



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



PATRIOTIC IAS

DAILY CURRENT AFFAIRS

THE HINDU NEWSPAPER

17 AUGUST 2026

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

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

GS Paper 1: History		17 August 2026
TOPICS COVERED		
17A8	Sumit Sarkar brought ordinary people, their experiences into history books सुमित सरकार ने आम लोगों और उनके अनुभवों को इतिहास की पुस्तकों में स्थान दिया	
17A8	Two forms of worship उपासना के दो रूप	



Festival bloom: Marigold and globe amaranth flowers are harvested in Coimbatore, Tamil Nadu, on Sunday as flower markets in the State gear up to meet the increased demand during the Onam season in Kerala.

Festival bloom: Marigold and globe amaranth flowers are harvested in Coimbatore, Tamil Nadu, on Sunday as flower markets in the State gear up to meet the increased demand during the **Onam season in Kerala**.



Festival frenzy: Artists perform 'Pulikali' (tiger dance) during the 'Athachamayam procession', which marks the start of the 10-day Onam celebrations, at Tripunithura in Ernakulam district of Kerala on Sunday. THULSI KAKKAT

Festival frenzy: Artists perform '**Pulikali**' (**tiger dance**) during the '**Athachamayam procession**', which marks the **start of the 10-day Onam celebrations**, at Tripunithura in Ernakulam district of Kerala on Sunday.

Onam

- Onam is the **official festival of Kerala**, celebrated across religious and social communities.
- It marks a time of **harvest, prosperity, and unity**.
- The traditional Virippu (first/autumn) rice crop is generally sown in April–May and harvested around September–October. Thus, the Onam/Chingam period overlaps with the beginning of this harvest season.
- Celebrated during the **Malayalam month of Chingam (August–September)**, typically spanning **10 days**.
- Traditional Onam celebrations extend for ten days, beginning with Atham and culminating in Thiruvonam, the most important day.



Legend of Mahabali and Vamana

- Rooted in **Bhagavata Purana**, the tale involves King **Mahabali**, a benevolent Asura ruler, and **Lord Vishnu** taking the **Vamana avatar (dwarf Brahmin)** to humble the king.
- He is remembered in Kerala's popular tradition as a **generous, righteous and egalitarian ruler**, whose kingdom enjoyed prosperity and was supposedly free from poverty and discrimination.
- As Mahabali's power and popularity increased, the Devas sought the intervention of **Lord Vishnu**.
- Vishnu appeared before Mahabali in his **Vamana Avatar**, in the form of a dwarf Brahmin.
- Vamana asked Mahabali for only as much land as he could cover in **three steps**.
- Mahabali agreed.

- Vamana then assumed a cosmic form and covered the universe with his first two steps.
- With nowhere remaining for the third step, Mahabali offered his own head.

Ancient References

- Early mentions appear in Sangam literature like **Maturaikkanci** (3rd century CE).
- **Alvar saints** and inscriptions, including an 11th-century one in **Thrikkakara Temple**, echo Onam's deep-rooted history.
- In 1961, Kerala's government declared Onam as the state's national festival, aiming to bolster **tourism** and **social integration**
- The temple's festival begins with **Kodiyettu on Atham** and concludes with **Arattu on Thiruvonam**.

Sumit Sarkar brought ordinary people, their experiences into history books

TRIBUTE
SS I: History
Janaki Nair

I did not have the good fortune of being taught by Sumit Sarkar. But like every (conscientious) modern Indian historian, I have indeed been 'taught' by him. His classic, *Modern India*, modestly described as a 'textbook', is perhaps the most well-thumbed of my many books. Here, along with colonial masters and nationalist leaders, peasants, workers, and ordinary people sprang from its pages.

This was no simple inclusion: it was a conceptual break, altering our understanding of Indian history in profound ways, acknowledging the lives and actions of millions, even their failures, as the true basis on which to understand our past. But political leaders, their actions, and the periodisations familiar to students of history

could not be dispensed with altogether. Therefore, the book, despite its emphasis on the novel breakthroughs of a 'history from below', was sandwiched 'between the foundation of the Indian National Congress in 1885 and the achievement of independence in 1947', since those 60 years 'witnessed perhaps the greatest transition in our country's long history'. In one memorable sentence, he signalled the many unfulfilled promises of Indian nationalism: thus, the Mahatma succeeded in 'drawing in the masses, while at the same time keeping mass activity strictly pegged down to certain forms predetermined by the leader'.

Let me not dwell on the gaping hole that Sarkar's demise had left among historians, and focus instead on the riches he has left us. His book, *Swadeshi Movement in Bengal*, on Bengal's (first) partition of 1905, and the nationalist

movement that it spawned, was full of methodological innovations, using plays, novels, newspapers, pamphlets, in addition to the more familiar colonial archive. These materials led him to ask questions that often led to ambiguous or unsatisfactory answers. Educated unemployment and rising prices surely fuelled the anger against the Bengal partition. But the pride-inducing victory of a little 'eastern' nation, Japan, over a powerful 'western' neighbour, Russia, — the **Russo-Japanese war of 1904-05** — also played its part, despite a relative ignorance in India of emerging critiques of imperialism elsewhere.

Sarkar also asked himself: how could a Swadeshi editorial in the *Bande Mataram* praise, in the same breath, both the labour movement and the caste system, the latter for having 'the true socialistic aim of keeping awake in ev-



Legacy unmatched: Historian Sumit Sarkar passed away on August 13. SPECIAL ARRANGEMENT

ery class of society a sense of duty to it? Or, as he would ask later, what drew upper caste men to revolutionary terrorism in Bengal, and why has that memory endured longer than those of tribal or lower caste participants?

He was among the earliest of historians to unpack how 'Hindu' nationalism gradually became 'common sense', with consequences up to this day.

Sarkar's task was to break out of the economic determinism and narrow

positivism that was the hallmark of Marxist scholarship at the time. But the work remains unsurpassed, since it upholds the protocols of historical research, the verifiability of evidence, and as he said, 'the constant knowledge that my conclusions remain open to revision and change'. Would a revised *Modern India*, that more correctly reflects the scholarship of the last four decades — as many regions, social groups, practices, and events have found

their historians — be at all possible in our times? How were material conditions and cultural forms to be integrated within a structured totality?

His Marxism did not come in the way of engaging with what Ranajit Guha has called the oldest (and richest) archive in India: religion. He read religion, but not as a believer; not to denigrate but to connect the celestial world to its earthly presence in meaningful ways.

In fact, Marxism enabled his interest in the 19th-century mystic (and rustic) Hindu thinker Ramakrishna Paramahansa, and the petty-bourgeois, clerical ambience within which he operated, which gave his philosophy its force and material influence, especially among the emerging, well-read, urban middle class. That contradiction needed to be explained. Sarkar linked the belated entry of clock-time into India, and the

disciplinary mechanisms it generated, to the slavery of clerical labour, which paved the way for the re-ception of Ramakrishna.

On RSS and Left

Sarkar showed us the true meaning of engaged scholarship: when India was stunned in 1992 by the shock troops of the BJP and RSS that brought down the Babri Masjid, Sarkar and his colleagues produced a short but vital book called *Khaki Shorts and Saffron Flags*. It was the first serious historical reconstruction (based also on sensitive fieldwork) of what the RSS had become, the most formidable force on the Indian political firmament. Certainly the young people who have today given us a ray of hope should place this book at the top of their reading lists.

Sarkar, in both his writing and his political positions, was unafraid to confront the official Left and its surrender to global cap-

ital, as at Nandigram and Singur. He would have been the first to admit that proletarians have not been the grave diggers of capitalism, though he welcomed historians who showed renewed interest in labour and working class history.

I was personally honoured when this remarkable historian included me in his review of five such books. But more striking was his intellectual openness: his choices 'provincialised' Bengal, by acknowledging the worlds and questions that lay well beyond it — Kanpur, Jamshedpur, KGF, Bombay, the railway works.

At a time when 'everyone' is a historian, and we are being trained in thinking of history only as 'pride' in the past, we will miss complex thinkers like Sarkar even more, for his passing no doubt signals the end of an era.

(Janaki Nair is the professor (retd), Centre for Historical Studies, JNU)

17A8. Sumit Sarkar brought ordinary people, their experiences into history books

सुमित सरकार ने आम लोगों और उनके अनुभवों को इतिहास की पुस्तकों में स्थान दिया

- His classic, **Modern India**, modestly described as a 'textbook', is perhaps the most well-thumbed of my many books.

उनकी प्रसिद्ध कृति, **Modern India**, जिसे विनम्रतापूर्वक एक 'पाठ्यपुस्तक' कहा गया है, संभवतः मेरी अनेक पुस्तकों में सबसे अधिक पढ़ी और उपयोग की गई पुस्तक है।

- His book, **Swadeshi Movement in Bengal**, on Bengal's (first) partition of 1905, and the nationalist movement that it spawned, was full of methodological innovations, using plays, novels, newspapers, pamphlets, in addition to the more familiar colonial archive.

1905 में बंगाल के (पहले) विभाजन और उससे उत्पन्न राष्ट्रवादी आंदोलन पर उनकी पुस्तक **Swadeshi**

Movement in Bengal अनेक पद्धतिगत नवाचारों से भरपूर थी, जिसमें परिचित औपनिवेशिक

अभिलेखागार के अतिरिक्त नाटकों, उपन्यासों, समाचार-पत्रों और पुस्तिकाओं का भी उपयोग किया गया था।

- But the pride-inducing victory of a little 'eastern' nation, **Japan**, over a powerful 'western' neighbour, **Russia**, — the **Russo-Japanese War of 1904-05** — also played its part, despite a



relative ignorance in India of emerging critiques of imperialism elsewhere.

लेकिन एक छोटे 'पूर्वी' राष्ट्र जापान की शक्तिशाली 'पश्चिमी' पड़ोसी रूस पर गौरव उत्पन्न करने वाली विजय—1904-05 का रूस-जापान युद्ध—ने भी अपनी भूमिका निभाई, यद्यपि भारत में अन्य स्थानों पर उभर रही साम्राज्यवाद की आलोचनाओं के प्रति अपेक्षाकृत कम जानकारी थी।

- Sarkar also asked himself: how could a Swadeshi editorial in the **Bande Mataram** praise, in the same breath, both the labour movement and the caste system, the latter for having had 'the true socialistic aim of keeping awake in every class of society a sense of duty to it'? सुमित सरकार ने स्वयं से यह प्रश्न भी किया: **Bande Mataram** में प्रकाशित कोई स्वदेशी संपादकीय एक ही समय में **श्रमिक आंदोलन और जाति व्यवस्था**, दोनों की प्रशंसा कैसे कर सकता था, जबकि जाति व्यवस्था के बारे में यह कहा गया था कि उसका 'सच्चा समाजवादी उद्देश्य समाज के प्रत्येक वर्ग में उसके प्रति कर्तव्य की भावना को जागृत रखना' था?
- Or, as he would ask later, what drew upper caste men to revolutionary terrorism in Bengal, and why has that memory endured longer than those of tribal or lower caste participants? या, जैसा कि उन्होंने बाद में पूछा, उच्च जाति के लोगों को बंगाल में क्रांतिकारी आतंकवाद की ओर क्या आकर्षित करता था, और उस आंदोलन में आदिवासी या निम्न जाति के प्रतिभागियों की स्मृतियों की तुलना में उनकी स्मृति अधिक लंबे समय तक क्यों बनी रही?
- Sarkar's task was to break out of the **economic determinism** and **narrow positivism** that was the hallmark of Marxist scholarship at the time. सुमित सरकार का उद्देश्य उस समय के मार्क्सवादी अध्ययन की पहचान बन चुके **आर्थिक नियतिवाद**

(**economic determinism**) और संकीर्ण **प्रत्यक्षवाद (positivism)** से बाहर निकलना था।

GS I: History: A&C

Two forms of worship

In the Bhagavad Gita, Canto 12 is dedicated to Bhakti Yoga, the yoga of devotion, said Sri Ramanujamji in a discourse. There are two primary forms of worship and meditation in Hindu philosophy – *Saguna Upasana* (manifestation form) and *Nirguna Upasana* (formless devotion). *Saguna* worship refers to devotion with attributes or with qualities, whereas *Nirguna Upasana* means devotion without attributes or formless devotion. In the Bhagavad Gita, Arjuna asks Lord Krishna which of the two paths is superior. Lord Krishna replies to Arjuna that while both paths ultimately lead to the same Supreme realisation, *Saguna Upasana*, devotion in personal form, is far easier and more practical for embodied human beings. This forms the foundational essence of Bhakti Yoga. He also explains that *Nirguna Upasana* represents a profound philosophical realisation and is exceptionally difficult for common people because the human mind and intellect naturally rely on names and forms, and need a physical sensory focus.

Saguna dhyana enhances the essence of *nirguna*. Take gold as an example: a solid bar of gold (*nirguna*) versus an intricately crafted wearable golden ornament (*saguna*). Similarly, water in a still, silent lake (*nirguna*), versus a beautifully flowing waterfall that brings joy through its movement and sound (*saguna*). Ultimately, both *saguna* and *nirguna Upasana* are two sides of the same coin, which are inseparable. *Saguna* has the added advantage of letting devotees connect emotionally, whether they view the divine as a master, a friend, a child, a beloved, or their own soul, allowing them to pray, seek compassion, and be guided.

the two paths is superior.

भगवद्गीता में अर्जुन भगवान कृष्ण से पूछते हैं कि इन दोनों मार्गों में से कौन-सा श्रेष्ठ है।

- He also explains that *Nirguna Upasana* represents a profound philosophical realisation and is exceptionally difficult for common people because the human mind and intellect naturally rely on names and forms, and need a physical sensory focus. वे यह भी समझाते हैं कि **निर्गुण उपासना** एक गहन दार्शनिक अनुभूति का प्रतिनिधित्व करती है और सामान्य लोगों के लिए अत्यंत कठिन है, क्योंकि मानव मन और बुद्धि स्वाभाविक रूप से **नाम और रूप** पर निर्भर करते हैं तथा उन्हें इंद्रियों के लिए एक **भौतिक आधार** की आवश्यकता होती है।

17A8. Two forms of worship

उपासना के दो रूप

- In the **Bhagavad Gita**, Canto 12 is dedicated to **Bhakti Yoga**, the yoga of devotion, said Sri Ramanujamji in a discourse. **भगवद्गीता** का 12वाँ अध्याय **भक्ति योग**, अर्थात् भक्ति के योग, को समर्पित है, ऐसा श्री **रामानुजमजी** ने एक प्रवचन में कहा।

- There are two primary forms of worship and meditation in Hindu philosophy — **Saguna Upasana** (manifestation form) and **Nirguna Upasana** (formless devotion).

हिंदू दर्शन में उपासना और ध्यान के दो प्रमुख रूप हैं—**सगुण उपासना** (साकार रूप) और **निर्गुण उपासना** (निराकार भक्ति)।

- Saguna worship** refers to devotion with attributes or with qualities, whereas **Nirguna Upasana** means devotion without attributes or formless devotion.

सगुण उपासना से तात्पर्य गुणों या विशेषताओं से युक्त ईश्वर के प्रति भक्ति से है, जबकि **निर्गुण उपासना** का अर्थ गुणों से रहित या **निराकार भक्ति** है।

- In the **Bhagavad Gita**, Arjuna asks Lord Krishna which of



- **Saguna dhyana** enhances the essence of nirguna.
सगुण ध्यान निर्गुण के सार को और अधिक सुदृढ़ करता है।
- Ultimately, both **saguna and nirguna Upasana** are two sides of the same coin, which are inseparable.
अंततः, सगुण और निर्गुण उपासना एक ही सिक्के के दो पहलू हैं, जिन्हें एक-दूसरे से अलग नहीं किया जा सकता।
- Saguna has the added advantage of letting devotees connect emotionally, whether they view the divine as a master, a friend, a child, a beloved, or their own soul, allowing them to pray, seek compassion, and be guided.
सगुण उपासना का अतिरिक्त लाभ यह है कि यह भक्तों को भावनात्मक रूप से जुड़ने का अवसर देती है, चाहे वे ईश्वर को स्वामी, मित्र, बालक, प्रियतम या अपनी आत्मा के रूप में देखें; इससे वे प्रार्थना कर सकते हैं, करुणा की याचना कर सकते हैं और मार्गदर्शन प्राप्त कर सकते हैं।

GS Paper 1: Society		17 August 2026
TOPICS COVERED		
17A8	'No private data sought for Census; ID details will be collected only if available 'जनगणना के लिए कोई निजी डेटा नहीं मांगा गया; पहचान संबंधी विवरण केवल उपलब्ध होने पर ही एकत्र किए जाएंगे'	
17A8	Girls conditioned from childhood to take up domestic burden लड़कियों को बचपन से ही घरेलू दायित्व उठाने के लिए तैयार किया जाता है	
17A8	Taken by one of the big four चार अत्यंत विषैले साँपों में से एक का शिकार	



'No private data sought for Census; ID details will be collected only if available'

J&K, Ladakh Census chief says data is confidential under Census Act; he asks people to write down answers beforehand as number of questions has increased; warns people to be aware of cyberfraud, encourages self-enumeration; Phase 2 of Census begins in snow-bound areas from today

GS 1: Society
INTERVIEW

Amit Sharma

Vijaita Singh
NEW DELHI

The Registrar-General and Census Commissioner of India (RG&CCI) on August 14 notified 40 questions for Population Enumeration, the second phase of the Census 2027, which will begin in Ladakh and snow-bound areas of Jammu and Kashmir, Himachal Pradesh and Uttarakhand from Monday and continue till September 30, ahead of the rest of the country, where the exercise will be held in February 2027.

The Census 2027 questionnaire will include 13 new questions that were not part of the Census 2011 questionnaire, which had 29 questions. The new questions seek information on the spouse's name, nationality, father and mother's particulars, digital literacy, permanent address, place of COVID-19 vaccination, number of bank accounts, passport, driving licence and mobile, Aadhaar and voter ID num-



SPECIAL ARRANGEMENT

bers, if available. Amit Sharma, Chief Principal Census Officer and Director, Census Operations, Jammu & Kashmir and Ladakh, speaks to *The Hindu* about the Census 2027 exercise and its significance for the two Union Territories.

Other than caste enumeration, the Population Census 2027 will also enumerate new data fields such as place of COVID-19 vaccination, identity documents and particulars of parents. What is the rationale behind the inclusion of such questions?

The questions are decided after several rounds of discussions with all Minis-

tries. No private or confidential data is being sought by enumerators; these are all documents provided by the government. We are not seeking the bank account details, only the number of accounts an individual has.

The identity documents such as Aadhaar, voter ID, driving licence, and passport are all issued by the government, and respondents are to provide them, subject to availability.

All data is confidential under the Census Act, 1948. It is better if respondents write down their details on paper before an enumerator comes. Since there are 40 questions, it may take more time.

How will self-enumeration work

in J&K and Ladakh?

Self-enumeration in the entire Union Territory of Ladakh and in the snow-bound areas of 16 districts of J&K will begin on Monday on the web portal before door-to-door enumeration begins on September 1. We would encourage people to self-enumerate. Beware of cyber fraud; fraudsters may seek information in the name of the Census. Our enumerators have QR-code-enabled ID cards; their credentials can be checked.

The self-enumeration option will be georeferenced and available only in the snow-bound areas. So, even if a resident of a snow-bound area of a district in J&K, say Gurez, who is presently in the plains, will not be able to access the portal.

Under the extended de facto pattern, everyone present at a location will be counted. More than 6.67 lakh households in J&K and 7,009 households in Ladakh voluntarily completed self-enumeration before the House Listing Operations (HLO), the first phase, in June.

Why is Census 2027

significant for J&K and Ladakh?

It will provide the first comprehensive demographic picture of Jammu & Kashmir after the abrogation of Article 370 and the first Census of Ladakh as a Union Territory. Beyond updating population figures after over a decade, it will generate data on population distribution, migration, age structure, housing, education, employment, fertility, disability and social composition to support planning and resource allocation.

Why is geography a key focus?

Demographic realities vary sharply across urban centres, border districts, remote mountain villages and tribal areas. Census 2027 aims to capture not just population numbers, but where people live, how they live, how they move and how those patterns are changing.

What are the main enumeration challenges in J&K and Ladakh?

J&K's population is spread across cities, villages,

mountainous regions, border areas and tribal habitations. Seasonal migration further complicates enumeration.

Ladakh's population lives across a vast high-altitude region marked by dispersed settlements, difficult connectivity, seasonal accessibility and remote locations. The Census must accurately capture where people live and how the population distribution varies.

How will nomadic communities and displaced populations be counted?

Special coordination with departments dealing with forests, tribal affairs and local administration will help identify migratory routes and seasonal settlements of Gujjar-Bakarwals and other nomadic groups. The objective is to ensure that mobility does not lead to undercounting.

Communities such as Kashmiri Pandits will be recorded according to established Census concepts and reference dates, while capturing migration and household characteristics.

For the full interview: newsth.live/amtsharma

17A8. 'No private data sought for Census; ID details will be collected only if available'

‘जनगणना के लिए कोई निजी डेटा नहीं मांगा गया; पहचान संबंधी विवरण केवल उपलब्ध होने पर ही एकत्र किए जाएंगे’

- The Registrar-General and Census Commissioner of India (RG&CCI) on August 14 notified 40 questions for Population Enumeration, the second phase of the Census 2027, which will begin in Ladakh and snow-bound areas of Jammu and Kashmir, Himachal Pradesh and Uttarakhand from Monday and continue till September 30, ahead of the rest of the country, where the exercise will be held in February 2027.

भारत के रजिस्ट्रार-जनरल एवं जनगणना आयुक्त (RG&CCI) ने 14 अगस्त को जनसंख्या गणना

(Population Enumeration) के लिए 40 प्रश्न अधिसूचित किए, जो जनगणना 2027 का दूसरा चरण है।

यह चरण सोमवार से लद्दाख तथा जम्मू-कश्मीर, हिमाचल प्रदेश और उत्तराखंड के बर्फबारी से प्रभावित क्षेत्रों में शुरू होगा और 30 सितंबर तक चलेगा, जबकि देश के शेष हिस्सों में यह प्रक्रिया फरवरी 2027 में आयोजित की जाएगी।

- The Census 2027 questionnaire will include 13 new questions that were not part of the Census 2011 questionnaire, which had 29 questions.

जनगणना 2027 की प्रश्नावली में 13 नए प्रश्न शामिल होंगे, जो जनगणना 2011 की प्रश्नावली का हिस्सा नहीं थे और जिसमें 29 प्रश्न थे।

- The new questions seek information on the spouse's name, nationality, father and mother's particulars, digital literacy, permanent address, place of COVID-19 vaccination, number of bank accounts, passport, driving licence and mobile, Aadhaar and voter ID numbers, if available.

नए प्रश्नों में पति या पत्नी का नाम, राष्ट्रीयता, पिता और माता का विवरण, डिजिटल साक्षरता, स्थायी पता,

COVID-19 टीकाकरण का स्थान, बैंक खातों की संख्या, तथा उपलब्ध होने पर पासपोर्ट, ड्राइविंग लाइसेंस, मोबाइल, आधार और मतदाता पहचान-पत्र संख्या से संबंधित जानकारी मांगी गई है।

- Amit Sharma, Chief Principal Census Officer and Director, Census Operations, Jammu & Kashmir and Ladakh, speaks to The Hindu about the Census 2027 exercise and its significance for the two Union Territories.

अमित शर्मा, मुख्य प्रधान जनगणना अधिकारी एवं जनगणना संचालन निदेशक, जम्मू-कश्मीर और लद्दाख, ने जनगणना 2027 की प्रक्रिया और दोनों केंद्रशासित प्रदेशों के लिए इसके महत्व के बारे में द हिंदू से बातचीत की।

- Other than caste enumeration, the **Population Census 2027** will also enumerate new data fields such as **place of COVID-19 vaccination, identity documents and particulars of parents**. जाति गणना के अतिरिक्त, जनसंख्या जनगणना 2027 में COVID-19 टीकाकरण का स्थान, पहचान दस्तावेज और माता-पिता का विवरण जैसे नए डेटा क्षेत्रों को भी दर्ज किया जाएगा।

What is the rationale behind the inclusion of such questions?

ऐसे प्रश्नों को शामिल करने के पीछे क्या तर्क है?

- The questions are decided after several rounds of discussions with all Ministries. इन प्रश्नों को सभी मंत्रालयों के साथ कई दौर की चर्चाओं के बाद निर्धारित किया जाता है।
- No private or confidential data is being sought by enumerators**; these are all documents provided by the government. गणनाकर्मियों द्वारा कोई निजी या गोपनीय डेटा नहीं मांगा जा रहा है; ये सभी सरकार द्वारा जारी किए गए दस्तावेज हैं।
- We are not seeking the bank account details, only the number of accounts an individual has**. हम बैंक खाते का विवरण नहीं मांग रहे हैं, बल्कि केवल यह जानकारी मांग रहे हैं कि किसी व्यक्ति के पास कितने बैंक खाते हैं।
- The identity documents such as Aadhaar, voter ID, driving licence, and passport are all issued by the government, and respondents are to provide them, subject to availability**. आधार, मतदाता पहचान-पत्र, ड्राइविंग लाइसेंस और पासपोर्ट जैसे पहचान दस्तावेज सरकार द्वारा जारी किए जाते हैं और उत्तरदाताओं को इन्हें उपलब्ध होने की स्थिति में प्रदान करना है।
- All data is confidential under the Census Act, 1948**. **Census Act, 1948** के तहत सभी डेटा गोपनीय है।
- It is better if respondents write down their details on paper before an enumerator comes**. बेहतर होगा कि गणनाकर्मियों के आने से पहले उत्तरदाता अपने विवरण कागज पर लिख लें।
- Since there are 40 questions, it may take more time. चूंकि इसमें 40 प्रश्न हैं, इसलिए इसमें अधिक समय लग सकता है।
- Our enumerators have QR code-enabled ID cards; their credentials can be checked**. हमारे गणनाकर्मियों के पास QR कोड-सक्षम पहचान-पत्र हैं; उनके प्रमाण-पत्रों की जाँच की जा सकती है।
- The self-enumeration option will be georeferenced and available only in the snow-bound areas**. स्व-गणना का विकल्प भौगोलिक रूप से संदर्भित (georeferenced) होगा और केवल बर्फबारी से प्रभावित क्षेत्रों में उपलब्ध होगा।
- Beyond updating population figures after over a decade, it will generate data on population distribution, migration, age structure, housing, education, employment, fertility, disability and social composition to support planning and resource allocation**. एक दशक से अधिक समय बाद जनसंख्या के आँकड़ों को अद्यतन करने के अलावा, यह जनसंख्या वितरण, प्रवासन, आयु संरचना, आवास, शिक्षा, रोजगार, प्रजनन क्षमता, दिव्यांगता और सामाजिक संरचना से संबंधित डेटा तैयार करेगी, ताकि योजना निर्माण और संसाधन आवंटन में सहायता मिल सके।

Girls conditioned from childhood to take up domestic burden

The time women spend on housework begins to rise around the age of 10 and reaches a peak of nearly 460 minutes a day around age 30

GS I: Society

DATA POINT

Tanu M. Goyal
Mohd. Tahoor
Shravani Prakash

In a recent interaction with women aspiring to become entrepreneurs in rural Haryana, it was found that other than social and cultural norms, the biggest practical problem constraining the women's ability to do more paid work was that a large share of their time was tied up in cooking and completing household chores. Strikingly, their daughters, rather than their sons, were already sharing this burden by helping them in the kitchen and other chores. The next generation, it seemed, is already learning to reproduce the gender gap in invisible, unpaid work.

India's Time Use Survey (2025) highlights that the division of labour that emerges in adulthood begins much earlier, through childhood conditioning. What starts in childhood widens with age, reaching its peak in the prime working years (Chart 1).

The time women spend on housework begins to rise around the age of 10 and continues through the late teens and twenties, reaching a peak of nearly 460 minutes (7.5 hours +) a day around age 30. The male curve, however, never crosses 65 minutes at any age between six and 75. Adolescence, in this sense, is not separate from adulthood; it is when the adult pattern begins to take shape (Chart 1). Data shows that at age six, Indian boys and girls spend almost the same amount of time on domestic and care work at about five minutes a day (Chart 2). Their trajectories remain relatively close through early childhood. Thereafter, however, they diverge sharply.

Around age 10, the girls' curve begins to pull away. Girls spend about 15 minutes a day on domestic and care work at age 10, 75 minutes at 15, and around 130 minutes

by age 17. Boys, meanwhile, move from roughly five minutes at age six to only about 17 minutes by the end of childhood. The result is a dramatic widening of the gender gap. The girl-to-boy ratio in unpaid work rises from 1.6 among children aged 6-9, to 4.5 among those aged 10-14, and to 7.5 among adolescents aged 15-17.

Little control over time

The cost is leisure. Between ages six and 17, girls' housework rises by roughly 124 minutes a day, while their leisure time falls by around 115 minutes. For boys, the decline in leisure is much smaller but the time they spend on housework changes relatively little.

This matters because the cost of girls' domestic work is often framed primarily as a trade-off with schooling and education. But data shows that girls, in fact, are spending slightly more time on learning than boys at most ages. They, therefore, remain in school but still pay a substantial price in leisure time that could be spent on sport, friendships, rest, exploration and simply having discretionary control over their own time. These are not economically irrelevant activities. They are part of how children build confidence, social networks, physical capability and even a sense of agency, all of which influence their ability to build career trajectories later in life (Chart 2).

Cooking lies at the centre of this divergence (Chart 3). Among adolescents aged 15-17 years, 42.4% of girls report cooking, compared with only 2.9% of boys. Girls in this age group spend close to an hour cooking, while boys spend just two minutes. Cleaning and laundry also become increasingly gendered, with wide gaps in both participation and time spent. The only tasks where adolescent boys match or exceed girls are farm work and shopping; activities that are more outward-facing (the field and market), rather than inward-facing into the kitchen.

Between childhood and adulthood, therefore, girls are being trained for the household while boys are being trained for the world outside. This helps explain why childhood conditioning can later appear as an "efficient" gendered allocation of household work.

One of the clearest manifestations of these gendered expectations is women's absence from the labour force. In the 2025 PLFS, childcare and domestic responsibilities were the single most-cited reason women gave for staying out of the labour force, reported by 52.5% of urban women and 40% of rural women, compared with less than 1% of men.

Most policy interventions address women's unpaid work in adulthood through childcare, community kitchens, safe mobility infrastructure, flexible work and social protection, among others. But the Time Use Survey suggests that policy must also start much earlier, by addressing the unequal assignment of domestic work between boys and girls.

The objective is not to remove domestic work from children's lives, but to remove its gender assignment. Schools can help by giving every child, boy or girl, equal opportunities to learn practical life skills, from cooking and home management to stitching, carpentry and financial management.

India has invested heavily in keeping girls in school and improving their educational outcomes, but equal attention must be paid to what happens to their time outside school. Otherwise, by the time young women enter the labour market, years of gendered conditioning and unpaid work may already have narrowed their choices. If we want a different workforce tomorrow, we may need to start by giving boys and girls a different childhood today.

Authors work at the Indian Council for Research on International Economic Relations (ICRIER). Views expressed are personal

Disproportionate burden

The data for the charts were sourced from India's Time Use Survey (2025) and the Ministry of Statistics and Program Implementation (MoSPI)

CHART 1: Time spent on housework (unpaid domestic and caregiving services)

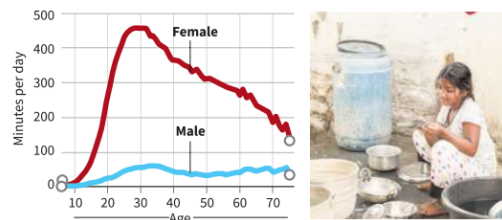


CHART 2: Time spent by children on domestic work, leisure and learning

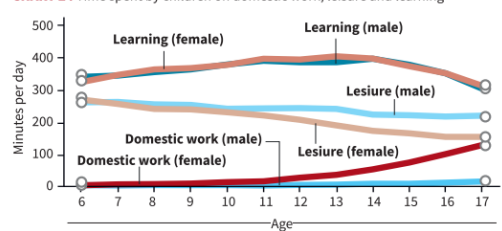
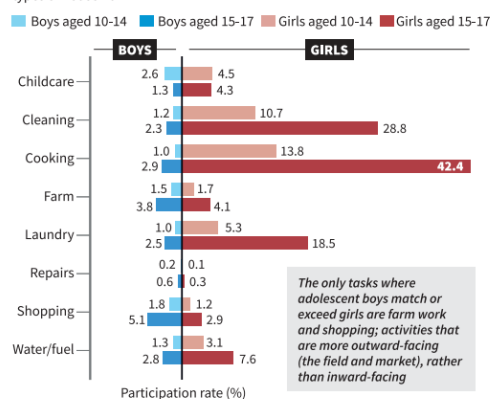


CHART 3: The share (participation rate) of girls and boys who engage in different types of housework



The only tasks where adolescent boys match or exceed girls are farm work and shopping; activities that are more outward-facing (the field and market), rather than inward-facing

17A8. Girls conditioned from childhood to take up domestic burden

लड़कियों को बचपन से ही घरेलू दायित्व उठाने के लिए तैयार किया जाता है

- In a recent interaction with women aspiring to become entrepreneurs in rural Haryana, it was found that other than social and cultural norms, the biggest practical problem constraining the women's ability to do more paid work was that a large share of their time was tied up in cooking and completing household chores.

हाल ही में ग्रामीण हरियाणा में उद्यमी बनने की आकांक्षा रखने वाली महिलाओं के साथ हुई बातचीत में यह पाया गया कि सामाजिक और सांस्कृतिक मानदंडों के अलावा, महिलाओं की अधिक वेतनभोगी कार्य करने की क्षमता को सीमित करने वाली सबसे बड़ी व्यावहारिक समस्या यह थी कि उनके समय का एक बड़ा हिस्सा खाना पकाने और घरेलू कार्यों को पूरा करने में व्यतीत हो जाता था।

- India's Time Use Survey (2025) highlights that the division of labour that emerges in adulthood begins much earlier, through childhood conditioning.

भारत का टाइम यूज़ सर्वे (2025) इस बात को रेखांकित करता है कि वयस्कता में दिखाई देने वाला श्रम-विभाजन बहुत पहले, अर्थात् बचपन में होने वाली conditioning के माध्यम से शुरू हो जाता है।

- What starts in childhood widens with age, reaching its peak in the prime working years (Chart 1).
जो अंतर बचपन में शुरू होता है, वह उम्र के साथ बढ़ता जाता है और प्रमुख कार्यशील आयु में अपने चरम पर पहुँच जाता है (चार्ट 1)।
- The time women spend on housework begins to rise around the age of 10 and continues through the late teens and twenties, reaching a peak of nearly 460 minutes (7.5 hours +) a day around age 30.
महिलाओं द्वारा घरेलू कार्य में बिताया जाने वाला समय लगभग 10 वर्ष की आयु से बढ़ना शुरू हो जाता है और किशोरावस्था के अंतिम वर्षों तथा बीसवें दशक में जारी रहता है, जो लगभग 30 वर्ष की आयु में प्रतिदिन लगभग 460 मिनट (7.5 घंटे से अधिक) के चरम पर पहुँच जाता है।
- The male curve, however, never crosses 65 minutes at any age between six and 75.
हालाँकि, पुरुषों के मामले में यह आँकड़ा छह से 75 वर्ष की किसी भी आयु में 65 मिनट से अधिक नहीं होता।
- Data shows that at age six, Indian boys and girls spend almost the same amount of time on domestic and care work at about five minutes a day (Chart 2).
आँकड़े बताते हैं कि छह वर्ष की आयु में भारतीय लड़के और लड़कियाँ घरेलू एवं देखभाल संबंधी कार्यों पर लगभग समान समय, अर्थात् प्रतिदिन करीब पाँच मिनट, बिताते हैं (चार्ट 2)।
- Girls spend about 15 minutes a day on domestic and care work at age 10, 75 minutes at 15, and around 130 minutes by age 17.
लड़कियाँ 10 वर्ष की आयु में घरेलू और देखभाल संबंधी कार्यों पर प्रतिदिन लगभग 15 मिनट, 15 वर्ष की आयु में 75 मिनट, और 17 वर्ष की आयु तक लगभग 130 मिनट बिताती हैं।
- Boys, meanwhile, move from roughly five minutes at age six to only about 17 minutes by the end of childhood.
इस बीच, लड़कों के मामले में यह समय छह वर्ष की आयु में लगभग पाँच मिनट से बढ़कर बचपन के अंत तक केवल लगभग 17 मिनट होता है।
- The result is a dramatic widening of the gender gap.
इसका परिणाम लैंगिक अंतर का नाटकीय रूप से बढ़ना है।
- The girl-to-boy ratio in unpaid work rises from 1.6 among children aged 6–9, to 4.5 among those aged 10–14, and to 7.5 among adolescents aged 15–17.
अवैतनिक कार्य में लड़कियों और लड़कों का अनुपात 6–9 वर्ष के बच्चों में 1.6 से बढ़कर 10–14 वर्ष के बच्चों में 4.5 और 15–17 वर्ष के किशोरों में 7.5 हो जाता है।
- This matters because the cost of girls' domestic work is often framed primarily as a trade-off with schooling and education.
यह महत्वपूर्ण है क्योंकि लड़कियों के घरेलू कार्य की कीमत को अक्सर मुख्य रूप से स्कूली शिक्षा और पढ़ाई के साथ समझौते के रूप में प्रस्तुत किया जाता है।
- But data shows that girls, in fact, are spending slightly more time on learning than boys at most ages.
लेकिन आँकड़े बताते हैं कि वास्तव में अधिकांश आयु वर्गों में लड़कियाँ लड़कों की तुलना में सीखने में थोड़ा अधिक समय बिता रही हैं।
- They, therefore, remain in school but still pay a substantial price in leisure time that could be spent on sport, friendships, rest, exploration and simply having discretionary control over their own time.
इसलिए वे स्कूल में बनी रहती हैं, लेकिन फिर भी उन्हें अवकाश समय के रूप में एक बड़ी कीमत चुकानी पड़ती है, जिसका उपयोग खेल, मित्रता, आराम, खोजबीन और केवल अपने समय पर स्वविवेकपूर्ण नियंत्रण रखने के लिए किया जा सकता था।

- They are part of how children build confidence, social networks, physical capability and even a sense of agency, all of which influence their ability to build career trajectories later in life (Chart 2).
ये उन प्रक्रियाओं का हिस्सा हैं जिनके माध्यम से बच्चे आत्मविश्वास, सामाजिक नेटवर्क, शारीरिक क्षमता और अपनी निर्णय-क्षमता की भावना विकसित करते हैं, और ये सभी आगे चलकर उनके करियर की दिशा निर्धारित करने की क्षमता को प्रभावित करते हैं (चार्ट 2)।
- Among adolescents aged 15–17 years, 42.4% of girls report cooking, compared with only 2.9% of boys.
15–17 वर्ष की आयु के किशोरों में 42.4% लड़कियाँ खाना पकाने की बात बताती हैं, जबकि केवल 2.9% लड़के ऐसा करते हैं।
- Girls in this age group spend close to an hour cooking, while boys spend just two minutes.
इस आयु वर्ग की लड़कियाँ खाना पकाने में लगभग एक घंटा बिताती हैं, जबकि लड़के केवल दो मिनट बिताते हैं।
- Cleaning and laundry also become increasingly gendered, with wide gaps in both participation and time spent.
सफाई और कपड़े धोने के कार्य भी तेजी से लैंगिक रूप लेते जाते हैं, जिनमें भागीदारी और बिताए गए समय दोनों में व्यापक अंतर दिखाई देता है।
- The only tasks where adolescent boys match or exceed girls are farm work and shopping; activities that are more outward-facing (the field and market), rather than inward-facing into the kitchen.
जिन कार्यों में किशोर लड़के लड़कियों के बराबर या उनसे अधिक भागीदारी करते हैं, वे केवल कृषि कार्य और खरीदारी हैं; ये ऐसी गतिविधियाँ हैं जो रसोई के भीतर केंद्रित कार्यों के बजाय अधिक बाहरी गतिविधियाँ हैं, अर्थात् खेत और बाजार से जुड़ी हुई हैं।
- Between childhood and adulthood, therefore, girls are being trained for the household while boys are being trained for the world outside.
इसलिए, बचपन और वयस्कता के बीच लड़कियों को घर-परिवार के लिए प्रशिक्षित किया जा रहा है, जबकि लड़कों को बाहरी दुनिया के लिए तैयार किया जा रहा है।
- This helps explain why childhood conditioning can later appear as an “efficient” gendered allocation of household work.
यह समझाने में सहायता करता है कि बचपन की conditioning बाद में घरेलू कार्यों के “कुशल” लैंगिक विभाजन के रूप में क्यों दिखाई दे सकती है।
- In the 2025 PLFS, childcare and domestic responsibilities were the single most-cited reason women gave for staying out of the labour force, reported by 52.5% of urban women and 40% of rural women, compared with less than 1% of men.
2025 PLFS में बच्चों की देखभाल और घरेलू जिम्मेदारियाँ महिलाओं द्वारा श्रमबल से बाहर रहने के लिए बताए गए सबसे प्रमुख कारण थे; 52.5% शहरी महिलाओं और 40% ग्रामीण महिलाओं ने इसे कारण बताया, जबकि पुरुषों में यह अनुपात 1% से भी कम था।
- Most policy interventions address women's unpaid work in adulthood through childcare, community kitchens, safe mobility infrastructure, flexible work and social protection, among others.
अधिकांश नीतिगत हस्तक्षेप वयस्क महिलाओं के अवैतनिक कार्य को बच्चों की देखभाल, सामुदायिक रसोई, सुरक्षित आवागमन की अवसंरचना, लचीले कार्य और सामाजिक सुरक्षा आदि के माध्यम से संबोधित करते हैं।
- But the Time Use Survey suggests that policy must also start much earlier, by addressing the unequal assignment of domestic work between boys and girls.
लेकिन टाइम यूज सर्वे से संकेत मिलता है कि नीतिगत प्रयासों को बहुत पहले शुरू होना चाहिए और लड़कों तथा लड़कियों के बीच घरेलू कार्यों के असमान आवंटन को संबोधित करना चाहिए।
- The objective is not to remove domestic work from children's lives, but to remove its gender assignment.

उद्देश्य बच्चों के जीवन से घरेलू कार्य को समाप्त करना नहीं है, बल्कि इसके **लैंगिक निर्धारण** को समाप्त करना है।

- Schools can help by giving every child, boy or girl, equal opportunities to learn practical life skills, from cooking and home management to stitching, carpentry and financial management. स्कूल प्रत्येक बच्चे, चाहे वह लड़का हो या लड़की, को **व्यावहारिक जीवन कौशल** सीखने के समान अवसर देकर सहायता कर सकते हैं—जैसे खाना पकाने और घर के प्रबंधन से लेकर सिलाई, बढ़ईगिरी और **वित्तीय प्रबंधन** तक।
- Otherwise, by the time young women enter the labour market, **years of gendered conditioning and unpaid work may already have narrowed their choices.**

अन्यथा, जब तक युवा महिलाएँ **श्रम बाजार** में प्रवेश करेंगी, तब तक वर्षों की **लैंगिक conditioning** और अवैतनिक कार्य उनके विकल्पों को पहले ही सीमित कर चुके होंगे।



A common krait bit six girls sleeping on the floor of a residential tribal school in Gadchiroli's Japatali village. Three of them died of the snake venom. Vinaya Deshpande Pandit reports on the governance problems in Maharashtra's forested area, the grief of the parents who have lost their children, and on the concern of those impacted by the closure of the school

Taken by one of the big four

Eight-year-old Anu Koreti's eyes twinkled as she raved about the performances put together to celebrate World Tribal Day on August 9. She clapped to the dance performances and later raved to her elder brother about how much she had enjoyed them. That was the last conversation she had before going to bed at a tribal residential school in Dhanora, Gadchiroli district, in Maharashtra. The programme honoured tribal culture, and gave a call for tribal empowerment.

For Anu and her two older siblings studying here, their only hope for a better future away from poverty was this tribal residential school. For them, and for the two generations of Gonds, a Scheduled Tribe, who studied in the private, aided primary and secondary Ashram School in Japatali in Dhanora, empowerment meant a window to education.

On the intervening night of August 9 and 10, as Anu and 111 girls in the school lay on the hostel dormitory, it bit six girls, all between 8 and 14 years, killing three. Anu was one of them.

One of the girls was airlifted to a hospital in Nagpur, Maharashtra's No. 2 capital. She is now home and recovering. One continues to be serious, on ventilator support, at a hospital in Gadchiroli, but out of danger. Another is on her way to recovery.

Residents question the lack of medical and general infrastructure in one of the most underdeveloped and remote parts of Maharashtra, Gadchiroli. Chief Minister Devendra Fadnis is its guardian minister. Gadchiroli, earlier a part of the Red Corridor, is the easternmost district of Maharashtra. It has a dense forest cover of over 75%, with rich wildlife. The tribal population is scattered in several remote hamlets and settlements. In the last five years, 99 people have died of snakebite in Gadchiroli.

Teachers and parents say there are several questions to be answered by those in power, around the lack of school infrastructure, the lack of an ambulance and accessible medical services, and a deficient road network.

What happened that night
The school where the incident occurred was run by veteran Congress leader and former MP Mantrao Kowase. He is among the five against whom separate FIRs have been registered under several hailable sections. The school's licence will be cancelled, the Maharashtra government has said. They are also appointing a third party to audit all the 513 private, aided residential tribal schools in the State, Tribal Affairs Minister Ashok Ukle told the media.



The 9-km stretch on National Highway 530 that the van could not traverse necessitated a 35-km detour, delaying the transport of the girls to the hospital for treatment. EMANUAL, KOWASE

In Japatali village, the orange school building stands out against the backdrop of fresh green fields, the colours of the Indian flag. From its population of 1,000 to 1,200 people, around 50 local children study in this school. Most of the children on the rolls are from Bhatoli, a village at least five hours away by road.

Set on grounds about the size of half a football field is a two-storied main building, with classrooms on both the floors. In a separate building are a few halls. The biggest of them is one measuring 850 square feet. This is where over 100 schoolgirls studying from classes 1 to 10 live and sleep. There are no beds, only mattresses. The only bed is the one for the cook, a contractual worker, who was with the girls at night.

Now, there are mosquito nets, newly fitted. "Had they been there that night, the snake could not have entered. We had raised this so many times in the past, but nobody paid attention," says school's cook Tanabai Sandu Durve. She was sleeping with the girls on the night of the incident, to fill in for the school's woman supervisor, who had allegedly gone on leave without the principal's approval. She is currently absconding after an FIR has been registered against her for negligence.

Near the windows are fresh tyre marks. The parents say the pile of bricks and wooden logs have

been removed from near the open windows.

It is the most conducive environment for a snake. The wood is moist and cool. It is highly likely that these girls did not realise they were bitten by a snake, because this snakebite feels like a mosquito bite," says the Gadchiroli civil surgeon Dr. Varsha Shivaji Lahade. In fact, in many cases, it is difficult to find the long marks too, she adds. The dense tropical dry-deciduous forests and river basins of Gadchiroli and neighbouring Chandrapur districts support a rich diversity of reptilian life. Over 21 species of snakes from multiple families, such as the Viperidae and Pythonidae are found in these jungles. The big four highly venomous snakes – the Indian spectacled cobra, saw-scaled viper, Russell's viper, common krait – all live in the jungles of the area.

When the snake coiled itself around the leg of a fourth child, she woke up, and screamed in panic. The children, up and running, woke up the cook. "I hit the snake with a stick, but it kept moving. So I called the peon on my phone, asking him to rush here," says Tanabai.

The peon, Prabhakar Madke, who was on the school employee present on the campus at that time, rushed in with another stick and hit the snake, killing it. "The girls started complaining of stomach ache and began vomiting. I called Bhojpur Sir, and he called the headmaster,"



Prabhakar Madke, the peon who was present on the night when six girls were bitten at the Ashram School in Japatali village, Dhanora taluka, Gadchiroli district, Maharashtra. EMANUAL, KOWASE

Family members of Anu Koreti, who was 8 years old when she died of snakebite in Gadchiroli district, Maharashtra. EMANUAL, KOWASE

Madke says, B.R. Bhojpur is the male supervisor of the school.

The two teachers arrived in school in some time, though the cook and peon are not sure how long it took. Hospital staff say that at about 2.20 a.m. Anu and Deepika Madavi (12) reached Dhanora Rural Hospital, 9 km away, in a vegetable delivery van. They couldn't take the shorter route down National Highway 530, because the potholes had made it unmotorable, so they had to take the longer 35 km road.

Ambuj Pant, the Collector of Gadchiroli, says it is the responsibility of the school to respond quickly and bring the children in when there was an emergency.

The remaining students were taken in another vehicle. Sushmita Mandal (14), Samrudhi Netam (14), and Deepika Lakda (12) arrived at 2.40 a.m., says Dr. Bhojpur, the medical superintendent of Dhanora Rural Hospital. Many girls were panicked, so over 12 of them were taken directly to Gadchiroli's hospital.

"Despite administering all the doses as per protocol, Sushmita and Deepika were non-responsive. CPR was performed. We finally declared them dead around 4.30 a.m.," he says, adding that, "The common krait is at least 10 times more venomous than the king cobra. The golden hour for administering ANS (anti-snake venom) is half an hour after the snakebite. This snake's venom is neuro-toxic, which means it attacks the nervous system."

Anu was referred to Gadchiroli's main hospital as the Rural Hospital felt she would need to be put on ventilator, though the Rural Hospital had a ventilator. Anu died on the way to the hospital.

A road that could not be taken

The people of Gadchiroli are raging. "The Ministers should visit us every two days. At least that will make our lives better. We have been complaining about this road (NH530) for a long time now. Every year, for three months, that road remains shut during monsoon," an angry parent says. "Now that the Ministers want to visit us, contractors have been called overnight to patch the road up with gravel. Had this road been usable, the girls would have reached the hospital in 5-20 minutes. It would have saved their lives. Why is no action taken for that?"

Residents say the same highway is smooth in the neighbouring State of Chhattisgarh, but is impossible to use in the stretch between Dhanora and Japatali. They also claim that the State government shuts its bus service annually during the monsoon season on that stretch.

For Suresh Baburam Karangam, it means that her daughter has lost three months of school every year for the last two years now. "How will their education take place?" she says.

Today, all the 233 children who were enrolled in the residential school have gone back home. The parents worry about their future if the school shuts down. "We slog on our farms. We don't have any money to put them in other schools which expect us to buy books, uniforms. Where will our children go if this school shuts down? The government should provide facilities in the same school and should let it function. Address the issues. Why ruin our children's future by shutting down the school?" says Bharat Jitendra Halami, a parent.

A village mourning

Anu had joined her two elder siblings Karan and Arjun last year, to start school. Back home in their remote tribal hamlet of Khatkand, a Maoist stronghold till not long ago, her smile would brighten up the entire neighbourhood. It was a task to reach this hamlet in Murambaon village, barely 25 km away from the Japatali school. The lush road passing through the forest was not usable during the monsoon. At least two trees are fallen, blocking the narrow, slippery road.

Her older brother, all of 13 years, is inconsolable. Karan Koreti was her guardian. Arjun is a year younger. On the night of the incident, they were on the same campus, but in the halls earmarked for boys.

"We came to know only in the morning. The girls came to tell me that a snake had bitten my sister. I asked, which snake. They pointed towards the corner where the dead snake was. The moment I saw it, I got worried," Karan says. He rushed to the teacher, who assured him that Anu was fine. She asked me to not call anyone," he says, unable to hold back his anger and grief.

Gajanan Koreti, the 31-year-old father, is wild with anger. "Should the school not have called us? A peon came to call me in the morning at 9, saying my daughter had been bitten by a snake. But he did not tell me that she had died. It was only when I reached the Gadchiroli hospital that a policeman told me outside the post-mortem room that my daughter was no more," he says. They gave him a vehicle to bring her body back to the village. "I picked up my boys from the school, showed it to the teachers, and came back," he says. Anu wanted to be an Anganwadi Sevak, a woman who serves the community, especially with health care. "She aspired to study well and end the uniform of a healthcare worker," says her mother Kamal.

The Opposition has questioned the government over its apathy towards tribal students. "Reports indicate that in Maharashtra's 1,166 ashram schools (schools set up for children of tribal communities), as many as 584 students have died in the past two years," says NCP (SP) leader Jayant Patil, who adds that "the education system has become obsolete".

Shir Sena (BJP) leader Ambadas Durve says, "How can the project officer, whose lapse led to this incident, be the complainant in this case? This person should be removed from service. Strict action should be taken against the senior government officials responsible for the lapse of overseeing the quality of these schools."

vinaya.deshpande@thehindu.co.in



17A8. Taken by one of the big four चार अत्यंत विषैले साँपों में से एक का शिकार

- Eight-year-old **Anu Koreti's** eyes twinkled as she raved about the performances put together to celebrate **World Tribal Day on August 9**.
आठ वर्षीय अनु कोरेती की आँखें चमक उठीं, जब वह 9 अगस्त को विश्व आदिवासी दिवस मनाने के लिए आयोजित प्रस्तुतियों के बारे में उत्साहपूर्वक बता रही थी।
- For them, and for the two generations of **Gonds, a Scheduled Tribe**, who studied in the private, aided primary and secondary Ashram School in Japtalai in Dhanora, empowerment meant a window to education.
उनके लिए और अनुसूचित जनजाति (Scheduled Tribe) से संबंधित गोंड समुदाय की उन दो पीढ़ियों के लिए, जिन्होंने धनोरा के जपतलाई स्थित निजी, सहायता प्राप्त प्राथमिक और माध्यमिक आश्रम विद्यालय में अध्ययन किया, सशक्तीकरण का अर्थ शिक्षा की एक खिड़की था।
- Over **21 species of snakes from multiple families**, such as the **Viperidae and Pythonidae**, are found in these jungles.
इन जंगलों में Viperidae और Pythonidae जैसे कई परिवारों से संबंधित 21 से अधिक साँपों की प्रजातियाँ पाई जाती हैं।
- The **Big Four** highly venomous snakes — the Indian spectacled cobra, saw-scaled viper, Russell's viper, common krait — all live in the jungles of the area.
चार अत्यंत विषैले प्रमुख साँप — भारतीय चश्माधारी कोबरा, साँ-स्केल्ड वाइपर, रसेल्स वाइपर और कॉमन क्रेट — सभी इस क्षेत्र के जंगलों में पाए जाते हैं।
- This snake's venom is **neuro-toxic**, which means it attacks the nervous system.”
इस साँप का विष न्यूरोटॉक्सिक (neuro-toxic) होता है, जिसका अर्थ है कि यह तंत्रिका तंत्र पर हमला करता है।”

GS Paper 1: Geography		17 August 2026
TOPICS COVERED		
17A8	'No proposal seeking green nod for Mahadayi diversion' 'महादयी नदी के जल मोड़ने के लिए पर्यावरणीय मंजूरी का कोई प्रस्ताव नहीं'	
17A8	PDP leaders seeking insurance for hail-hit orchards detained ओलावृष्टि से प्रभावित बागानों के लिए बीमा की मांग कर रहे PDP नेताओं को हिरासत में लिया गया	
17A8	Spanish fighter jet downs drone in Romania after airspace breach हवाई क्षेत्र के उल्लंघन के बाद स्पेनिश लड़ाकू विमान ने रोमानिया में ड्रोन को मार गिराया	
17A8	Thousands evacuate after quake kills at least 53 people in Indonesia इंडोनेशिया में भूकंप से कम-से-कम 53 लोगों की मौत के बाद हजारों लोगों ने सुरक्षित स्थानों पर शरण ली	

Endless toil: Adults and children search for gold at a mining site in Iga-Barriere in **eastern Congo's Ituri province** on Friday. Accusations of child labour, unsafe conditions, and corruption have long plagued the country's mining industry.



- Gold occurs in nature mainly in **quartz veins in hard rocks (primary/lode deposits)** and in **river or stream sediments (placer/alluvial deposits)**.



- It is mined both from underground/open-pit mines and from alluvial deposits.

Major Gold-Mining Regions of the World

Country	Important gold-mining regions/mines
China	Shandong, Henan, Jiangxi and Inner Mongolia
Russia	Siberia and Russian Far East; major deposits include Sukhoi Log
Australia	Western Australia , especially the Kalgoorlie region; also New South Wales
Canada	Ontario, Quebec, British Columbia and Nunavut
United States	Nevada is the dominant gold-producing region; Alaska is also important
Ghana	Ashanti region and southwestern Ghana
South Africa	Witwatersrand Basin , historically one of the world's most important gold regions
Uzbekistan	Muruntau , one of the world's largest gold mines/deposits
Indonesia	Papua region, including the Grasberg mining complex
Peru	Andes, particularly northern and southern mineral belts

Gold Mining in India

- India has gold resources in several geological belts, but actual commercial production is concentrated in relatively few areas.
- Karnataka is India's most important gold-mining State.** The major producing centre is the **Hutti Gold Mines** in **Raichur district**.



Important Indian occurrences include:

State	Important Gold Areas
Karnataka	Hutti, Uti, Hira-Buddini, Kolar
Andhra Pradesh	Ramagiri and Jonnagiri region
Jharkhand	Singhbhum belt
Rajasthan	Bhukia gold-bearing belt, Banswara
Kerala	Some placer/alluvial gold occurrences
Chhattisgarh	Sonakhan region

Kolar vs Hutti — Important Exam Point

- Kolar Gold Fields (KGF), Karnataka** was historically India's most famous gold-mining centre. Commercial mining there was discontinued in **2001** because operations had become economically difficult.



- **Hutti Gold Mines, Karnataka** remains the country's principal established gold-producing mining operation.

How is gold found?

- **Primary/Lode Gold:** Gold occurs within rocks, often associated with **quartz veins**. The rock must be mined, crushed and processed to extract gold.
- **Placer/Alluvial Gold:** Weathering releases gold from rocks. Because gold is very dense, particles can accumulate in **river beds and sediments**.

'No proposal seeking green nod for Mahadayi diversion'

GS II: Geography
Rishikesh Bahadur Desai
BELAGAVI

There is no proposal before the Union government from Karnataka seeking Environmental Clearance (EC) for diversion of the Mahadayi river for various projects, the Centre recently told the Lok Sabha in reply to a question posed by an MP from Goa.

While this is being interpreted as a setback for the project by sections in Goa, officials in the know in Karnataka, however, maintain that EC is not relevant for a drinking water project.

Kirti Vardhan Singh, Union Minister of State for Environment, Forest and Climate Change, in response to a question on EC by Captain Viriato Fernandes, MP



The Centre responded to the question raised by a Goa MP

from South Goa, said that no proposal seeking an EC for any river diversion project involving the Mahadayi river is presently under consideration in the ministry.

The reply further said that the National Board for Wildlife (NBWL) has not approved Karnataka's proposal to use 10.6852 hectares of forest land for the Kalasa Nala Diversion Scheme in the tiger corridor between the Kali and Sahyadri Tiger Reserves.

The Minister said that no proposal or river basin details for conducting a Cumulative Impact Assessment (CIA) and Carrying Capacity Study (CCS) of the Mahadayi basin have been submitted by the State governments concerned.

In his question, the MP had highlighted concerns voiced by civil society groups, scientific institutions and experts regarding the proposed diversion of the Mahadayi, claiming that it could affect Goa's drinking water security, lead to potential saline ingress and freshwater aquifers in the river basin.

17A8. 'No proposal seeking green nod for Mahadayi diversion'

'महादयी नदी के जल मोड़ने के लिए

पर्यावरणीय मंजूरी का कोई प्रस्ताव नहीं'

• The reply further said that the **National Board for Wildlife (NBWL)** has not approved Karnataka's proposal to use **10.6852 hectares of forest land** for the **Kalasa Nala Diversion Scheme** in the tiger corridor between the **Kali and Sahyadri Tiger Reserves**.

• उत्तर में आगे कहा गया कि **राष्ट्रीय वन्यजीव बोर्ड (NBWL)** ने काली और सहयाद्री टाइगर रिजर्वों के बीच स्थित बाघ गलियारे में **कलसा नाला जल मोड़ योजना** के लिए **10.6852 हेक्टेयर वन भूमि** के उपयोग संबंधी कर्नाटक के प्रस्ताव को मंजूरी नहीं दी है।

GS Paper II: Polity		17 August 2026
TOPICS COVERED		
17A8	The federal dilemma of delimitation परिसीमन की संघीय दुविधा	



The federal dilemma of delimitation

The Centre made an oral assurance while introducing the Bill to increase Lok Sabha seats that each State's share would increase by 50% on a pro-rata basis. However, the increase could weaken the Rajya Sabha's role as a check on the Lower House, while the Lok Sabha's limited sitting days would leave MPs with less time to raise issues

SS II Policy

EXPLAINER

Rangarajan R.

The story so far:

The Tamil Nadu Legislative Assembly has passed a resolution urging the Centre to permanently freeze the number of Lok Sabha seats at the existing number of 543 and maintain the present State-wise distribution of those seats. It also advocated the preservation of current ratio of 2.2:1 between Lok Sabha and Rajya Sabha seats. It sought the implementation of one-third reservation of seats for women in the Lok Sabha from the 2029 election onwards, without linking it to any future census or delimitation.

Defining delimitation

Delimitation means the process of fixing the number of seats and boundaries of the territorial constituencies in each State for the Lok Sabha and Legislative Assemblies. This 'Delimitation process' is performed by 'Delimitation Commission' that is set up under an act of Parliament. The last time when the number of seats were determined was on the basis of 1971 census population.

'Democracy' means 'rule or government by the people'. It follows that the government is elected by a majority with the broad principle of 'one citizen-one vote-one value'. Article 32(2) of the Constitution provides that the ratio between the number of seats and population of a State, shall as far as practicable be same for all the States. The number of seats in the Lok Sabha based on 1971 census was fixed at 543, when the population was 54.8 crores. This broadly translated to an average population of 10.1 lakhs per constituency. However, it has been frozen as per 1971 census in order to encourage population control measures so that States with higher population growth do not end up having higher number of seats. This was done through the 42nd Amendment Act till the year 2000 and was extended by the 94th amendment act till 2026. This number will have to be readjusted based on the first census after 2026 which would be the next census in 2027. In 2023, through the 106th Constitutional Amendment, the Parliament had provided for one-third reservation of seats for women in the Lok Sabha and Legislative Assemblies. This would be through delimitation based on the census in 2027.

The issues involved

The population explosion that happened in our country during the last five decades has been uneven, with some States like Uttar Pradesh, Bihar, Madhya Pradesh and Rajasthan witnessing a greater increase than States like Kerala, Tamil Nadu, Karnataka and Andhra Pradesh. The ratio between the current number of seats and the projected population of States as of 2026 does not satisfy the core democratic principle of 'one person-one vote-one value' (Table 1). On the other hand, the increase in the number of seats among various States based on the current population (to 848) is provided in Table 2. Southern States, smaller states in the North, as well as the North Eastern States, are bound to be at a disadvantage when compared to large Indian States in such a scenario. This would be against the federal principles of our country. It also goes against the philosophy for freezing the seats as per 1971 census with the States

Representation imbalance

The redistribution of seats based on current population could put smaller and less populous States at a disadvantage



Table 1: Value of vote of each citizen based on estimated population as of 2026

State	Number of seats at present	Projected population as of 2026 (in crores)	Projected population per Lok Sabha seat (in lakh)	Value of 1 vote*
Uttar Pradesh	80	25.7	32.1	0.56
Bihar	40	13.5	33.8	0.53
Rajasthan	25	8.4	33.6	0.54
Madhya Pradesh	29	9.1	31.4	0.57
Tamil Nadu	39	7.8	20	0.9
Andhra Pradesh + Telangana	42	9.3	22.1	0.81
Kerala	20	3.6	18	1
Karnataka	28	6.9	24.6	0.73
Punjab	13	3.2	24.6	0.73
Himachal Pradesh	4	0.8	20	0.9
Uttarakhand	5	1.2	24	0.75

* Kerala calculated as 1 and States' values derived on this base

Table 2: If the number of seats is increased to 848 based on 2026 projected population

(Based on research paper of Milan Vaishnav and Jamie Hinton, for the Carnegie Endowment)

State	Number of seats at present	Projected number of seats	Existing proportion	Revised proportion
Uttar Pradesh	80	143	14.7%	16.9%
Bihar	40	79	7.4%	9.3%
Rajasthan	25	50	4.6%	5.9%
Madhya Pradesh	29	52	5.3%	6.1%
Tamil Nadu	39	49	7.2%	5.8%
Andhra Pradesh + Telangana	42	54	7.7%	6.4%
Kerala	20	20	3.7%	2.4%
Karnataka	28	41	5.2%	4.8%
Punjab	13	18	2.4%	2.1%
Himachal Pradesh	4	4	0.7%	0.5%
Uttarakhand	5	7	0.9%	0.8%
Total	543	848		

that have been better at controlling the population losing out on their political significance.

Current proposal by the Centre

The Union government had introduced the Constitution 131st Amendment Bill in April 2026 to increase the maximum number of Lok Sabha seats from existing 550 to 850. The Home Minister made an oral assurance in the Parliament that the number of seats in each State/Union Territory would be increased by 50% on a pro-rata basis. However, this bill was defeated in the Lok Sabha. There are expectations that the government may introduce the bill again, in the near future with explicit provisions for 50% increase in seats for all States/Union Territories on a pro-rata basis.

The larger implications

The are two main arguments in support of the proposal for 50% pro-rata increase. First, it would not alter the current proportion of representation of various States/Union Territories in the Lok Sabha. Second, it would enable seamless reservation of one-third seats for women with the additional 272 seats being reserved for women out of the enlarged house of around 816 seats.

However, such an increase has its share of challenges. Firstly, the current strength of Rajya Sabha is 245 that results in a ratio of 2.2:1 between the total strength of Lok Sabha and Rajya Sabha. An increase in Lok Sabha seats by 50% without altering seats in Rajya Sabha would skew this ratio to 3.3:1.

In the event of disagreement between the two houses on any bill, there is a mechanism for Joint Sitting under the Constitution to resolve the deadlock. Though used rarely in the past (only 3 times since Independence), this increased strength in the Lok Sabha runs the risk of rise in such joint sittings to push through Bills. In such a scenario, it would diminish the role of the Rajya Sabha as an effective check and balance on the Lok Sabha. Secondly, considering that the Lok Sabha sits for only around 60 days in a year, there would hardly be any meaningful time for each MP to raise their issues in the house. The purpose of the house would then be reduced to mere numerical representation rather than meaningful deliberation.

Finally, the increased cost to the exchequer because of additional MPs including allocation for the Members of Parliament Local Area Development Scheme (MPADS) funds needs to be

borne in mind.

Harmonious reconciliation

The issue arises as the democratic and federal principles seem to be at loggerheads in the delimitation exercise as currently envisaged. However, they can be harmoniously reconciled by giving equal importance to both. The main work of a Member of Parliament is to legislate on the 'Union List' subjects such as defence, external affairs, railways, telecommunication, taxation etc. and hold the Central government accountable. A majority of the schemes of the Central Government are implemented only by the State governments. Hence, the number of MPs in Lok Sabha may be frozen at the present number of 543, which would ensure no disruption to the current representation of various States. This would maintain and uphold the federal principle. One-third reservation for women can be provided out of the existing 543 seats. The number of MLAs in each State may be increased in line with the current population to address the democratic representational requirement. (Rangarajan R. is a former IAS officer and author of 'Courseware on Polity Simplified'. He currently trains at 'Officers IAS Academy'. Views expressed are personal.)

THE GIST

The Union government introduced the Constitution 131st Amendment Bill in April 2026 to increase the maximum number of Lok Sabha seats from the existing 550 to 850.

The Tamil Nadu Assembly recently passed a resolution urging the Centre to permanently freeze the number of Lok Sabha seats at 543 and maintain the present State-wise distribution of seats.

The ratio between the current number of seats and the projected population of States as of 2026 does not satisfy the principle of 'one person, one vote, one value'. However, increasing the number of seats based on current population would put smaller and less populous States at a disadvantage.

17A8. The federal dilemma of delimitation

परिसीमन की सघीय दुविधा

- The Tamil Nadu Legislative Assembly has passed a resolution urging the Centre to permanently freeze the number of Lok Sabha seats at the existing number of 543 and maintain the present State-wise distribution of those seats.
तमिलनाडु विधान सभा ने एक प्रस्ताव पारित कर केंद्र से लोकसभा की सीटों की संख्या को वर्तमान 543 पर स्थायी रूप से स्थिर रखने और उन सीटों के वर्तमान राज्यवार वितरण को बनाए रखने का आग्रह किया है।
- It also advocated the preservation of current ratio of 2.2:1 between Lok Sabha and Rajya Sabha seats.
इसने लोकसभा और राज्यसभा की सीटों के बीच वर्तमान 2.2:1 के अनुपात को बनाए रखने की भी वकालत की।

- Article 81(2) of the Constitution provides that the ratio between the number of seats and population of a State, shall as far as practicable be same for all the States.
संविधान के अनुच्छेद 81(2) में प्रावधान है कि किसी राज्य में सीटों की संख्या और उसकी जनसंख्या के बीच का अनुपात, जहाँ तक व्यावहारिक रूप से संभव हो, सभी राज्यों के लिए समान होना चाहिए।
- The number of seats in the Lok Sabha based on 1971 census was fixed at 543, when the population was 54.8 crores.
1971 की जनगणना के आधार पर लोकसभा में सीटों की संख्या 543 निर्धारित की गई थी, जब जनसंख्या 54.8 करोड़ थी।
- This broadly translated to an average population of 10.1 lakhs per constituency.
इसका अर्थ मोटे तौर पर प्रत्येक निर्वाचन क्षेत्र में 10.1 लाख की औसत जनसंख्या था।
- However, it has been frozen as per 1971 census in order to encourage population control measures so that States with higher population growth do not end up having higher number of seats.
हालाँकि, इसे 1971 की जनगणना के अनुसार स्थिर रखा गया, ताकि जनसंख्या नियंत्रण उपायों को प्रोत्साहित किया जा सके और अधिक जनसंख्या वृद्धि वाले राज्यों को अंततः अधिक सीटें प्राप्त न हो जाएँ।
- This was done through the 42nd Amendment Act till the year 2000 and was extended by the 84th amendment act till 2026.
यह व्यवस्था 42वें संविधान संशोधन अधिनियम के माध्यम से वर्ष 2000 तक की गई थी और 84वें संविधान संशोधन अधिनियम द्वारा इसे 2026 तक बढ़ा दिया गया।
- This number will have to be readjusted based on the first census after 2026 which would be the next census in 2027.
इस संख्या को 2026 के बाद होने वाली पहली जनगणना, जो अगली जनगणना 2027 में होगी, के आधार पर पुनः समायोजित करना होगा।
- In 2023, through the 106th Constitutional Amendment, the Parliament had provided for one-third reservation of seats for women in the Lok Sabha and Legislative Assemblies.
2023 में 106वें संविधान संशोधन के माध्यम से संसद ने लोकसभा और विधानसभाओं में महिलाओं के लिए एक-तिहाई सीटों के आरक्षण का प्रावधान किया था।
- On the other hand, the increase in the number of seats among various States based on the current population (to 848) is provided in Table 2.
दूसरी ओर, वर्तमान जनसंख्या के आधार पर विभिन्न राज्यों में सीटों की संख्या को बढ़ाकर 848 करने का विवरण तालिका 2 में दिया गया है।
- The Union government had introduced the Constitution 131st Amendment Bill in April 2026 to increase the maximum number of Lok Sabha seats from existing 550 to 850.
केंद्र सरकार ने अप्रैल 2026 में संविधान 131वाँ संशोधन विधेयक पेश किया था, जिसका उद्देश्य लोकसभा की अधिकतम सीटों की संख्या को वर्तमान 550 से बढ़ाकर 850 करना था।
- The Home Minister made an oral assurance in the Parliament that the number of seats in each State/Union Territory would be increased by 50% on a pro-rata basis.
गृह मंत्री ने संसद में मौखिक आश्वासन दिया कि प्रत्येक राज्य/केंद्रशासित प्रदेश में सीटों की संख्या समानुपातिक आधार (pro-rata basis) पर 50% बढ़ाई जाएगी।
- Firstly, the current strength of Rajya Sabha is 245 that results in a ratio of 2.2:1 between the total strength of Lok Sabha and Rajya Sabha.
पहला, राज्यसभा की वर्तमान सदस्य संख्या 245 है, जिसके कारण लोकसभा और राज्यसभा की कुल सदस्य संख्या के बीच 2.2:1 का अनुपात बनता है।
- An increase in Lok Sabha seats by 50% without altering seats in Rajya Sabha would skew this ratio to 3.3:1.
राज्यसभा की सीटों में परिवर्तन किए बिना लोकसभा की सीटों में 50% वृद्धि करने से यह अनुपात बिगड़कर 3.3:1 हो जाएगा।

- In the event of disagreement between the two houses on any bill, there is a mechanism for **Joint Sitting** under the Constitution to resolve the deadlock.
किसी विधेयक पर दोनों सदनों के बीच असहमति की स्थिति में गतिरोध को दूर करने के लिए संविधान के अंतर्गत **संयुक्त बैठक (Joint Sitting)** की एक व्यवस्था है।
- Though used rarely in the past (**only 3 times since Independence**), this increased strength in the Lok Sabha runs the risk of rise in such joint sittings to push through Bills.
यद्यपि अतीत में इसका उपयोग बहुत कम हुआ है (**स्वतंत्रता के बाद केवल 3 बार**), लोकसभा की सदस्य संख्या में यह वृद्धि विधेयकों को पारित कराने के लिए ऐसी **संयुक्त बैठकों की संख्या बढ़ने** का जोखिम उत्पन्न करती है।
- Secondly, considering that the Lok Sabha sits for **only around 60 days in a year**, there would **hardly be any meaningful time for each MP to raise their issues in the house**.
दूसरा, यह देखते हुए कि लोकसभा वर्ष में केवल लगभग 60 दिनों के लिए बैठती है, प्रत्येक सांसद के लिए सदन में अपने मुद्दे उठाने हेतु शायद ही पर्याप्त सार्थक समय उपलब्ध होगा।
- The **purpose of the house would then be reduced to mere numerical representation rather than meaningful deliberation**.
तब सदन का उद्देश्य **सार्थक विचार-विमर्श** के बजाय केवल संख्यात्मक प्रतिनिधित्व तक सीमित होकर रह जाएगा।
- Finally, the **increased cost to the exchequer because of additional MPs including allocation for the Members of Parliament Local Area Development Scheme (MPLADS) funds needs to be borne in mind**.
अंततः, अतिरिक्त सांसदों के कारण **राजकोष पर बढ़ने वाली लागत**, जिसमें सांसद स्थानीय क्षेत्र विकास योजना (MPLADS) के लिए धन का आवंटन भी शामिल है, को ध्यान में रखना आवश्यक है।

Harmonious reconciliation

सामंजसपूर्ण समन्वय

- The issue arises as the **democratic and federal principles seem to be at loggerheads** in the delimitation exercise as currently envisaged.
समस्या इसलिए उत्पन्न होती है क्योंकि वर्तमान में परिकल्पित **परिसीमन प्रक्रिया** में लोकतांत्रिक और **संघीय सिद्धांत** एक-दूसरे के आमने-सामने दिखाई देते हैं।
- However, they can be harmoniously reconciled by giving equal importance to both**.
हालाँकि, दोनों को **समान महत्व** देकर इनका सामंजसपूर्ण समन्वय किया जा सकता है।
- The **main work of a Member of Parliament is to legislate on the 'Union List' subjects such as defence, external affairs, railways, telecommunication, taxation etc. and hold the Central government accountable**.
सांसद का मुख्य कार्य **'संघ सूची'** के विषयों, जैसे **रक्षा, विदेश मामले, रेलवे, दूरसंचार और कराधान** आदि पर कानून बनाना तथा **केंद्र सरकार को जवाबदेह ठहराना** है।
- A majority of the schemes of the Central Government are implemented only by the State governments**.
केंद्र सरकार की अधिकांश योजनाओं का क्रियान्वयन केवल राज्य सरकारों द्वारा किया जाता है।
- Hence, the number of MPs in Lok Sabha may be frozen at the present number of 543, which would ensure no disruption to the current representation of various States.
अतः लोकसभा में सांसदों की संख्या को वर्तमान **543** पर स्थिर रखा जा सकता है, जिससे विभिन्न राज्यों के वर्तमान **प्रतिनिधित्व में कोई व्यवधान नहीं आएगा**।
- This would maintain and uphold the **federal principle**.
इससे **संघीय सिद्धांत** कायम रहेगा और सुदृढ़ होगा।
- One-third reservation for women can be provided out of the existing 543 seats.
महिलाओं के लिए **एक-तिहाई आरक्षण** वर्तमान 543 सीटों में से ही प्रदान किया जा सकता है।



- The number of MLAs in each State may be increased in line with the current population to address the **democratic representational requirement**.
लोकतांत्रिक प्रतिनिधित्व की आवश्यकता को पूरा करने के लिए प्रत्येक राज्य में विधायकों की संख्या को वर्तमान जनसंख्या के अनुरूप बढ़ाया जा सकता है।

GS Paper II: Governance	17 August 2026
TOPICS COVERED	
17A8	Not just turbulence केवल अशांति नहीं

GS II: Governance

Not just turbulence

India's aviation should not have to depend on chance for safety

The August 4, 2026, incident involving Air India flight AI 2379, from Phuket to Delhi, with 137 passengers and eight crew, now has two tracks. The first concerns its reclassification: the initial 'event of turbulence' is now a "serious incident" after inflight technical issues and a significant deviation in aircraft altitude caused injuries to more than 20 passengers and crew, quickly drawing in the Directorate General of Civil Aviation (DGCA). The subsequent probe by the Aircraft Accident Investigation Bureau, along with France's investigation authority, BEA, and technical representatives from Airbus, should unravel the multiple anomalies that briefly overtook the Airbus A320N – fault warnings across the hydraulic systems, elevator flight-control faults, autopilot disconnection, emergency-exit door indications and an engine anti-ice warning. Airbus's initial data is said to support the evidence of technical errors. However, it is the second track that has received much attention: the result of the pilot-in-command's post-flight screening for psychoactive substances.

The Tata Group-Singapore Airlines joint venture airline has been prodded into commencing the immediate and mandatory screening of its flight deck crew 'for any substances or un-prescribed medications'. But the deeply discomfiting discovery has exposed the weak link in crew screening – the greater emphasis on pre- and post-flight breathalyser checks for alcohol than on testing for psychoactive substances, which falls under the Civil Aviation Requirements (CAR) Section 5-Air Safety Series F Part V. In fact, the CAR – which applies to Air Traffic Controllers also – leans more towards random and post-flight/post-shift testing, with graded disciplinary action. With India's air carriers expanding operations, crew citing stress-related issues, and, separately, the availability of substances for medicinal or recreational use, the regulator must ensure stringent psychoactive substance testing and operational compliance. The DGCA's Medical Circular No. 02 of 2021, on 'over-the-counter (OTC) drugs and self-medication', highlights pilot cognitive/psychomotor skills impairment, drawing on the Mangaluru (2010) and Kozhikode (2020) fatal air accidents. Further, documented cases from the West reveal that even small levels of impairment can affect crew judgement, reaction time, coordination, and decision-making, the critical skills needed in the flight deck. Ensuring that fit crew are behind the controls is an aviation industry bedrock, and every Indian operator, large or growing, must uphold the highest standards. This was a lucky escape, but luck cannot be allowed to become a safety strategy.

17A8. Not just turbulence केवल अशांति नहीं

- The August 4, 2026, incident involving **Air India flight AI 2379**, from **Phuket to Delhi**, with 137 passengers and eight crew, now has two tracks.

4 अगस्त 2026 को एयर इंडिया की उड़ान AI 2379, जो फुकेत से दिल्ली जा रही थी और जिसमें 137 यात्री तथा आठ चालक दल के सदस्य सवार थे, से जुड़ी घटना की अब दो दिशाओं में जाँच हो रही है।

- The subsequent probe by the **Aircraft Accident Investigation Bureau**, along with France's investigation authority, **BEA**, and technical representatives from **Airbus**, should unravel the multiple anomalies that briefly overtook the **Airbus A320N** — fault warnings across the **hydraulic systems**, **elevator flight-control faults**, **autopilot disconnection**, **emergency-exit door indications** and **an engine anti-ice warning**.

इसके बाद **Aircraft Accident Investigation Bureau** द्वारा, फ्रांस की जाँच एजेंसी **BEA** तथा **Airbus** के तकनीकी प्रतिनिधियों के साथ की जा रही जाँच से **Airbus A320N** में उत्पन्न हुई कई असामान्यताओं का पता चलना चाहिए—हाइड्रोलिक प्रणालियों में खराबी की चेतावनियाँ, एलिवेटर फ्लाइट-कंट्रोल में खराबियाँ, ऑटोपायलट का डिस्कनेक्ट होना, आपातकालीन निकास द्वार के संकेत और इंजन एंटी-आइस चेतावनी।

- But the deeply discomfiting discovery has exposed the weak link in **crew screening** — the greater emphasis on **pre- and post-flight breathalyser checks for alcohol** than on testing for **psychoactive substances**, which falls under the **Civil Aviation Requirements (CAR) Section 5-Air Safety Series F Part V**. लेकिन इस अत्यंत चिंताजनक खोज ने चालक दल की जाँच की कमजोर कड़ी को उजागर कर दिया है—मनःसक्रिय पदार्थों की जाँच की तुलना में शराब के लिए उड़ान-पूर्व और उड़ान-पश्चात ब्रेथलाइज़र परीक्षणों पर अधिक जोर दिया जाता है, जबकि मनःसक्रिय पदार्थों की जाँच **Civil Aviation Requirements (CAR) Section 5-Air Safety Series F Part V** के अंतर्गत आती है।

- Further, documented cases from the West reveal that **even small levels of impairment can affect crew judgement, reaction time, coordination, and decision-making**, the critical skills needed in the flight deck.

इसके अतिरिक्त, पश्चिमी देशों से सामने आए दस्तावेजीकृत मामलों से पता



चलता है कि क्षमता में मामूली कमी भी चालक दल के निर्णय, प्रतिक्रिया समय, समन्वय और निर्णय लेने की क्षमता को प्रभावित कर सकती है, जबकि ये फ्लाइंग डेक में आवश्यक महत्वपूर्ण कौशल हैं।

GS Paper II: International Relations		17 August 2026
TOPICS COVERED		
17A8	India is losing West Asia, but it is not too late भारत पश्चिम एशिया को खो रहा है, लेकिन अभी बहुत देर नहीं हुई है	
17A8	U.S. to tell partners to pick sides in AI race with China चीन के साथ AI प्रतिस्पर्धा में अमेरिका अपने साझेदार देशों से पक्ष चुनने को कहेगा	

India is losing West Asia, but it is not too late

GS II: IR

India is losing West Asia, one country at a time. Even as the region undergoes a once-in-a-generation shift in its security architecture and political battle lines, it is unclear what India's strategy is...or whether New Delhi has one at all.

It was not supposed to be this way. Just 10 years ago, India was rapidly remaking its footprint in West Asia. In 2016, Saudi Arabia awarded India's Prime Minister its highest civilian honour. In 2021, the I2U2 agreement was signed binding India, Israel, the United States and the United Arab Emirates (UAE) together. In 2024, Iran leased Chabahar to India. All these successes though are now memories from the past.

Pakistan's new diplomatic moment

In the last four months, the U.S.-Israel war with Iran has escalated into a catastrophic regional conflict with Iran attacking the Gulf Cooperation Council (GCC) countries, the Saudis hitting Iraqi militias, Houthis attacking Saudi ships and Israel carrying out strikes in multiple countries. Now, the Gulf countries are rethinking the efficacy of the U.S. security umbrella. They see a threat from both Iran and Israel.

Among the Gulf countries there is a schism on how to handle this threat – through engagement (as the UAE is doing) or through deterrence (as the Saudis are contemplating).

In this context, Pakistan's role as mediator in the U.S.-Iran conflict is gaining it reputational benefits in the region. Irrespective of Pakistan's motives, analysts in the region see that Pakistan waded into the conflict at a time when it seemed that no one could bring U.S. President Donald Trump and the Iranians to the table despite efforts by Türkiye, Qatar and Egypt.

The latest collective defence pact in Mecca between Saudi Arabia, Türkiye and Pakistan comes in this context. This pact may mean less in shaping the U.S.-Iran war as none of these



Raja Karthikeya

Adjunct Fellow and Lead for West Asia Studies at the Takshashila Institution

countries is likely to directly take on Iran alongside the U.S. The pact is thus aimed less at Iran and more at deterring Israel. All three countries see themselves as the next target of Israel after Iran. They thus want to pool Saudi capital, Pakistan's military strength, and Türkiye's technological advances.

This is a challenge for India. A future war between Israel and Pakistan will inevitably draw in India given the close partnership between Israel and India. Similarly, even greater Turkish support for Pakistan in a future conflict that Pakistan might have with India cannot be ruled out.

The choices before India

What then is India's strategy? It appears to be confident of Israel's victory in its various battles in the region given its proximity to the U.S. But U.S. politics are changing rapidly, with both 'Make America Great Again' Republicans and Democratic Socialists questioning the once-unquestioned U.S. support for Israel. Can Israel then emerge triumphant alone?

India has cultivated a special relationship with the UAE given the importance of remittances from Indian expat workers in the country, the investments by the Indian elite in the UAE and the UAE's strategic investments in India. But the UAE's mounting differences with Saudi Arabia are a cause for concern, as are its positions against UN-recognised governments in conflicts as far as Sudan. Can the UAE emerge unscathed in all these conflicts?

India can choose to sign military alliances with Israel and the UAE. But this would hurt what is left of India's relationship with Iran and Saudi Arabia. India can choose to do nothing as it is doing now. And its merchant mariners may keep getting killed in the Strait of Hormuz while more Indian ships may sink in the Bab-el-Mandeb.

A great power in the making risks appearing humbled and hobbled in its immediate maritime neighbourhood.

Or, India can pick a third way. It can devise an active regional political strategy. Re-engage the Saudis with whom it has no explicit differences.

It can start playing a role of rebuilding trust between the Arab countries and Iran, starting with the UAE-Iran relationship. It can engage in Jordan's security offering Jordan defensive technologies at a time when U.S. munitions are running low. It can engage in the future UN peacekeeping role in Lebanon, which is now under a cloud, with the forecast being an end to the UN Interim Force in Lebanon (UNIFIL). It can even run a back-channel with Türkiye sharing its red lines about its relationship with Pakistan. If India cannot join the new Saudi-led maritime force for the Red Sea, it can work with Egypt on a parallel effort to safeguard India-bound shipping, from the Suez Canal to Bab-el-Mandeb. It can look into setting up a military presence in the Red Sea region whether in Somaliland or Socotra. Building on current military training exchanges, it can start drills and military exercises with a range of countries in the region.

Think of bridge-building

India can also appoint a new Special Envoy for West Asia – not one focused on the Israel-Palestine peace process necessarily, but one who can draw all the threads together to secure India's interests in the region at a time of unprecedented turbulence. All of this can be part of one pro-active vision for India to support a new security architecture for West Asia – one that does not draw new battle lines but instead contributes to trust-building.

India cannot afford to be a stranger to West Asia. India has both the capacity and the responsibility to help restore peace and predictability in the region.

17A8. India is losing West Asia, but it is not too late

भारत पश्चिम एशिया को खो रहा है, लेकिन अभी बहुत देर नहीं हुई है

- In 2016, Saudi Arabia awarded India's Prime Minister its highest civilian honour. 2016 में, सऊदी अरब ने भारत के प्रधानमंत्री को अपना सर्वोच्च नागरिक सम्मान प्रदान किया।
- In 2021, the I2U2 agreement was signed binding India, Israel, the United States and the United Arab Emirates (UAE) together. 2021 में, I2U2 समझौते पर हस्ताक्षर किए गए, जिसने भारत, इज़राइल, संयुक्त राज्य अमेरिका और संयुक्त अरब अमीरात (UAE) को एक साथ जोड़ा।
- In 2024, Iran leased Chabahar to India. 2024 में, ईरान ने चाबहार को भारत को पट्टे पर दिया।

Pakistan's new diplomatic moment

पाकिस्तान का नया कूटनीतिक अवसर

- In the last four months, the U.S.-Israel war with Iran has escalated into a catastrophic regional conflict with **Iran attacking the Gulf Cooperation Council (GCC) countries**, the Saudis hitting Iraqi militias, Houthis attacking Saudi ships and Israel carrying out strikes in multiple countries.
पिछले चार महीनों में, ईरान के साथ अमेरिका-इज़राइल युद्ध एक विनाशकारी क्षेत्रीय संघर्ष में बदल गया है, जिसमें ईरान ने **खाड़ी सहयोग परिषद (GCC)** के देशों पर हमले किए हैं, सऊदी अरब ने इराकी मिलिशिया पर प्रहार किए हैं, **हूती विद्रोहियों** ने सऊदी जहाजों पर हमले किए हैं और इज़राइल ने कई देशों में हमले किए हैं।
- Irrespective of Pakistan's motives, analysts in the region see that Pakistan waded into the conflict at a time when it seemed that no one could bring U.S. President Donald Trump and the Iranians to the table despite efforts by **Türkiye, Qatar and Egypt**.
पाकिस्तान के उद्देश्यों से इतर, क्षेत्र के विश्लेषकों का मानना है कि पाकिस्तान ऐसे समय में संघर्ष में उतरा जब ऐसा प्रतीत हो रहा था कि **तुर्किये, कतर और मिस्र के प्रयासों के बावजूद कोई भी अमेरिकी राष्ट्रपति डोनाल्ड ट्रम्प और ईरानियों को वार्ता की मेज पर नहीं ला सकता था।**
- The latest **collective defence pact in Mecca between Saudi Arabia, Türkiye and Pakistan comes in this context**.
सऊदी अरब, तुर्किये और पाकिस्तान के बीच मक्का में हालिया सामूहिक रक्षा समझौता इसी संदर्भ में हुआ है।
- This pact may mean less in shaping the U.S.-Iran war as none of these countries is likely to directly take on Iran alongside the U.S.
इस समझौते की अमेरिका-ईरान युद्ध की दिशा निर्धारित करने में सीमित भूमिका हो सकती है, क्योंकि इन देशों में से कोई भी संभवतः अमेरिका के साथ मिलकर सीधे ईरान का सामना नहीं करेगा।
- The pact is thus aimed less at Iran and more at deterring Israel.
इसलिए यह समझौता **ईरान की तुलना में इज़राइल को रोकने पर अधिक केंद्रित है।**
- All three countries see themselves as the next target of Israel after Iran.
तीनों देश स्वयं को ईरान के बाद **इज़राइल के अगले लक्ष्य** के रूप में देखते हैं।
- A future war between Israel and Pakistan will inevitably draw in India given the close partnership between Israel and India.
इज़राइल और पाकिस्तान के बीच भविष्य में होने वाला युद्ध, **इज़राइल और भारत के बीच घनिष्ठ साझेदारी** को देखते हुए, अनिवार्य रूप से भारत को भी इसमें खींच लाएगा।
- Similarly, even greater Turkish support for Pakistan in a future conflict that Pakistan might have with India cannot be ruled out.
इसी प्रकार, भविष्य में पाकिस्तान और भारत के बीच होने वाले किसी संघर्ष में **तुर्किये द्वारा पाकिस्तान को और अधिक समर्थन** दिए जाने की संभावना से भी इनकार नहीं किया जा सकता।

The choices before India

भारत के सामने विकल्प

- It appears to be confident of Israel's victory in its various battles in the region given its proximity to the U.S.
ऐसा प्रतीत होता है कि **अमेरिका के साथ अपनी निकटता** को देखते हुए भारत क्षेत्र में इज़राइल की विभिन्न लड़ाइयों में उसकी **विजय को लेकर आश्वस्त है।**
- But U.S. politics are changing rapidly, with both **'Make America Great Again' Republicans and Democratic Socialists** questioning the once-unquestioned U.S. support for Israel.

लेकिन अमेरिकी राजनीति तेजी से बदल रही है, जिसमें **'Make America Great Again'** रिपब्लिकन और **डेमोक्रेटिक सोशलिस्ट**, दोनों ही इज़राइल के





लिए अमेरिका के उस समर्थन पर सवाल उठा रहे हैं, जिस पर पहले कभी प्रश्न नहीं उठाया जाता था।

- India has cultivated a special relationship with the UAE given the importance of remittances from Indian expat workers in the country, the investments by the Indian elite in the UAE and the UAE's strategic investments in India.

भारत ने UAE के साथ विशेष संबंध विकसित किए हैं, जिसका कारण देश में भारतीय प्रवासी श्रमिकों द्वारा भेजी जाने वाली धनराशि (remittances) का महत्व, UAE में भारतीय अभिजात वर्ग के निवेश और भारत में UAE के रणनीतिक निवेश हैं।

- India can choose to sign military alliances with Israel and the UAE.

भारत इज़राइल और UAE के साथ सैन्य गठबंधन करने का विकल्प चुन सकता है।

- But this would hurt what is left of India's relationship with Iran and Saudi Arabia.

लेकिन इससे ईरान और सऊदी अरब के साथ भारत के बचे हुए संबंधों को नुकसान पहुँचेगा।

- A great power in the making risks appearing humbled and hobbled in its immediate maritime neighbourhood.

एक उभरती हुई महाशक्ति को अपने निकटवर्ती समुद्री पड़ोस में कमजोर और असहाय दिखाई देने का जोखिम है।

- Re-engage the Saudis with whom it has no explicit differences.

भारत सऊदी अरब के साथ पुनः जुड़ सकता है, जिसके साथ उसके कोई स्पष्ट मतभेद नहीं हैं।

- It can start playing a role of rebuilding trust between the Arab countries and Iran, starting with the UAE-Iran relationship.

वह अरब देशों और ईरान के बीच विश्वास पुनर्निर्माण में भूमिका निभाना शुरू कर सकता है, जिसकी शुरुआत UAE-ईरान संबंधों से की जा सकती है।

- It can engage in Jordan's security offering Jordan defensive technologies at a time when U.S. munitions are running low.

वह जॉर्डन की सुरक्षा में सहयोग कर सकता है और ऐसे समय में जॉर्डन को रक्षात्मक प्रौद्योगिकियाँ प्रदान कर सकता है, जब अमेरिकी गोला-बारूद का भंडार कम हो रहा है।

- It can engage in the future UN peacekeeping role in Lebanon, which is now under a cloud, with the forecast being an end to the UN Interim Force in Lebanon (UNIFIL).

वह लेबनान में भविष्य की संयुक्त राष्ट्र शांति स्थापना भूमिका में शामिल हो सकता है, जो वर्तमान में अनिश्चितता के घेरे में है, क्योंकि लेबनान में संयुक्त राष्ट्र अंतरिम बल (UNIFIL) के समाप्त होने का अनुमान लगाया जा रहा है।

- It can even run a back-channel with Türkiye sharing its red lines about its relationship with Pakistan.

वह तुर्किये के साथ एक पर्दे के पीछे की कूटनीतिक वार्ता भी चला सकता है और पाकिस्तान के साथ अपने संबंधों को लेकर अपनी लाल रेखाएँ साझा कर सकता है।

- If India cannot join the new Saudi-led maritime force for the Red Sea, it can work with Egypt on a parallel effort to safeguard India-bound shipping, from the Suez Canal to Bab-el-Mandeb.

यदि भारत लाल सागर के लिए सऊदी नेतृत्व वाले नए समुद्री बल में शामिल नहीं हो सकता, तो वह स्वेज नहर से बाब-अल-मंदेब तक भारत आने वाले जहाजों की सुरक्षा के लिए मिस्र के साथ समानांतर प्रयास कर सकता है।

- It can look into setting up a military presence in the Red Sea region whether in Somaliland or Socotra.

वह लाल सागर क्षेत्र में सैन्य उपस्थिति स्थापित करने की संभावनाओं पर विचार कर सकता है, चाहे वह सोमालीलैंड या सोकोट्रा में हो।

Think of bridge-building

सेतु-निर्माण के बारे में सोचें

- India can also appoint a new Special Envoy for West Asia — not one focused on the Israel-Palestine peace process necessarily, but one who can draw all the threads together to secure



India's interests in the region at a time of unprecedented turbulence.

भारत एक नए पश्चिम एशिया के लिए विशेष दूत की नियुक्ति भी कर सकता है—जरूरी नहीं कि वह केवल इज़राइल-फिलिस्तीन शांति प्रक्रिया पर केंद्रित हो, बल्कि ऐसा व्यक्ति हो जो अभूतपूर्व उथल-पुथल के समय क्षेत्र में भारत के हितों को सुरक्षित करने के लिए सभी मुद्दों को एक साथ जोड़ सके।

- All of this can be part of one pro-active vision for India to support a new security architecture for West Asia — one that does not draw new battle lines but instead contributes to trust-building.

यह सब पश्चिम एशिया के लिए एक नई सुरक्षा संरचना का समर्थन करने संबंधी भारत की एक सक्रिय दृष्टि का हिस्सा हो सकता है—ऐसी सुरक्षा संरचना, जो नई संघर्ष रेखाएँ खींचने के बजाय विश्वास-निर्माण में योगदान दे।

- India cannot afford to be a stranger to West Asia.
भारत पश्चिम एशिया से अनजान या अलग-थलग रहने का जोखिम नहीं उठा सकता।
- India has both the capacity and the responsibility to help restore peace and predictability in the region.

भारत के पास क्षेत्र में शांति और पूर्वानुमेयता बहाल करने की क्षमता और जिम्मेदारी, दोनों हैं।

GCC

Members — 6 Countries

Country	Capital
Saudi Arabia	Riyadh
United Arab Emirates (UAE)	Abu Dhabi
Kuwait	Kuwait City
Qatar	Doha
Bahrain	Manama
Oman	Muscat

Basic Facts

- Established: 25 May 1981
- Headquarters: Riyadh, Saudi Arabia
- Official language: Arabic
- It was created to promote **coordination, integration and cooperation** among its members.
- Cooperation covers areas such as **economy, trade, finance, security, defence, transport and social affairs**.



Why is the GCC important?

- The GCC region possesses enormous **oil and natural-gas resources** and occupies a strategically crucial position connecting **West Asia, the Arabian Sea and major global energy routes**.
- For India, GCC countries are especially important because of **energy imports, trade and investment, connectivity, strategic relations and the large Indian diaspora** living and working in the Gulf.

U.S. to tell partners to pick sides in AI race with China

GS III: IR

Reuters
WASHINGTON

The U.S. is preparing to tell dozens of countries they must pick sides in the artificial intelligence (AI) race with China, warning they will be excluded from a U.S.-led AI coalition if they also sign up for Beijing's competing framework, according to a U.S. official and an internal draft reviewed by Reuters.

Washington last year launched the **Pax Silica initiative** aimed at securing supply chains for AI models, semiconductors and critical minerals, amid a fierce technology rivalry with Beijing. About two dozen countries have joined, including Kazakhstan, a key potential source of critical minerals that has also joined China's coalition, as well as close U.S. allies such as Japan, Australia and South Korea.

The draft letter is addressed to the 35 signatories of a U.S. "AI Opportunity Statement" signed in June, which includes members of the non-binding Pax Silica framework and other countries that have expressed a desire to align cooperation on AI with Washington.

By pressing countries to choose sides, the U.S. hopes to starve China of resources in a race to make the most sophisticated AI, which could be used for military or economic dominance.

In July, Chinese President Xi Jinping launched a rival "World Artificial Intelligence Cooperation Organization", promoting his country's open-weight technology as a challenge to U.S. influence over the fast-moving sector. Kazakhstan is the only country so far known to have joined both initiatives, setting off alarm bells in Washington.

17A8. U.S. to tell partners to pick sides in AI race with China चीन के साथ AI प्रतिस्पर्धा में अमेरिका अपने साझेदार देशों से पक्ष चुनने को कहेगा

- Washington last year launched the **Pax Silica initiative** aimed at securing supply chains for AI models, semiconductors and critical minerals, amid a fierce technology rivalry with Beijing.

बीजिंग के साथ तीव्र तकनीकी प्रतिस्पर्धा के बीच, वॉशिंगटन ने पिछले वर्ष Pax Silica पहल शुरू की थी, जिसका उद्देश्य AI मॉडल, सेमीकंडक्टर और महत्वपूर्ण खनिजों की आपूर्ति श्रृंखलाओं को सुरक्षित करना था।

- About two dozen countries have joined, including Kazakhstan, a key potential source of critical minerals that has also joined China's coalition, as well as close U.S. allies such as Japan, Australia and South Korea.

लगभग दो दर्जन देश इसमें शामिल हो चुके हैं, जिनमें कज़ाखस्तान भी शामिल है, जो महत्वपूर्ण खनिजों का एक प्रमुख संभावित स्रोत है और चीन के गठबंधन में भी शामिल हो चुका है; इसके अलावा जापान, ऑस्ट्रेलिया और दक्षिण कोरिया जैसे अमेरिका के करीबी सहयोगी भी इसमें शामिल हैं।

- The draft letter is addressed to the 35 signatories of a U.S. "AI Opportunity Statement" signed in June, which includes members of the non-binding Pax Silica framework and other countries that have expressed a desire to align cooperation on AI with Washington.

यह मसौदा पत्र जून में हस्ताक्षरित अमेरिका के "AI Opportunity Statement" के 35

हस्ताक्षरकर्ताओं को संबोधित है, जिसमें गैर-बाध्यकारी Pax Silica ढाँचे के सदस्य तथा वे अन्य देश शामिल हैं जिन्होंने AI पर सहयोग को वॉशिंगटन के साथ संरेखित करने की इच्छा व्यक्त की है।

- In July, Chinese President Xi Jinping launched a rival "World Artificial Intelligence Cooperation Organization", promoting his country's open-weight technology as a challenge to U.S. influence over the fast-moving sector. जुलाई में, चीन के राष्ट्रपति शी जिनपिंग ने प्रतिस्पर्धी "World Artificial Intelligence Cooperation Organization" की शुरुआत की और अपने देश की ओपन-वेट तकनीक को तेजी से विकसित हो रहे इस क्षेत्र में अमेरिकी प्रभाव के लिए चुनौती के रूप में बढ़ावा दिया।
- Kazakhstan is the only country so far known to have joined both initiatives, setting off alarm bells in Washington.

कज़ाखस्तान अब तक दोनों पहलों में शामिल होने वाला एकमात्र ज्ञात देश है, जिससे वॉशिंगटन में चिंता की घंटियाँ बज उठी हैं।

GS Paper III: Science and Technology	17 August 2026
TOPICS COVERED	
17A8	Scientists find why an enervating disorder affects only Eurasians

वैज्ञानिकों ने पता लगाया कि एक थका देने वाला विकार केवल यूरेशियाई लोगों को ही क्यों प्रभावित करता है

17A8 Understanding Anthropic's move to watermark Claude AI content
Claude AI सामग्री पर वॉटरमार्क लगाने के Anthropic के कदम को समझना

Scientists find why an enervating disorder affects only Eurasians

The Nizam's Institute of Medical Sciences in Hyderabad, diagnoses one case of Friedrich's ataxia every month on average — and almost all of these individuals come from consanguineous marriages, according to medical geneticist Ashwin Dalal

GS III S&T

D.P. Kasbekar

Friedrich's ataxia, or FRDA, is a genetic disorder that progressively damages the nerves and the heart.

The affected individuals typically begin to show symptoms between the ages of 5 and 15. They become unsteady and their coordination is impaired. Their speech slows down and slurs. Swallowing becomes difficult. Hearing and vision deteriorates. They feel fatigued, lose sensation, first in the arms and legs, then in the trunk and other parts of the body, and the spine curves to one side. Eventually, most patients die relatively young, of heart disease. There is no cure.

According to Ashwin Dalal, a medical geneticist at the Nizam's Institute of Medical Sciences in Hyderabad, the institute diagnoses one case of FRDA every month on average — and almost all of these individuals come from consanguineous marriages. That is, marriages between relatives, such as uncles and nieces, or between cousins. Many Indian communities practise consanguinity — and it greatly increases the risk of genetic diseases that are otherwise rare. Friedrich's ataxia is one such disease.

Curiously, so far, FRDA has not been reported in people from sub-Saharan Africa, North America, and China, Japan, and Southeast Asia. For a long time, scientists have only found it in individuals of European, North African, West Asian, and South Asian descent.

A new study from researchers at the University of Oklahoma Health Sciences Center in the U.S. has finally cracked the puzzle. Their findings were reported in June 9 in the journal *Human Molecular Genetics*.

Inefficient powerhouses
FRDA is caused when a gene called *FXN* becomes mutated.

The *FXN* gene codes for a protein called frataxin. Frataxin is essential for mitochondria, which are our cells' powerhouses. The chemical ATP, which is the cell's energy currency, is made mostly in the mitochondria. Nerve, spinal cord, brain, and heart muscle cells use a lot of energy. When their frataxin levels become abnormally low, the mitochondria produce ATP less effectively and also accumulate toxic by-products. This renders the cell dysfunctional, leading to the symptoms of FRDA.

The most common disease-causing mutations occur in a part of the *FXN* gene called the intron. A mutation takes the form of modifying the number of times a particular sequence of bases is repeated in the intron. Normal variants of the *FXN* gene contain 5-11 or 12-33 repeats. They're called the short normal and long normal



For a long time, scientists found FRDA in individuals of European, North African, West Asian, and South Asian descent. GETTY IMAGES (REPRESENTATIVE IMAGE)

variants. The short-normal variant is common in Europe and South Asia (85-90% of the population), sub-Saharan Africa (90%), and East Asia (over 99%). The long-normal variants are absent in East Asia and make up most of the rest in sub-Saharan Africa and in Europe and South Asia.

However, the DNA sequences of people with Friedrich's ataxia revealed that *FXN* alleles variants had 100-1,500 repeats. The researchers called them expanded variants.

The short-normal and long-normal variants have an open structure in the chromosome that allows cells to make frataxin as needed. However, the expanded variants forced the chromosome to assume a closed shape that reduced frataxin expression.

Individuals who develop Friedrich's ataxia carry two copies of the expanded variant, one from each parent. A person with only one copy is called a carrier. Even though they themselves won't have the disease, carriers can pass their defective introns to their children.

Fortunately, genetic tests can find out if a person is a carrier and whether they passed their extended variant to their children.

From mutation to disease

The researchers also found that 95% of the expanded variants of the intron originally came from just two long-normal variants. Specifically, they reported that at two times in history, a long-normal variant mutated to an extended variant,

These findings will help scientists understand what makes the two protomutations different from other long-normal variants; this answer in turn will help find ways to prevent or at least slow down the genetic changes

both times in Eurasia. We don't know why these events happened nor why only long-normal variants mutated this way. We also don't know why this never happened in sub-Saharan Africa. On the other hand, the absence of long-normal variants in East Asian populations could explain why these problematic mutations didn't arise there.

These originator mutations, which the researchers called protomutations, didn't straightaway lead to Friedrich's ataxia. Instead, they slowly but steadily changed into pre-mutations — where the number of repeats was abnormally high but not enough to significantly impair frataxin expression.

The non-disease-causing but still abnormal pre-mutations turned into an extended variant in a sudden burst of repeat expansion in a single or few parent-to-child transmissions.

Recall that people with Friedrich's ataxia die earlier. So over time, the extended variants disappear from the population. People with protomutations and pre-mutations on the other hand did not present that risk. As a result, they

acted as 'reservoirs' in the population that steadily replenished the depleting extended variants over time.

Taken together, the patchy distribution of protomutations can explain why Friedrich's ataxia occurs only in some populations.

The protomutations arose only a few times and only in populations with a sufficient number of the long-normal variants.

Ancient DNA

Finally, by analysing DNA from the skeletal remains of individuals who lived in ancient times, the researchers also found both the two protomutations were present in Europe and Western Asia at least 9,000 years ago. However, they were not seen in the Neanderthals and Denisovans.

In a statement, research team leader Sanjay Bidichandani credited "the longstanding tradition in the human genetics community of freely sharing DNA sequence data" to be "crucial to accurately track the presence of susceptibility to Friedrich's ataxia from prehistoric humans to a wide variety of extant populations".

These findings will help scientists understand what makes the two protomutations different from other long-normal variants that don't turn into pre-mutations. This answer in turn will help find ways to prevent or at least slow down the genetic changes.

(D.P. Kasbekar is a retired scientist. kasbekardp@yahoo.co.in)

THE GIST

So far, Friedrich's ataxia not been reported in people from sub-Saharan Africa, North America, and China, Japan, and Southeast Asia.

A new study from research at the University of Oklahoma Health Sciences Center found that Friedrich's ataxia is caused when a gene called becomes mutated.

The study found that patch distribution of originator mutations, called protomutations, can explain why Friedrich's ataxia occurs only in some populations.

17A8. Scientists find why an enervating disorder affects only Eurasians वैज्ञानिकों ने पता लगाया कि एक थका देने वाला विकार केवल यूरेशियाई लोगों को ही क्यों प्रभावित करता है

- Friedreich's ataxia, or FRDA, is a genetic disorder that progressively damages the nerves and the heart.**
फ्रीडराइख्स एटैक्सिया, या FRDA, एक आनुवंशिक विकार है जो तंत्रिकाओं और हृदय को क्रमशः गंभीर रूप से क्षतिग्रस्त करता है।
- The affected individuals typically begin to show symptoms between the ages of 5 and 15.**
प्रभावित व्यक्तियों में सामान्यतः 5 से 15 वर्ष की आयु के बीच लक्षण दिखाई देने लगते हैं।
- They become unsteady and their coordination is impaired.**
उनका संतुलन बिगड़ने लगता है और उनके शारीरिक समन्वय में कमी आ जाती है।
- Their speech slows down and slurs.**
उनकी वाणी धीमी और अस्पष्ट हो जाती है।
- Swallowing becomes difficult.**
निगलने में कठिनाई होने लगती है।
- Hearing and vision deteriorates.**
श्रवण और दृष्टि क्षमता में गिरावट आने लगती है।
- They feel fatigued, lose sensation, first in the arms and legs, then in the trunk and other parts of the body, and the spine curves to one side.**
वे थकान महसूस करते हैं, संवेदना खोने लगते हैं—पहले हाथों और पैरों में, फिर धड़ और शरीर के अन्य हिस्सों में—और उनकी रीढ़ एक ओर मुड़ जाती है।
- Eventually, most patients die relatively young, of heart disease.**
अंततः, अधिकांश रोगियों की अपेक्षाकृत कम आयु में हृदय रोग के कारण मृत्यु हो जाती है।
- There is no cure.**
इसका कोई उपचार उपलब्ध नहीं है।
- According to Ashwin Dalal, a medical geneticist at the Nizam's Institute of Medical Sciences in Hyderabad, the institute diagnoses one case of FRDA every month on average — and almost all of these individuals come from consanguineous marriages.**
हैदराबाद स्थित निज़ाम्स इंस्टीट्यूट ऑफ मेडिकल साइंसेज़ के चिकित्सा आनुवंशिकीविद् अश्विन दलाल के अनुसार, संस्थान में औसतन प्रत्येक महीने FRDA के एक मामले का निदान किया जाता है—और इनमें से लगभग सभी व्यक्ति सजातीय वैवाहिक संबंधों (consanguineous marriages) से आते हैं।
- That is, marriages between relatives, such as uncles and nieces, or between cousins.**
अर्थात्, ऐसे विवाह जो रिश्तेदारों के बीच होते हैं, जैसे चाचा/मामा और भतीजी/भांजी के बीच, या चचेरे/ममेरे/फुफेरे/मौसेरे भाई-बहनों के बीच।
- Many Indian communities practise consanguinity — and it greatly increases the risk of genetic diseases that are otherwise rare.**
भारत के अनेक समुदायों में सजातीय विवाह की प्रथा है—और इससे उन आनुवंशिक रोगों का जोखिम बहुत बढ़ जाता है जो अन्यथा दुर्लभ होते हैं।
- Friedreich's ataxia is one such disease.**
फ्रीडराइख्स एटैक्सिया ऐसा ही एक रोग है।
- Curiously, so far, FRDA has not been reported in people from sub-Saharan Africa, North America, and China, Japan, and Southeast Asia.**
रोचक रूप से, अब तक उप-सहारा अफ्रीका, उत्तरी अमेरिका, चीन, जापान और दक्षिण-पूर्व एशिया के लोगों में FRDA की सूचना नहीं मिली है।

Inefficient powerhouses

अकुशल ऊर्जा-गृह

- **FRDA is caused when a gene called FXN becomes mutated.**
FRDA तब होता है जब FXN नामक जीन में उत्परिवर्तन हो जाता है।
- **The FXN gene codes for a protein called frataxin.**
FXN जीन एक ऐसे प्रोटीन के निर्माण के लिए कूटलेखन करता है जिसे फ्रेटाक्सिन (frataxin) कहा जाता है।
- **Frataxin is essential for mitochondria, which are our cells' powerhouses.**
फ्रेटाक्सिन माइटोकॉन्ड्रिया के लिए आवश्यक है, जिन्हें हमारी कोशिकाओं का ऊर्जा-गृह कहा जाता है।
- **The chemical ATP, which is the cell's energy currency, is made mostly in the mitochondria.**
रासायनिक पदार्थ ATP, जो कोशिका की ऊर्जा मुद्रा है, मुख्यतः माइटोकॉन्ड्रिया में बनता है।
- **Nerve, spinal cord, brain, and heart muscle cells use a lot of energy.**
तंत्रिका, मेरुरज्जु, मस्तिष्क और हृदय की मांसपेशियों की कोशिकाएँ बहुत अधिक ऊर्जा का उपयोग करती हैं।
- **When their frataxin levels become abnormally low, the mitochondria produce ATP less effectively and also accumulate toxic by-products.**
जब उनमें फ्रेटाक्सिन का स्तर असामान्य रूप से कम हो जाता है, तो माइटोकॉन्ड्रिया कम प्रभावी ढंग से ATP का उत्पादन करते हैं और विषैले उप-उत्पाद भी जमा होने लगते हैं।
- **This renders the cell dysfunctional, leading to the symptoms of FRDA.**
इससे कोशिका की कार्यप्रणाली बाधित हो जाती है, जिसके परिणामस्वरूप FRDA के लक्षण उत्पन्न होते हैं।
- **The most common disease-causing mutations occur in a part of the FXN gene called the intron.**
रोग उत्पन्न करने वाले सबसे सामान्य उत्परिवर्तन FXN जीन के एक भाग में होते हैं, जिसे इंट्रॉन (intron) कहा जाता है।
- **A mutation takes the form of modifying the number of times a particular sequence of bases is repeated in the intron.**
एक उत्परिवर्तन इंट्रॉन में क्षारकों के किसी विशेष अनुक्रम के दोहराव की संख्या में परिवर्तन के रूप में होता है।
- **Normal variants of the FXN gene contain 5-11 or 12-33 repeats.**
FXN जीन के सामान्य वैरिएंट में 5-11 या 12-33 दोहराव होते हैं।
- **They're called the short normal and long normal variants.**
इन्हें शॉर्ट-नॉर्मल और लॉन्ग-नॉर्मल वैरिएंट कहा जाता है।
- **The short-normal variant is common in Europe and South Asia (85-90% of the population), sub-Saharan Africa (90%), and East Asia (over 99%).**
शॉर्ट-नॉर्मल वैरिएंट यूरोप और दक्षिण एशिया (जनसंख्या के 85-90%), उप-सहारा अफ्रीका (90%) और पूर्वी एशिया (99% से अधिक) में सामान्य है।
- **However, they were not seen in the Neanderthals and Denisovans.**
हालाँकि, ये निएंडरथल और डेनिसोवन में नहीं पाए गए।



Understanding Anthropic's move to watermark Claude AI content

While many regulators want AI content to be more clearly labelled, Claude users worry about their written work being flagged as AI; although watermarks provide a reliable way to verify the origin of images and videos, accurately detecting AI-generated text is uncharted territory.

GS III: S&T

Sahana Venugopal

The story so far:

As part of its measures to comply with the European Union's AI Act, the Google and Amazon-backed Anthropic announced that Claude content in the future will carry a machine-readable marking to better enable AI content labelling.

Adding a watermark to AI images and videos is not a new concept. However, the update that made waves was Anthropic announcing that it would add a watermark to Claude text as well, potentially forcing millions to reconsider their use of AI tools. This update will be globally implemented.

What is the new watermarking system by Anthropic?

The new policy was introduced after Anthropic signed the EU AI Act's Article 50(2) Code of Practice on Transparency of AI-Generated Content.

In order to better identify content that Claude has generated and/or processed, Anthropic is set to add watermarks embedded in text content, as well as signed provenance metadata attached to supported files in formats such as .svg, .png, or .jpg.

Regarding the text-based watermark applied at the model level, users will not be able to see it and Anthropic has confirmed that it will not affect Claude's response.

However, one statement in particular

caught the attention of AI users: "Because the watermark is part of the text, it will travel with the text when it's copied and pasted elsewhere, and may persist through some editing."

In essence, this update forces millions of Claude customers to entirely reconsider their use of AI tools. Professional emails, personal messages, school assignments, workplace deliverables, and other types of written content that could once be passed off easily as human-made, may soon come with an AI watermark – even if Claude's involvement was close to negligible.

How exactly the watermarking technology works in the case of Claude text is not yet clear, as the rollout announcement did not reveal the full technical details.

Furthermore, Anthropic is still working on letting external parties detect the Claude AI markings. More information is expected in the future.

Output from the Claude Platform (API), Claude, Claude Code, Claude Cowork, and Claude Tag are set to get the embedded watermarks. The same applies when Claude models are accessed through AWS, Google Cloud, and Microsoft Foundry.

Why are Claude users and non-users concerned?

While some praised Anthropic's marking policy in the hopes of seeing more clearly labelled AI-generated content, critics argued that Claude adding a watermark even to lightly edited text could put

reputations at serious risk.

For example, if a human-made file is proofread, translated, summarised, or even converted by someone else using Claude, the final output could still carry a mark, according to Anthropic's update. Naturally, this has put both AI users as well as non-users on edge.

Anthropic also warned about the possibility of false positive and false negative results: detecting a Claude mark does not confirm that the work was created by AI, while the lack of a mark does not mean the work was 100% human-made.

Some factors that can throw off results include short text lengths, content changes after Claude processing, metadata being stripped by converting the file format, and the use of a Claude offering that does not yet support AI marking.

In the days following Anthropic's announcement, multiple dubious websites claiming to offer Claude AI watermark "removal" or "clean up" services have come online.

These concerns are not new. The earlier rise of a market for AI text detectors – and subsequently, AI text humanisers designed to deceive these same detectors – has resulted in multiple authors and bloggers being accused of passing off AI content as original creations.

Despite AI text detection tools being experimental, fallible, and prone to errors, they have been involved in cases that led to cancelled book deals and social

media trolling.

Claude users now fear that their own AI tool could end up damaging their credentials.

Are watermarks effective at stopping fake AI content?

Watermarks certainly help simplify the jobs of regulators, fact-checkers, and journalists by giving them a reliable way to verify the origin of an image or a video and even trace it back to a specific provider. But accurately detecting AI-generated text is uncharted territory.

What's more, AI-generated content often travels far and can be circulated thousands of times on social media unchecked, as content moderation rules have been loosened across Mark Zuckerberg's Meta family of apps and Elon Musk's X.

The average internet user distractedly scrolling through media on their phone often misses even visible AI watermarks, let alone invisible markings.

Tech providers and regulators will need to work hand-in-hand to make sure that the AI watermarks lead to a tangible reduction in misinformation, deepfakes, or AI content being passed off as human-made.

For now, however, Claude users are rethinking their workflows and debating at what point human content turns into AI content. Anthropic's watermarking initiative for AI text is an intriguing concept, but it is too soon to tell if this approach to labelling will lead to more clarity or create more confusion.

17A8. Understanding Anthropic's move to watermark Claude AI content Claude AI सामग्री पर वॉटरमार्क लगाने के Anthropic के कदम को समझना

- As part of its measures to comply with the **European Union's AI Act**, the **Google and Amazon-backed Anthropic** announced that **Claude content in the future will carry a machine-readable marking** to better enable AI content labelling.
यूरोपीय संघ के AI Act के अनुपालन के लिए उठाए जा रहे उपायों के तहत, Google और Amazon समर्थित Anthropic ने घोषणा की कि भविष्य में Claude की सामग्री में **मशीन-पठनीय चिह्नांकन (machine-readable marking)** होगा, ताकि AI-जनित सामग्री की बेहतर पहचान और लेबलिंग की जा सके।
- Adding a watermark to AI images and videos is not a new concept.
AI द्वारा निर्मित चित्रों और वीडियो पर वॉटरमार्क लगाना कोई नई अवधारणा नहीं है।
- However, the update that made waves was Anthropic announcing that it would add a watermark to **Claude text** as well, potentially forcing millions to reconsider their use of AI tools.
हालाँकि, जिस अपडेट ने व्यापक ध्यान आकर्षित किया, वह Anthropic की यह घोषणा थी कि वह **Claude के टेक्स्ट** में भी वॉटरमार्क जोड़ेगा, जिससे संभावित रूप से लाखों लोगों को AI उपकरणों के अपने उपयोग पर पुनर्विचार करना पड़ सकता है।
- This update will be globally implemented.
यह अपडेट वैश्विक स्तर पर लागू किया जाएगा।

What is the new watermarking system by Anthropic?

Anthropic की नई वॉटरमार्किंग प्रणाली क्या है?

- The new policy was introduced after Anthropic signed the **EU AI Act's Article 50(2) Code of Practice on Transparency of AI-Generated Content**.
नई नीति Anthropic द्वारा EU AI Act के अनुच्छेद 50(2) के AI-जनित सामग्री की पारदर्शिता संबंधी आचार संहिता पर हस्ताक्षर किए जाने के बाद पेश की गई।
- In order to better identify content that Claude has generated and/or processed, Anthropic is set to add **watermarks embedded in text content**, as well as **signed provenance metadata** attached to supported files in formats such as .svg, .png, or .jpg.
Claude द्वारा निर्मित और/या संसाधित सामग्री की बेहतर पहचान करने के लिए, Anthropic टेक्स्ट सामग्री में अंतर्निहित वॉटरमार्क जोड़ने जा रहा है, साथ ही .svg, .png या .jpg जैसे समर्थित फाइल प्रारूपों में संलग्न हस्ताक्षरित उद्गम-संबंधी मेटाडेटा (signed provenance metadata) भी जोड़ा जाएगा।
- Regarding the text-based watermark applied at the model level, users will not be able to see it and Anthropic has confirmed that it will not affect Claude's response.
मॉडल स्तर पर लागू किए जाने वाले टेक्स्ट-आधारित वॉटरमार्क के संबंध में, उपयोगकर्ता इसे देख नहीं सकेंगे और Anthropic ने पुष्टि की है कि यह Claude की प्रतिक्रिया को प्रभावित नहीं करेगा।
- Output from the **Claude Platform (API), Claude, Claude Code, Claude Cowork, and Claude Tag** are set to get the embedded watermarks.
Claude Platform (API), Claude, Claude Code, Claude Cowork और Claude Tag से प्राप्त आउटपुट में अंतर्निहित वॉटरमार्क जोड़े जाने हैं।
- While some praised Anthropic's marking policy in the hopes of seeing more clearly labelled AI-generated content, critics argued that Claude adding a watermark even to lightly edited text could put reputations at serious risk.
जहाँ कुछ लोगों ने अधिक स्पष्ट रूप से लेबल की गई AI-जनित सामग्री की आशा में Anthropic की चिह्नांकन नीति की सराहना की, वहीं आलोचकों ने तर्क दिया कि Claude द्वारा हल्के रूप से संपादित टेक्स्ट में भी वॉटरमार्क जोड़ना प्रतिष्ठा के लिए गंभीर जोखिम उत्पन्न कर सकता है।
- For example, if a human-made file is proofread, translated, summarised, or even converted by someone else using Claude, the final output could still carry a mark, according to Anthropic's update.
उदाहरण के लिए, यदि किसी मानव-निर्मित फाइल का Claude का उपयोग करके किसी अन्य व्यक्ति द्वारा प्रूफरीड, अनुवाद, सारांश या यहाँ तक कि रूपांतरण किया जाता है, तो Anthropic के अपडेट के अनुसार अंतिम आउटपुट में भी चिह्न बना रह सकता है।
- Anthropic also warned about the possibility of **false positive and false negative results**: detecting a Claude mark does not confirm that the work was created by AI, while the lack of a mark does not mean the work was 100% human-made.
Anthropic ने **false positive और false negative परिणामों** की संभावना के बारे में भी चेतावनी दी है: Claude चिह्न का पता चलना यह प्रमाणित नहीं करता कि कार्य AI द्वारा बनाया गया था, जबकि चिह्न का न होना यह नहीं दर्शाता कि कार्य 100% मानव-निर्मित था।

GS Paper III: Environment		17 August 2026
TOPICS COVERED		
17A8	Hara mangrove forests हारा मैंग्रोव वन	

BIG SHOT



Adult and immature blue-footed boobies rest on rocks near the entrance to the Panama Canal as seabirds native to the cold, nutrient-rich waters of Peru and Chile appear outside their usual range, while El Niño warms the eastern Pacific and disrupts marine food supplies, off the coast of Panama City on August 5. REUTERS

Adult and immature **blue-footed boobies** rest on rocks near the **entrance to the Panama Canal** as seabirds native to the cold, nutrient-rich waters of Peru and Chile appear outside their usual range, **while El Niño warms the eastern Pacific and disrupts marine food supplies**, on the coast of **Panama City** on August 5.

Visual question: Name this creature, considered **the largest extant lizard**, which gets its name from **an Indonesian island** to which it is endemic.



GS III: Environment
Visual question: Name this creature, considered the largest extant lizard, which gets its name from an Indonesian island to which it is endemic. AFP

Hara mangrove forests

GS III: Environment
Vasudevan Mukunth

The Hara forests are a vital ecological treasure of the Persian Gulf. Spanning the Strait of Hormuz, these mangrove forests consist mainly of grey mangrove trees (*Avicennia marina*), which have a special filtration system in their roots that allows them to thrive in saline conditions. The same roots also protect the coast against erosion and are voluminous carbon sinks, sequestering significantly more carbon than terrestrial forests. The forests are a UNESCO Biosphere Reserve and serve as an important nursery for marine life as they shelter shrimp, crabs, and numerous fish species that sustain the region's fisheries. Up from the water's edge, the Hara forests' canopy is also a major migratory hub for birds like the great stone-curlew and various herons. The mangroves are the backbone of the sustainable tourism programmes of Qeshm, an Iranian island in the Persian Gulf, and draw visitors to their labyrinthine waterways. Protecting these forests is crucial for the lives and livelihoods of Qeshm's local communities and for efforts to preserve the Gulf's natural heritage. Environmentalists have said losing them would trigger a catastrophic collapse of the local food chain and coastal defenses.



A satellite image shows Qeshm Island following an oil spill at sea, off the coast of Iran, on August 10, 2026. REUTERS

Recent satellite images have revealed a major environmental threat to just these forests: an oil spill off Qeshm's southern coast. Experts have identified the source to be a bulk carrier named Minoan Pioneer, which has been leaking heavy fuel oil after being struck by a projectile. The slick stretches 160 km long, with dark liquid already washing ashore. The ongoing West Asia conflict is also hindering cleanup efforts, leaving the mangroves at great risk of devastation.

For feedback and suggestions for 'Science', please write to science@thehindu.co.in with the subject 'Daily page'

17A8. Hara mangrove forests

हारा मैंग्रोव वन

- The **Hara forests** are a vital ecological treasure of the Persian Gulf.

हारा वन फारस की खाड़ी का एक अत्यंत महत्वपूर्ण पारिस्थितिक धरोहर हैं।

- Spanning the Strait of Hormuz, these mangrove forests consist mainly of **grey mangrove trees (*Avicennia marina*)**, which have a special filtration system in their roots that allows them to thrive in saline conditions.

हॉर्मुज़ जलडमरूमध्य तक फैले ये मैंग्रोव वन मुख्यतः ग्रे मैंग्रोव वृक्षों (*Avicennia marina*) से बने हैं, जिनकी जड़ों में एक

विशेष निस्स्यंदन प्रणाली होती है, जो उन्हें लवणीय परिस्थितियों में पनपने में सक्षम बनाती है।

- The **same roots** also protect the coast against erosion and are voluminous carbon sinks, sequestering significantly more carbon than terrestrial forests.

यही जड़ें तट को अपरदन से भी बचाती हैं और विशाल कार्बन सिंक के रूप में कार्य करती हैं, जो स्थलीय वनों की तुलना में काफी अधिक कार्बन का अवशोषण एवं भंडारण करती हैं।

- The **forests** are a **UNESCO Biosphere Reserve** and serve as an important nursery for marine life as they shelter shrimp, crabs, and numerous fish species that sustain the region's fisheries.

ये वन एक **UNESCO बायोस्फीयर रिज़र्व** हैं और समुद्री जीवन के लिए एक महत्वपूर्ण प्रजनन एवं पोषण स्थल के रूप में कार्य करते हैं, क्योंकि ये झींगा, केकड़े और मछलियों की अनेक प्रजातियों को आश्रय प्रदान करते हैं, जो इस क्षेत्र के **मत्स्य उद्योग** को बनाए रखती हैं।

- Up from the water's edge, the Hara forests' canopy is also a major migratory hub for birds like the **great stone-curlew** and various herons.



जल की सीमा से ऊपर, हारा वनों का वृक्ष-आवरण (canopy) ग्रेट स्टोन-कल्यू और विभिन्न बगुलों जैसी पक्षी प्रजातियों के लिए एक प्रमुख प्रवासी केंद्र भी है।

- The mangroves are the backbone of the sustainable tourism programmes of Qeshm, an Iranian island in the Persian Gulf, and draw visitors to their labyrinthine waterways. ये मैंग्रोव सतत पर्यटन कार्यक्रमों की आधारशिला हैं, जो फारस की खाड़ी में स्थित ईरान के एक द्वीप केशम में संचालित होते हैं, और अपने भूलभुलैया जैसे जलमार्गों की ओर पर्यटकों को आकर्षित करते हैं।

GS Paper III: Internal Security	17 August 2026
TOPICS COVERED	
17A8	Army to ready ex-Agniveer list for CAPF postings CAPF में नियुक्ति के लिए सेना पूर्व-अग्निवीरों की सूची तैयार करेगी

Army to ready ex-Agniveer list for CAPF postings

GS III: IS: Defence
Vijaita Singh
NEW DELHI

The armed forces are likely to compile a list of Agniveers eligible for recruitment into the Central Armed Police Forces (CAPFs) under the government's reservation policy for the temporary recruits, a government source has told *The Hindu*.

The first batch of around 25,000 Agniveers is scheduled to retire from the Army by December.

While the CAPFs have reserved 50% of constable vacancies for former Agniveers, the Army, Navy, and Air Force will furnish details of eligible personnel, indicating that ex-Agniveers may not be able to apply directly for recruitment under the reserved quota, the source said.

Although recruitment into the armed forces is not based on caste reserva-

tions, the official said that the existing quotas for the Scheduled Castes, Scheduled Tribes, and Other Backward Classes will continue to apply for recruitment into the CAPFs.

Longer service tenure

The service tenure of personnel in the CAPFs extends up to the age of 60, whereas those in the armed forces retire much earlier. "During deliberations, it was felt that, if given a choice, many Agniveers would prefer to join the CAPFs rather than continue in the armed forces because of the longer career span and greater job security," the source said.

"Therefore, it has been decided, at least initially, that the armed forces, beginning with the Army, will provide the CAPFs with a list of eligible candidates for recruitment under the reserved quota," the



With this move, retired Agniveers may not be able to directly apply for recruitment in the Central Armed Police Forces. FILE PHOTO

source added.

Over the past month, CAPFs such as the Central Reserve Police Force (CRPF), Sashastra Seema Bal, and Assam Rifles have issued notifications, specifying 50% quota for the ex-Agniveers. As reported by *The Hindu*, the Border Security Force was the first to issue such a notification.

For instance, the annual intake of constables in the CRPF, the largest CAPF, is

typically around 7,000. Under the new recruitment framework, about 3,500 of these vacancies will be reserved for ex-Agniveers. If all the reserved vacancies are not filled during the first phase of recruitment, the unfilled posts will be carried forward and added to the remaining 50% of vacancies to be filled through the open recruitment process in the second phase.

The ex-Agniveers will be exempted from written examinations, physical standard tests, and physical efficiency tests, the notifications said.

Recruitment to the post of Constable (General Duty) will be carried out through direct recruitment, with 50% of vacancies in every recruitment year reserved for ex-Agniveers, the CRPF's notification, issued on July 27, said.

"In the first phase, the concerned nodal force will conduct recruitment to fill the vacancies earmarked for ex-Agniveers, or in accordance with instructions issued by the Ministry of Home Affairs (MHA) from time to time. In the second phase, recruitment for the remaining 50% of vacancies will be conducted through an open examination under the existing recruitment provisions," the CRPF said.

17A8. Army to ready ex-Agniveer list for CAPF postings

CAPF में नियुक्ति के लिए सेना पूर्व-अग्निवीरों की सूची तैयार करेगी

- The armed forces are likely to compile a list of **Agniveers** eligible for recruitment into the **Central Armed Police Forces (CAPFs)** under the government's reservation policy for the temporary recruits, a government source has told *The Hindu*. एक सरकारी सूत्र ने *The Hindu* को बताया है कि सशस्त्र बलों द्वारा सरकार की अल्पकालिक भर्ती किए गए अग्निवीरों के लिए आरक्षण नीति के तहत केंद्रीय सशस्त्र पुलिस बलों (CAPFs) में भर्ती के लिए पात्र अग्निवीरों की सूची तैयार किए जाने की संभावना है।

- The first batch of around **25,000 Agniveers** is scheduled to retire from the Army by December.
लगभग **25,000 अग्निवीरों** का पहला बैच दिसंबर तक सेना से सेवानिवृत्त होने वाला है।
- While the CAPFs have reserved **50% of constable vacancies** for former Agniveers, the Army, Navy, and Air Force will furnish details of eligible personnel, indicating that ex-Agniveers may not be able to apply directly for recruitment under the reserved quota, the source said.
सूत्र ने बताया कि जहाँ CAPFs ने कांस्टेबल की 50% रिक्तियाँ पूर्व-अग्निवीरों के लिए आरक्षित की हैं, वहीं सेना, नौसेना और वायु सेना पात्र कर्मियों का विवरण उपलब्ध कराएँगी, जिससे संकेत मिलता है कि पूर्व-अग्निवीर आरक्षित कोटे के तहत भर्ती के लिए सीधे आवेदन नहीं कर पाएँगे।
- Although **recruitment into the armed forces is not based on caste reservations**, the official said that the **existing quotas for the Scheduled Castes, Scheduled Tribes, and Other Backward Classes** will continue to apply for recruitment into the CAPFs.
हालाँकि सशस्त्र बलों में भर्ती जाति-आधारित आरक्षण पर आधारित नहीं है, अधिकारी ने कहा कि अनुसूचित जाति, अनुसूचित जनजाति और अन्य पिछड़ा वर्ग के लिए मौजूदा कोटा CAPFs में भर्ती के लिए लागू रहेगा।

Longer service tenure लंबी सेवा अवधि

- The service tenure of personnel in the CAPFs extends up to the age of 60, whereas those in the armed forces retire much earlier.
CAPFs के कर्मियों की सेवा अवधि 60 वर्ष की आयु तक होती है, जबकि सशस्त्र बलों में कार्यरत कर्मी इससे काफी पहले सेवानिवृत्त हो जाते हैं।
- Over the past month, CAPFs such as the **Central Reserve Police Force (CRPF), Sashastra Seema Bal, and Assam Rifles** have issued notifications, specifying **50% quota for the ex-Agniveers**.
पिछले एक महीने के दौरान केंद्रीय रिजर्व पुलिस बल (CRPF), सशस्त्र सीमा बल और असम राइफल्स जैसे CAPFs ने अधिसूचनाएँ जारी की हैं, जिनमें पूर्व-अग्निवीरों के लिए 50% कोटा निर्धारित किया गया है।
- For instance, the **annual intake of constables in the CRPF, the largest CAPF, is typically around 7,000**.
उदाहरण के लिए, सबसे बड़े CAPF CRPF में कांस्टेबलों की वार्षिक भर्ती सामान्यतः लगभग 7,000 होती है।
- Under the new recruitment framework, about **3,500 of these vacancies** will be reserved for ex-Agniveers.
नई भर्ती व्यवस्था के तहत, इनमें से लगभग 3,500 रिक्तियाँ पूर्व-अग्निवीरों के लिए आरक्षित होंगी।
- The **ex-Agniveers will be exempted from written examinations, physical standard tests, and physical efficiency tests**, the notifications said.
अधिसूचनाओं के अनुसार, पूर्व-अग्निवीरों को लिखित परीक्षा, शारीरिक मानक परीक्षण और शारीरिक दक्षता परीक्षण से छूट दी जाएगी।
- Recruitment to the post of Constable (General Duty)** will be carried out through direct recruitment, with 50% of vacancies in every recruitment year reserved for ex-Agniveers, the CRPF's notification, issued on July 27, said.
27 जुलाई को जारी CRPF की अधिसूचना में कहा गया है कि कांस्टेबल (जनरल ड्यूटी) के पद पर भर्ती प्रत्यक्ष भर्ती के माध्यम से की जाएगी और प्रत्येक भर्ती वर्ष में 50% रिक्तियाँ पूर्व-अग्निवीरों के लिए आरक्षित होंगी।