A **3-star benchmark** provides a starting point, but policy should signal transition to **4- and 5-star steel** over time.  
**3-स्टार मानक** प्रारंभिक बिंदु है, लेकिन नीति को समय के साथ **4- और 5-स्टार स्टील** की ओर संक्रमण का संकेत देना चाहिए।



- A roadmap tightening standards after 2030 would encourage industry investment in **higher-grade low-carbon production**.  
2030 के बाद कड़े मानक उद्योग को उच्च गुणवत्ता लो-कार्बन उत्पादन में निवेश के लिए प्रेरित करेंगे।
- The procurement scale can create a **living lab for green steel**.  
खरीद का पैमाना ग्रीन स्टील के लिए जीवंत प्रयोगशाला बना सकता है।
- The Ministries of **Steel, Finance, and Environment** must coordinate to link **climate ambition with financial and procurement power**.  
इस्पात, वित्त और पर्यावरण मंत्रालयों को जलवायु लक्ष्य को वित्तीय और खरीद शक्ति से जोड़ने के लिए समन्वय करना होगा।

## How district cooling can ease India's climate and urban planning troubles

District cooling is a centralised system that supplies air-conditioning to a cluster of buildings. Instead of every building running its own chillers, one large plant makes chilled water and sends it through insulated underground pipes to many buildings

GS III: Environment

Manish Dubey  
Prasad Vaidya

**W**ith rising temperatures, longer heatwaves, and a rapidly growing urban economy, cooling in India is rapidly shifting from a lifestyle choice to a basic need, driving up air-conditioner use in homes and workplaces. This surge is now a major part of cities' power demand, in turn raising concerns about blackouts and higher emissions and about keeping urban areas livable. In this context, planners and experts are looking at district cooling as a way to keep people comfortable while using less electricity and emitting less carbon.

### A central cooler

District cooling is a centralised system that supplies air-conditioning to a cluster of buildings, like a shared air-conditioner for an entire neighbourhood or campus. Instead of every building running its own chillers or rooftop units, one large plant makes chilled water and sends it through insulated underground pipes to many buildings, much like a public utility such as piped natural gas or electricity.

Inside each building, this water passes through heat exchangers, cools the indoor air by absorbing heat, then returns slightly warmer to the central plant, where it's cooled again and sent back into the network. Buildings therefore don't need to install or operate large cooling systems. They simply draw 'cooling as a service' from the network.

Like other utilities, district cooling usually follows a multi-part tariff: a one-time connection charge to join the network, a fixed demand charge based on the maximum cooling capacity, and a consumption charge based on actual cooling energy used.

### Efficiency gains

District cooling plants use large, high-efficiency chillers and cooling towers to deliver more cooling from each unit of electricity than individual building systems. They typically supply chilled water at about 6°C and receive it back at

around 12-14°C, after it has absorbed heat. Many systems use thermal storage so that 20-40% of the cooling can be produced at night, when demand and tariffs are lower.

Together, these choices allow well-run systems to operate roughly twice as efficiently as many stand-alone building chillers, cutting electricity use for cooling by 30-50% and reducing peak demand on the grid by 20-30%. These efficiency gains translate into important environmental benefits. Lower electricity use means greenhouse gas emissions can fall by roughly 15-40% while concentrating equipment in a one unified plant can cut refrigerant volumes in buildings by up to 80%, reducing leak risks. At the street level, fewer small outdoor units spewing hot air outside can also mitigate the urban heat-island effect. Some districts abroad have already reported local temperature drops of 1-2°C where such systems operate.

Water use is often raised as a concern, especially in water-stressed cities. In district cooling systems, the chilled water circulating between the plant and buildings runs in a closed loop and consumes very little water. A district cooling plant of about 10,000 tonnes of capacity typically requires a little over one kilolitre of make-up water during cooling tower operation. Because these systems are built at scale and centrally managed, they can also be designed to use treated sewage or wastewater.

### Making sense

All of this connects directly to India's National Cooling Action Plan. Using less power for cooling and shifting part of the load to the night eases pressure on the grid, improving energy security and reducing the risk of outages during heatwaves, when people most need cooling.

Lower emissions and easier use of low-zero global warming potential refrigerants in central plants support India's climate goals and its Kigali commitments to phase down hydrofluorocarbons while reliable, high-quality cooling underpins the growth of services, IT, hospitals and data

centres in dense urban areas. By freeing up rooftops and indoor space otherwise taken up by cooling equipment, district cooling can also help cities use urban land better, making it a tool of comfort as much as climate action and smarter urbanisation.

District cooling works best where cooling demand is high, dense, and predictable. This makes it suitable for commercial districts, transit-oriented corridors, airports and aerocities, hospitals, universities, and IT parks. In India, Navi Mumbai, Hyderabad's financial districts, Ahmedabad's GIFT City, and parts of Bengaluru are often cited as strong candidates because they combine new development, dense commercial loads, and planned infrastructure.

### Business case

For operators, district cooling is a utility-style business with revenue typically coming from a one-time connection charge, a fixed demand charge, and a variable consumption charge. The model can be financially attractive if there are enough long-term customers and city planning offers certainty about future demand.

For customers, cooling can account for 30-50% of electricity use in many commercial buildings, and by using energy more efficiently and sharing infrastructure, district cooling can cut operating costs by about 20-40% over the life of a project.

Not having to install separate chillers and cooling towers in each building can also save developers 5-10% of project cost and unlock 1-2% extra usable or saleable space. Utility-grade reliability (often above 99.9%) is also a major plus for hospitals and data centres.

The main concern is the fixed demand charge: customers pay for reserved capacity even if the building is partly empty.

If they over-estimate their needs or have inefficient internal systems that waste chilled water, bills can feel high, making good building design and right-sizing of contracts crucial.

For electricity utilities, the primary benefit is lower peak load from air-conditioning during hot afternoons. District systems use large, efficient chillers, benefit from diversity where different buildings peak at different times, and often include thermal storage to shift 20-40% of cooling production to the night, helping flatten daytime peaks. This allows utilities to avoid or defer new peak load plants and reduce purchases of expensive peak power.

### Economy of scale

To move to a real network of district cooling systems, many players need to work together. Urban authorities should demarcate district cooling zones in master plans, set aside land for plants and pipe corridors, and coordinate underground utilities.

Municipal bodies need to be empowered and strengthened to introduce clear concession rules, service standards, and long-term frameworks so private players know how they will recover investments.

Likewise, state electricity regulators and DISCOMs can consider shifting loads from day to night as a formal demand-side resource, link it to tariff design, and recognise the value of avoided peak capacity. Central agencies can also issue standard technical guidelines and model PPP contracts while developers design new buildings with ready connection points and compatible internal piping.

GIFT City in Gujarat has already demonstrated district cooling. Studies here have suggested full deployment could reduce power demand by around 6,100 MW, save about 7,850 GWh annually, and avoid roughly 6.6 million tonnes of CO2 emissions each year.

With effective coordination and clear governance frameworks, Indian cities can replicate and expand such examples, transforming cooling from a climate vulnerability into a cornerstone of sustainable, resilient urban infrastructure.

Prasad Vaidya is Advisor, Indian Institute for Human Settlements (IIHS).  
Manish Dubey is Chief-Practice, IIHS.

## How district cooling can ease India's climate and urban planning troubles

जिला शीतलन कैसे भारत की जलवायु और शहरी नियोजन की समस्याओं को कम कर सकता है

- **District cooling is a centralised system that supplies air-conditioning to a cluster of buildings.**  
जिला शीतलन एक केंद्रीकृत प्रणाली है जो इमारतों के समूह को वातानुकूलन प्रदान करती है।
- **Instead of every building running its own chillers, one large plant makes chilled water and sends it through insulated**





### underground pipes to many buildings.

हर इमारत द्वारा अपने चिलर्स चलाने के बजाय, एक बड़ा संयंत्र ठंडा पानी बनाता है और उसे इन्सुलेटेड भूमिगत पाइपों के माध्यम से कई इमारतों तक भेजता है।

- With rising temperatures, longer heatwaves, and a rapidly growing urban economy, cooling in India is shifting from a lifestyle choice to a basic need, driving up air-conditioner use in homes and workplaces.

बढ़ते तापमान, लंबी हीटवेव और तेजी से बढ़ती शहरी अर्थव्यवस्था के कारण भारत में कूलिंग अब जीवनशैली विकल्प से बदलकर मूलभूत आवश्यकता बन रही है, जिससे घरों और कार्यस्थलों में एयर-कंडीशनर उपयोग बढ़ रहा है।

- District cooling is a centralised system supplying air-conditioning to a cluster of buildings like a shared air-conditioner for a neighbourhood or campus.

डिस्ट्रिक्ट कूलिंग एक केंद्रीकृत प्रणाली है जो कई इमारतों के समूह को एयर-कंडीशनिंग प्रदान करती है, जैसे किसी पूरे क्षेत्र या कैम्पस के लिए साझा एयर-कंडीशनर।

- Inside buildings, water passes through heat exchangers, cools indoor air, then returns warmer to the central plant for cooling again.  
इमारतों के भीतर पानी हीट एक्सचेंजर से होकर गुजरता है, हवा को ठंडा करता है और फिर थोड़ा गर्म होकर केंद्रीय संयंत्र में दोबारा ठंडा होने लौटता है।
- Buildings do not need large cooling systems and simply draw cooling as a service from the network.  
इमारतों को बड़े कूलिंग सिस्टम की आवश्यकता नहीं होती और वे नेटवर्क से कूलिंग ऐज़ ए सर्विस प्राप्त करती हैं।
- District cooling usually follows a multi-part tariff including connection charge, fixed demand charge, and consumption charge.  
डिस्ट्रिक्ट कूलिंग में आमतौर पर बहु-भाग टैरिफ होता है जिसमें कनेक्शन शुल्क, स्थिर मांग शुल्क और उपयोग शुल्क शामिल होते हैं।

### Efficiency gains दक्षता में वृद्धि

- District cooling plants use high-efficiency chillers and cooling towers to deliver more cooling per unit of electricity than individual systems.  
डिस्ट्रिक्ट कूलिंग संयंत्र उच्च दक्षता चिलर और कूलिंग टावर का उपयोग कर प्रति यूनिट बिजली से अधिक कूलिंग प्रदान करते हैं।
- They supply chilled water at 6-7°C and receive it back at 12-14°C after absorbing heat.  
ये 6-7°C पर ठंडा पानी भेजते हैं और 12-14°C पर वापस प्राप्त करते हैं।
- Many systems use thermal storage so that 20-40% cooling is produced at night when demand and tariffs are lower.  
कई सिस्टम थर्मल स्टोरेज का उपयोग करते हैं ताकि 20-40% कूलिंग रात में तैयार हो सके जब मांग और टैरिफ कम होते हैं।
- Such systems can be twice as efficient, cutting electricity use by 30-50% and reducing peak demand by 20-30%.  
ये सिस्टम दोगुने दक्ष हो सकते हैं, जिससे बिजली उपयोग 30-50% कम और पीक मांग 20-30% घटती है।
- Lower electricity use can reduce greenhouse gas emissions by 15-40% and cut refrigerant volumes in buildings by up to 80%.  
कम बिजली उपयोग से ग्रीनहाउस गैस उत्सर्जन 15-40% तक घट सकता है और भवनों में रेफ्रिजरेंट मात्रा 80% तक कम हो सकती है।
- Fewer outdoor units also help reduce the urban heat-island effect, with some districts seeing 1-2°C temperature drop.  
कम बाहरी यूनिट्स शहरी हीट-आइलैंड प्रभाव कम करने में मदद करती हैं और कुछ क्षेत्रों में 1-2°C तापमान गिरावट देखी गई है।
- Water use in district cooling is low since chilled water circulates in a closed loop system.  
डिस्ट्रिक्ट कूलिंग में पानी का उपयोग कम होता है क्योंकि ठंडा पानी बंद चक्र प्रणाली में घूमता है।
- A 10,000-tonne capacity plant needs just over one kilolitre water during cooling tower operation.



**10,000 टन क्षमता** वाले संयंत्र को कूलिंग टावर संचालन के दौरान केवल **एक किलोलीटर से थोड़ा अधिक पानी** चाहिए।

- Such systems can also use **treated sewage or wastewater** due to centralised scale and management.  
ऐसे सिस्टम केंद्रीकृत प्रबंधन के कारण **शोधित सीवेज या अपशिष्ट जल** का भी उपयोग कर सकते हैं।

## Making sense समझना

- All of this connects directly to **India's National Cooling Action Plan**. Using less **power** for cooling and shifting part of the load to the **night** eases pressure on the grid, improves **energy security**, and reduces risk of **outages during heatwaves**.  
यह सब सीधे **भारत की नेशनल कूलिंग एक्शन प्लान** से जुड़ा है। कूलिंग के लिए कम **बिजली** उपयोग और कुछ लोड को **रात** में स्थानांतरित करने से ग्रिड पर दबाव कम होता है, **ऊर्जा सुरक्षा** बढ़ती है और **हीटवेव के दौरान बिजली कटौती** का जोखिम घटता है।
- Lower emissions and easier use of **low/zero global warming potential refrigerants** in central plants support **climate goals** and **Kigali commitments to phase down hydrofluorocarbons**.  
कम उत्सर्जन और केंद्रीय संयंत्रों में **लो/जीरो ग्लोबल वार्मिंग पोटेंशियल रेफ्रिजरेंट** का उपयोग **जलवायु लक्ष्यों** और **किगाली प्रतिबद्धताओं** को समर्थन देता है, जिनका उद्देश्य **हाइड्रोफ्लोरोकार्बन** को कम करना है।
- Reliable cooling supports growth of **services, IT, hospitals, and data centres** in dense urban areas.  
विश्वसनीय कूलिंग घने शहरी क्षेत्रों में **सेवाओं, आईटी, अस्पतालों और डाटा सेंटर** की वृद्धि को समर्थन देती है।
- **By freeing rooftops and indoor space, district cooling helps better urban land use, aiding climate action and smart urbanisation**.  
छतों और अंदरूनी स्थान को मुक्त करके डिस्ट्रिक्ट कूलिंग बेहतर **शहरी भूमि उपयोग** में मदद करती है और **जलवायु कार्रवाई** तथा **स्मार्ट शहरीकरण** को बढ़ावा देती है।
- **District cooling works best where cooling demand is high, dense, and predictable, suitable for commercial districts, airports, hospitals, universities, and IT parks**.  
डिस्ट्रिक्ट कूलिंग वहां सबसे बेहतर काम करती है जहां कूलिंग मांग **अधिक, सघन और पूर्वानुमेय** हो, जैसे **व्यावसायिक क्षेत्र, हवाई अड्डे, अस्पताल, विश्वविद्यालय और आईटी पार्क**।
- **In India, Navi Mumbai, Hyderabad financial districts, GIFT City Ahmedabad, and parts of Bengaluru are strong candidates**.  
भारत में **नवी मुंबई, हैदराबाद वित्तीय क्षेत्र, अहमदाबाद का गिफ्ट सिटी और बेंगलुरु के कुछ हिस्से** प्रमुख संभावित क्षेत्र हैं।
- For customers, cooling accounts for **30-50% electricity use** in many commercial buildings, and district cooling can cut operating costs by **20-40%**.  
ग्राहकों के लिए कई व्यावसायिक भवनों में कूलिंग **30-50% बिजली उपयोग** करती है और डिस्ट्रिक्ट कूलिंग परिचालन लागत **20-40%** तक कम कर सकती है।
- Developers can save **5-10% project cost** and gain **1-2% extra usable space** by avoiding separate cooling systems.  
डेवलपर्स अलग कूलिंग सिस्टम से बचकर **5-10% परियोजना लागत** बचा सकते हैं और **1-2% अतिरिक्त उपयोगी स्थान** प्राप्त कर सकते हैं।
- Utility-grade reliability often above **99.9%** benefits **hospitals and data centres**.  
अक्सर **99.9% से अधिक विश्वसनीयता** अस्पतालों और डाटा सेंटर के लिए लाभकारी होती है।
- The main concern is **fixed demand charge**, where customers pay for reserved capacity even if usage is low.  
मुख्य चिंता **स्थिर मांग शुल्क** है, जिसमें उपयोग कम होने पर भी ग्राहकों को आरक्षित क्षमता के लिए भुगतान करना पड़ता है।
- Over-estimation or inefficient internal systems can increase bills, making proper **building design** and **right-sizing contracts** important.  
जरूरत का गलत अनुमान या अक्षम सिस्टम बिल बढ़ा सकते हैं, इसलिए उचित **भवन डिजाइन** और **सही क्षमता निर्धारण** महत्वपूर्ण है।



## Economy of scale पैमाने की अर्थव्यवस्था

- To move to a real network of **district cooling systems**, many players need to work together. **Urban authorities** should demarcate district cooling zones in **master plans**, set aside land for plants and **pipe corridors**, and coordinate underground utilities.  
वास्तविक **डिस्ट्रिक्ट कूलिंग सिस्टम** नेटवर्क बनाने के लिए कई पक्षों को साथ काम करना होगा। **शहरी प्राधिकरणों** को **मास्टर प्लान** में डिस्ट्रिक्ट कूलिंग ज़ोन चिह्नित करने चाहिए, संयंत्रों और **पाइप कॉरिडोर** के लिए भूमि आरक्षित करनी चाहिए तथा भूमिगत सेवाओं का समन्वय करना चाहिए।
- **Municipal bodies** need to be empowered and strengthened to introduce clear **concession rules, service standards**, and **long-term frameworks** so private players know how they will recover investments.  
**नगर निकायों** को सशक्त और मजबूत किया जाना चाहिए ताकि स्पष्ट **रियायत नियम, सेवा मानक** और **दीर्घकालिक ढाँचा** लागू हो सके, जिससे निजी निवेशकों को निवेश वसूली का भरोसा हो।
- **State electricity regulators** and **DISCOMs** can shift loads from **day to night** as a formal **demand-side resource**, link it to **tariff design**, and recognise the value of avoided **peak capacity**.  
**राज्य बिजली नियामक** और **डिस्कॉम** दिन से रात में लोड स्थानांतरण को औपचारिक **डिमांड-साइड संसाधन** के रूप में अपना सकते हैं, इसे **टैरिफ डिज़ाइन** से जोड़ सकते हैं और बची हुई **पीक क्षमता** के महत्व को पहचान सकते हैं।
- **Central agencies** can issue standard **technical guidelines** and **model PPP contracts**, while developers design buildings with ready **connection points** and compatible internal piping.  
**केंद्रीय एजेंसियां** मानक **तकनीकी दिशानिर्देश** और **मॉडल PPP अनुबंध** जारी कर सकती हैं, जबकि डेवलपर्स भवनों में तैयार **कनेक्शन पॉइंट** और अनुकूल पाइपिंग डिज़ाइन कर सकते हैं।
- **GIFT City, Gujarat** has demonstrated district cooling. Full deployment could reduce **power demand by 6,100 MW**, save **7,850 GWh annually**, and avoid **6.6 million tonnes CO2 emissions** each year.  
**गुजरात का गिफ्ट सिटी** डिस्ट्रिक्ट कूलिंग का उदाहरण प्रस्तुत कर चुका है। पूर्ण विस्तार से **6,100 मेगावाट बिजली मांग** कम हो सकती है, हर वर्ष **7,850 GWh ऊर्जा बचत** और लगभग **6.6 मिलियन टन CO2 उत्सर्जन** में कमी हो सकती है।
- With effective **coordination** and clear **governance frameworks**, Indian cities can expand such models, transforming cooling from a **climate vulnerability** into **sustainable and resilient urban infrastructure**.  
**प्रभावी समन्वय** और स्पष्ट **शासन ढाँचे** के साथ भारतीय शहर इस मॉडल का विस्तार कर सकते हैं और कूलिंग को **जलवायु जोखिम** से बदलकर **सतत और मजबूत शहरी अवसंरचना** बना सकते हैं।