



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



PATRIOTIC IAS

DAILY CURRENT AFFAIRS

THE HINDU NEWSPAPER

25 AUGUST 2026

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

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

GS Paper 1: History		25 August 2026
TOPICS COVERED		
25A8	'PM taking forward Sant Ravidas's ideals' 'प्रधानमंत्री संत रविदास के आदर्शों को आगे बढ़ा रहे हैं'	
25A8	Celebrating Prophet's birth पैगंबर के जन्म का उत्सव	



PM taking forward Sant Ravidas's ideals'

GS I: History

The Hindu Bureau
NEW DELHI

BJP president Nitin Nabin on Monday said Prime Minister Narendra Modi's leadership was taking forward Sant Ravidas's ideals of social harmony, equality and selfless service, with development reaching the poorest of the poor.

He was speaking at the party's *Samrasta Sankalp Abhiyan* (Social Harmony Pledge Campaign) event, organised to mark the 650th birth anniversary of Sant Shiromani Ravidas, a Bhakti poet, who fought for the marginalised sec-

tions of society.

Mr. Nabin said that under the Modi government, development schemes were being delivered to the poor and the last person in society. About 25 crore people had been brought out of poverty, he said. He said the BJP's resolve was to unite every section of society and realise the goal of a Viksit Bharat by 2047.

Among those present were Delhi Chief Minister Rekha Gupta, BJP State president and Minister of State Harsh Malhotra. Mr. Nabin said the party's entire cadre was carrying forward the campaign.

25A8. 'PM taking forward Sant Ravidas's ideals' 'प्रधानमंत्री संत रविदास के आदर्शों को आगे बढ़ा रहे हैं'

• BJP president Nitin Nabin on Monday said Prime Minister Narendra Modi's leadership was taking forward Sant Ravidas's ideals of social harmony, equality and selfless service, with development reaching the poorest of the poor.

भाजपा अध्यक्ष नितिन नबीन ने सोमवार को कहा कि प्रधानमंत्री नरेंद्र मोदी के नेतृत्व में सामाजिक समरसता, समानता और निःस्वार्थ सेवा के संत रविदास के आदर्शों को आगे बढ़ाया जा रहा है और विकास का लाभ अति गरीबों तक पहुँच रहा है।

• He was speaking at the party's *Samrasta Sankalp Abhiyan* (Social Harmony Pledge Campaign) event, organised to mark the **650th birth anniversary of Sant Shiromani Ravidas, a Bhakti poet, who fought for the marginalised sections of society.**

वह पार्टी के समरसता संकल्प अभियान (Social Harmony Pledge Campaign) कार्यक्रम में बोल रहे थे, जिसका आयोजन भक्ति कवि और

समाज के हाशिए पर स्थित वर्गों के लिए संघर्ष करने वाले संत शिरोमणि रविदास की 650वीं जयंती के अवसर पर किया गया था।

- Mr. Nabin said that under the Modi government, development schemes were being delivered to the poor and the last person in society. श्री नबीन ने कहा कि मोदी सरकार के तहत विकास योजनाओं का लाभ गरीबों और समाज के अंतिम व्यक्ति तक पहुँचाया जा रहा है।
- About 25 crore people had been brought out of poverty, he said. उन्होंने कहा कि लगभग 25 करोड़ लोगों को गरीबी से बाहर निकाला गया है।
- He said the BJP's resolve was to unite every section of society and realise the goal of a Viksit Bharat by 2047. उन्होंने कहा कि भाजपा का संकल्प समाज के प्रत्येक वर्ग को एकजुट करना और 2047 तक विकसित भारत के लक्ष्य को साकार करना है।
- Among those present were Delhi Chief Minister Rekha Gupta, BJP State president and Minister of State Harsh Malhotra. उपस्थित लोगों में दिल्ली की मुख्यमंत्री रेखा गुप्ता, भाजपा के प्रदेश अध्यक्ष और राज्य मंत्री हर्ष मल्होत्रा शामिल थे।
- Mr. Nabin said the party's entire cadre was carrying forward the campaign. श्री नबीन ने कहा कि पार्टी का पूरा कैडर इस अभियान को आगे बढ़ा रहा है।

Sant Shiromani Guru Ravidas

- The important date distinction is that the Government of India observed his **649th birth anniversary on 1 February 2026**, while the **650th Prakash Parv is to be celebrated in 2027.**
- Haryana began year-long commemorative activities in **July 2026** leading up to the 650th anniversary.



Who Was Sant Ravidas?

- **Sant Ravidas**, also known as **Raidas**, **Guru Ravidas** or **Bhagat Ravidas**, was a medieval Indian **Bhakti poet, saint and social reformer** associated particularly with North India.
- Government and educational sources commonly place his **birth around 1376–77 CE at or near Varanasi/Kashi**, although historical traditions differ about the precise chronology of his life. Bihar SCERT describes him as having been born sometime around **1376–1377 CE**, while contemporary government commemorations use a chronology consistent with the 650th anniversary falling in **2027**.
- He was born into a community traditionally associated with **leather-working**, which occupied a low position in the prevailing caste hierarchy. This social background profoundly shaped his critique of **untouchability, caste discrimination and inherited social status**.
- He became one of the prominent voices of the **Nirguna Bhakti tradition**, which emphasised devotion to a God beyond rigid physical form and ritual boundaries. Haryana government material describes him as one of the foremost pillars of **Nirgun Bhakti**.

Core Teachings of Guru Ravidas

Equality of Human Beings

- Ravidas rejected the idea that one person could be spiritually superior to another merely because of **birth or caste**.
- His teachings challenged a society in which occupation and social status were often hereditary and in which communities considered “untouchable” faced severe exclusion.
- In modern language, his message can be understood as an assertion of **human dignity and equality**.

Opposition to Untouchability and Social Hierarchy

- Ravidas's importance was not limited to abstract spirituality. His life and compositions offered a powerful critique of **caste prejudice and social exclusion**.
- His own social location made this critique particularly significant: an individual from a socially marginalised occupational community became a widely respected spiritual authority.

Dignity of Labour

- Ravidas's life is associated with the idea that **honest work does not reduce an individual's spiritual or social worth**.
- This challenged the notion that certain occupations could make particular communities inherently inferior.

- For a student, the idea can be understood simply as: **a person's dignity comes from humanity and conduct, not from hereditary occupation.**

Devotion Over Ritual Status

- Ravidas stressed sincere **bhakti**, remembrance of the Divine and inner purity.
- His message questioned the idea that religious privilege belonged only to particular castes or those able to perform elaborate rituals.
- Thus, Bhakti became an instrument through which socially excluded groups could claim **direct access to the divine.**

The Idea of “Begampura”

- One of the most celebrated compositions associated with Ravidas begins with “**Begampura Sehar Ko Nao**”, which is included in university curricula on Bhakti poetry.
- **Begampura** literally conveys the idea of a **city without sorrow or suffering.**
- Ravidas imagines an ideal social order free from oppressive hierarchy, fear and deprivation.
- Begampura can therefore be interpreted as a powerful medieval vision of a society characterised by **freedom, dignity and social equality.**
- For example, if a society does not determine a person's worth on the basis of birth and nobody is excluded from social life because of caste, it approximates the egalitarian ideal represented by **Begampura.**

Language and Literary Importance

- Ravidas composed devotional poetry in the **vernacular linguistic environment of North India**, making religious and social ideas accessible beyond scholarly elites.
- His compositions use direct imagery and everyday experience rather than highly technical philosophical language.
- Important compositions studied today include “**Begampura Sehar Ko Nao,**” “**Tohi Mohi Mohi Tohi Antar Kaisa,**” and “**Prabhu Ji Tum Chandan Hum Pani.**” Delhi University includes these works in its study of Bhakti poetry.
- This vernacular character of Bhakti literature helped democratise religious discourse by making spiritual ideas accessible to ordinary people.

Guru Ravidas and the Sikh Tradition

- Ravidas's importance extends beyond one religious community.

- His devotional compositions became part of the broader **Sant-Bhakti tradition** and were incorporated into Sikh scriptural tradition.
- **The Adi Granth**, compiled by **Guru Arjan in 1604**, contains compositions of several **Bhagats from Bhakti and related devotional traditions, including Ravidas**. This gave his poetry a lasting place in Sikh religious practice and memory.
- This is one reason Guru Ravidas enjoys especially strong reverence in **Punjab**, apart from Uttar Pradesh and other parts of northern India.

Ravidas and Mirabai

- **Mirabai and Rani Jhali** were among those influenced by him.

Why Ravidas Was Important for Marginalised Sections

- Ravidas transformed the experience of social exclusion into a broader philosophy of **equality and dignity**.
- He demonstrated that spiritual authority did not require **high caste status, wealth or political power**.
- His ideal society challenged not only untouchability but also the larger assumption that social inequality was divinely ordained.
- Consequently, Ravidas later became an important cultural and intellectual symbol in movements concerning **Dalit identity, dignity and social justice**.
- Contemporary academic work continues to examine Ravidas in relation to **Dalit assertion, medieval Hindi poetry and social transformation**. JNU, for example, records specialised scholarship on “**Dalit Asmita aur Ravidas ka Kavya**” and Ravidas's Nirguna sensibility.

Contemporary Relevance

- Ravidas's teachings closely resonate with modern constitutional principles such as **equality, dignity, social justice and rejection of untouchability**.
- His idea that birth should not determine human worth remains significant in addressing contemporary forms of **caste discrimination and social exclusion**.
- His emphasis on fraternity also complements the constitutional ideal of **fraternity assuring the dignity of the individual**.
- In **2026**, both the President and Prime Minister emphasised his enduring message of **justice, compassion, equality and social harmony**.

Recent Government Initiatives

- In 2024, development works worth approximately ₹32 crore around the Sant Guru Ravidas Janmasthan at Seer Govardhanpur, Varanasi were inaugurated, while the foundation stone was laid for a Sant Ravidas Museum and park beautification project worth about ₹62 crore.
- On 1 February 2026, the 649th birth anniversary was officially commemorated, and **Adampur Airport in Punjab** was renamed “**Shri Guru Ravidass Maharaj Ji Airport, Adampur.**”

GS I: History

Celebrating Prophet's birth

Milad-un-Nabi, also known as Mawlid al-Nawabi, marks the observance of the birth of the Islamic Prophet Muhammad. Celebrated on the 12th day of Rabi 'al-Awwal, the third month of the Islamic calendar, this occasion holds deep spiritual significance for millions of Muslims across the globe. The day serves primarily as a sacred time for reflection, gratitude and remembrance, said Syed Meeran.

Rather than a grand, ostentatious holiday, Milad-un-Nabi is centered on honouring the life, teachings and noble character (Akhlaq) of Prophet Muhammad. Devotees gather in mosques, community centres and homes to listen to lectures detailing his life story, recite poetry in his praise (Nats or Mawlid compositions) and readings from the Koran.

Central to the celebration is the message of universal peace, compassion and charity. Prophet Muhammad is regarded in Islam as Rahmatan lil-Aalamin (a mercy to the worlds) and the observance emphasises his legacy of kindness towards the poor, social justice, forgiveness and community service. Across many traditions, communities prepare elaborate feasts, distribute food to the less fortunate and organise charitable drives to honour his altruistic spirit. Emulating the Prophet's concern for the vulnerable families and feeding them is a core aspect on this day. Ultimately, Milad-un-Nabi is more than a historical commemoration. It acts as an annual renewal of faith, encouraging believers to embody the Prophet's virtues – honesty, humility, patience and love – in their daily lives, strengthening social harmony and spiritual growth.

25A8. Celebrating Prophet's birth

पैगंबर के जन्म का उत्सव

- Milad-un-Nabi, also known as Mawlid al-Nawabi, marks the observance of the birth of the Islamic Prophet Muhammad.

मिलाद-उन-नबी, जिसे मौलद अल-नबवी के नाम से भी जाना जाता है, इस्लाम के पैगंबर मुहम्मद के जन्म के स्मरण का अवसर है।

- Celebrated on the 12th day of Rabi 'al-Awwal, the third month of the Islamic calendar, this occasion holds deep spiritual significance for millions of Muslims across the globe.

इस्लामी कैलेंडर के तीसरे महीने रबी अल-अव्वल की 12वीं तारीख को मनाया जाने वाला यह अवसर दुनिया भर के लाखों मुसलमानों के लिए गहरे आध्यात्मिक महत्व का है।

- The day serves primarily as a sacred time for reflection, gratitude and remembrance, said Syed Meeran. सैयद मीरान ने कहा कि यह दिन मुख्य रूप से चिंतन, कृतज्ञता और स्मरण के लिए एक पवित्र अवसर के रूप में मनाया जाता है।

- Rather than a grand, ostentatious holiday, Milad-un-Nabi is centered on honouring the life, teachings and noble character (Akhlaq) of Prophet Muhammad.

भव्य और दिखावटी उत्सव के बजाय, मिलाद-उन-नबी का केंद्र पैगंबर

मुहम्मद के जीवन, शिक्षाओं और सदाचारी चरित्र (अखलाक) का सम्मान करना है।

- Devotees gather in mosques, community centres and homes to listen to lectures detailing his life story, recite poetry in his praise (Nats or Mawlid compositions) and readings from the Koran.

श्रद्धालु मस्जिदों, सामुदायिक केंद्रों और घरों में एकत्र होकर उनके जीवन की कथा पर आधारित व्याख्यान सुनते हैं, उनकी प्रशंसा में कविताएँ (नात या मौलद रचनाएँ) पढ़ते हैं और कुरान का पाठ करते हैं।

- Central to the celebration is the message of universal peace, compassion and charity. इस उत्सव का केंद्रीय संदेश सार्वभौमिक शांति, करुणा और दानशीलता है।

- Prophet Muhammad is regarded in Islam as Rahmatan lil-Aalamin (a mercy to the worlds) and the observance emphasises his legacy of kindness towards the poor, social justice, forgiveness and community service.

इस्लाम में पैगंबर मुहम्मद को रहमतन लिल-आलमीन (समस्त संसार के लिए दया) माना जाता है और यह अवसर गरीबों के प्रति दयालुता, सामाजिक न्याय, क्षमा और सामुदायिक सेवा की उनकी विरासत पर बल देता है।

- Across many traditions, communities prepare elaborate feasts, distribute food to the less fortunate and organise charitable drives to honour his altruistic spirit.



विभिन्न परंपराओं में समुदाय विशेष भोज तैयार करते हैं, वंचित लोगों में भोजन वितरित करते हैं और उनकी परोपकारी भावना का सम्मान करने के लिए धर्मार्थ अभियानों का आयोजन करते हैं।

- Emulating the Prophet's concern for the vulnerable families and feeding them is a core aspect on this day.
कमजोर और असुरक्षित परिवारों के प्रति पैगंबर की चिंता का अनुकरण करना और उन्हें भोजन कराना इस दिन का एक प्रमुख पक्ष है।
- Ultimately, Milad-un-Nabi is more than a historical commemoration.
अंततः, मिलाद-उन-नबी केवल एक ऐतिहासिक स्मरणोत्सव से कहीं अधिक है।
- It acts as an annual renewal of faith, encouraging believers to embody the Prophet's virtues — honesty, humility, patience and love — in their daily lives, strengthening social harmony and spiritual growth.

यह आस्था के वार्षिक नवीनीकरण के रूप में कार्य करता है और विश्वासियों को अपने दैनिक जीवन में पैगंबर के गुणों—ईमानदारी, विनम्रता, धैर्य और प्रेम—को अपनाने के लिए प्रेरित करता है, जिससे सामाजिक समरसता और आध्यात्मिक विकास मजबूत होता है।

GS Paper 1: Geography	01 August 2026
TOPICS COVERED	
25A8	SC bans constructions near Rajasthan's Jojari river to curb pollution प्रदूषण पर अंकुश लगाने के लिए SC ने राजस्थान की जोजरी नदी के पास निर्माण पर रोक लगाई

SC bans constructions near Rajasthan's Jojari river to curb pollution

GS I: Geography
The Hindu Bureau
NEW DELHI

The Supreme Court on Monday banned any construction or development activities within 100 metres of Jojari River in Rajasthan. The court also prohibited hazardous industries within 500 metres of either side of the existing flood line along the river's flow path.

The decision by a Bench of Justices Vikram Nath and Sandeep Mehta is the latest in a series of interventions made by the apex court to protect the seasonal river, which has faced a barrage of contamination that has affected around two million lives in the water-starved State.

On August 4, the apex

court had suggested that the Rajasthan government prepare a 20-point resolution plan to deal with the issue of contamination in the Jojari, Bandi and Luni rivers in the State.

The Jojari river passes through Jodhpur, the Bandi river flows through Pali, and the Luni river runs through Balotra. The Bandi and Jojari rivers merge with the Luni river near Balotra city.

'Consider relocation'

The Supreme Court had said that the entire industrial area in Pali was located along the river bank. It had said that the State authorities would have to consider relocating industries away from the river in the long run.

25A8. SC bans constructions near Rajasthan's Jojari river to curb pollution

प्रदूषण पर अंकुश लगाने के लिए SC ने राजस्थान की जोजरी नदी के पास निर्माण पर रोक लगाई

• The Supreme Court on Monday banned any construction or development activities within 100 metres of **Jojari River in Rajasthan.**

सर्वोच्च न्यायालय ने सोमवार को राजस्थान की जोजरी नदी के 100 मीटर के दायरे में किसी भी निर्माण या विकास गतिविधि पर रोक लगा दी।

• The court also prohibited hazardous industries within 500 metres of either side of the existing flood line along the river's flow path.

न्यायालय ने नदी के प्रवाह मार्ग के साथ मौजूद बाढ़ रेखा (flood line) के दोनों ओर 500 मीटर के दायरे में खतरनाक उद्योगों पर भी प्रतिबंध लगा दिया।

• The decision by a Bench of Justices Vikram Nath and Sandeep Mehta is the latest in a series of interventions made by the apex court to protect the seasonal river, which has faced a barrage of contamination that has affected around two million lives in the water-starved State.

न्यायमूर्ति विक्रम नाथ और न्यायमूर्ति संदीप मेहता की पीठ का यह निर्णय इस मौसमी नदी की रक्षा के लिए सर्वोच्च न्यायालय द्वारा किए गए हस्तक्षेपों की श्रृंखला में नवीनतम है, जो प्रदूषण की गंभीर मार

झेल रही है और जिसने जल-संकटग्रस्त राज्य में लगभग 20 लाख लोगों के जीवन को प्रभावित किया है।



- On August 4, the apex court had suggested that the Rajasthan government prepare a 20-point resolution plan to deal with the issue of contamination in the **Jojari, Bandi and Luni rivers** in the State.
4 अगस्त को सर्वोच्च न्यायालय ने सुझाव दिया था कि राजस्थान सरकार राज्य की जोजरी, बांडी और लूणी नदियों में प्रदूषण की समस्या से निपटने के लिए **20-सूत्रीय समाधान योजना** तैयार करे।
- The **Jojari river passes through Jodhpur, the Bandi river flows through Pali, and the Luni river runs through Balotra.**
जोजरी नदी जोधपुर से होकर गुजरती है, बांडी नदी पाली से होकर बहती है और लूणी नदी बालोतरा से होकर गुजरती है।
- The **Bandi and Jojari rivers merge with the Luni river near Balotra city.**
बांडी और जोजरी नदियाँ बालोतरा शहर के पास लूणी नदी में मिल जाती हैं।

GS Paper II: Polity		25 August 2026
TOPICS COVERED		
25A8	Bills on simultaneous elections unconstitutional: Cong. leader समकालिक चुनावों संबंधी विधेयक असंवैधानिक: कांग्रेस नेता	
25A8	Simultaneous polls possible in 2029, says panel chief पैनल प्रमुख ने कहा, 2029 में एक साथ चुनाव संभव	
25A8	Invisible actors अदृश्य कर्ता	

Bills on simultaneous elections unconstitutional: Cong. leader

Chidambaram tells JPC proposed legislation violates Constitution's Basic Structure; think tanks point to infirmities; while some Padma awardees support move, others say it can lead to chaos

GS II: Polity

Sobhana K. Nair
NEW DELHI

Former Union Minister P. Chidambaram on Monday strongly opposed the proposal for simultaneous Lok Sabha and Assembly elections while appearing before the Joint Committee of Parliament (JPC) examining the Constitution (129th Amendment) Bill, 2024, and the Union Territories Laws (Amendment) Bill, 2024.

He described the initiative as "monstrous", "mindless" and "unconstitutional".

According to sources, Mr. Chidambaram told the committee that the proposed legislation, which seeks to synchronise Lok Sabha and Assembly elections under the "One Nation, One Election" framework, violates the Constitution's Basic Structure. The senior Congress leader argued that curtailing the tenure of a legislature elected for a fixed five-



P. Chidambaram

year term would directly undermine constitutional principles and parliamentary democracy.

'Govt. lacks majority'

The former Home and Finance Minister said his conscience did not permit him to support the Bills, and contended that the government lacked the required two-thirds majority needed for the constitutional amendment. Sources said the committee recorded his concerns and invited specific suggestions and recommendations for improving the legislation.

The committee, headed

by BJP MP P.P. Chaudhary, held a three-part meeting on Monday. The first part was with Mr. Chidambaram, second part with Padma awardees, and third with two independent think-tanks.

A group of 10 Padma awardees, including Tarlochan Singh, Navin Khanna, Meenakshi Jain and Niru Kumar, appeared before the panel. While some supported simultaneous elections, others cautioned that the move could create "chaos" in the country.

Ms. Jain argued that repeated enforcement of the Model Code of Conduct disrupted development projects, and said synchronised elections would allow uninterrupted implementation of regional development programmes.

Dr. Saumitra Rawat said continuous election cycles affected academic calendars and entrance examinations such as NEET, while cardiologist Ashok Seth pointed to the strain

recurrent polls placed on the healthcare system through repeated diversion of medical and administrative personnel.

Many of the Padma awardees recommended clearer statutory provisions governing election schedules and timelines for fresh elections.

The committee later heard submissions from Nation First Policy Research and the Vidhi Centre for Legal Policy, both of which suggested that the law in its present form has many infirmities. The organisations called for clearly defined and judicially reviewable grounds for postponing Assembly elections, fixed outer limits for any deferment, and mandatory parliamentary oversight.

They also stressed the need to avoid governance vacuums during election deferrals, suggesting either structured limits on President's Rule or caretaker governments restricted to routine administration.

25A8. Bills on simultaneous elections unconstitutional: Cong. leader

समकालिक चुनावों संबंधी विधेयक असंवैधानिक: कांग्रेस नेता

- Former Union Minister P. Chidambaram on Monday strongly opposed the proposal for simultaneous Lok Sabha and Assembly elections while appearing before the **Joint Committee of Parliament (JPC) examining the Constitution (129th Amendment) Bill, 2024, and the Union Territories Laws (Amendment) Bill, 2024.**
पूर्व केंद्रीय मंत्री पी. चिदंबरम ने सोमवार को संसद की संयुक्त समिति (JPC) के समक्ष पेश होते हुए लोकसभा और विधानसभा चुनावों को एक साथ कराने के प्रस्ताव का कड़ा विरोध किया। समिति संविधान (129वाँ संशोधन) विधेयक, 2024 और केंद्र शासित प्रदेश विधि (संशोधन) विधेयक, 2024 की जाँच कर रही है।
- He described the initiative as “monstrous”, “mindless” and “unconstitutional”.
उन्होंने इस पहल को “विकराल”, “विचारहीन” और “असंवैधानिक” बताया।
- According to sources, Mr. Chidambaram told the committee that the proposed legislation, which seeks to synchronise Lok Sabha and Assembly elections under the “One Nation, One Election” framework, violates the Constitution’s **Basic Structure**.
सूत्रों के अनुसार, श्री चिदंबरम ने समिति से कहा कि प्रस्तावित कानून, जिसका उद्देश्य “एक राष्ट्र, एक चुनाव” के ढाँचे के तहत लोकसभा और विधानसभा चुनावों को समकालिक बनाना है, संविधान की मूल संरचना का उल्लंघन करता है।
- The senior Congress leader argued that curtailing the tenure of a legislature elected for a fixed five-year term would directly undermine constitutional principles and parliamentary democracy.
वरिष्ठ कांग्रेस नेता ने तर्क दिया कि निश्चित पाँच वर्ष के कार्यकाल के लिए निर्वाचित विधानमंडल के कार्यकाल को कम करना संवैधानिक सिद्धांतों और संसदीय लोकतंत्र को सीधे कमजोर करेगा।

‘Govt. lacks majority’

‘सरकार के पास बहुमत नहीं है’

- The former Home and Finance Minister said his conscience did not permit him to support the Bills, and contended that the government lacked the required two-thirds majority needed for the constitutional amendment.
पूर्व गृह और वित्त मंत्री ने कहा कि उनका अंतरात्मा उन्हें विधेयकों का समर्थन करने की अनुमति नहीं देती और उन्होंने तर्क दिया कि सरकार के पास संवैधानिक संशोधन के लिए आवश्यक दो-तिहाई बहुमत नहीं है।
- Sources said the committee recorded his concerns and invited specific suggestions and recommendations for improving the legislation.
सूत्रों ने कहा कि समिति ने उनकी चिंताओं को दर्ज किया और कानून में सुधार के लिए विशिष्ट सुझाव और सिफारिशें आमंत्रित कीं।
- The **committee, headed by BJP MP P.P. Chaudhary**, held a three-part meeting on Monday.
BJP सांसद पी.पी. चौधरी की अध्यक्षता वाली समिति ने सोमवार को तीन भागों में बैठक की।
- The first part was with Mr. Chidambaram, second part with Padma awardees, and third with two independent think-tanks.
पहले भाग में श्री चिदंबरम के साथ, दूसरे भाग में पद्म पुरस्कार विजेताओं के साथ और तीसरे भाग में दो स्वतंत्र थिंक-टैंक के साथ बैठक हुई।
- A group of 10 Padma awardees, including Tarlochan Singh, Navin Khanna, Meenakshi Jain and Niru Kumar, appeared before the panel.
तरलोचन सिंह, नवीन खन्ना, मीनाक्षी जैन और नीरु कुमार सहित 10 पद्म पुरस्कार विजेता समिति के समक्ष उपस्थित हुए।
- While some supported simultaneous elections, others cautioned that the move could create “chaos” in the country.

जहाँ कुछ ने समकालिक चुनावों का समर्थन किया, वहीं अन्य ने चेतावनी दी कि यह कदम देश में “अराजकता” उत्पन्न कर सकता है।

- Ms. Jain argued that repeated enforcement of the **Model Code of Conduct** disrupted development projects, and said synchronised elections would allow uninterrupted implementation of regional development programmes.
सुश्री जैन ने तर्क दिया कि आदर्श आचार संहिता के बार-बार लागू होने से विकास परियोजनाएँ बाधित होती हैं और कहा कि समकालिक चुनाव क्षेत्रीय विकास कार्यक्रमों के निर्बाध कार्यान्वयन की अनुमति देंगे।
- Dr. Saumitra Rawat said continuous election cycles affected academic calendars and entrance examinations such as **NEET**, while cardiologist Ashok Seth pointed to the strain recurrent polls placed on the healthcare system through repeated diversion of medical and administrative personnel.
डॉ. सौमित्र रावत ने कहा कि लगातार चलने वाले चुनाव चक्र शैक्षणिक कैलेंडर और NEET जैसी प्रवेश परीक्षाओं को प्रभावित करते हैं, जबकि हृदय रोग विशेषज्ञ अशोक सेठ ने बार-बार होने वाले चुनावों के कारण चिकित्सा और प्रशासनिक कर्मियों की बार-बार तैनाती से स्वास्थ्य सेवा प्रणाली पर पड़ने वाले दबाव की ओर संकेत किया।
- Many of the Padma awardees recommended clearer statutory provisions governing election schedules and timelines for fresh elections.
कई पद्म पुरस्कार विजेताओं ने चुनाव कार्यक्रम और नए चुनाव कराने की समय-सीमा को नियंत्रित करने वाले अधिक स्पष्ट वैधानिक प्रावधानों की सिफारिश की।
- The committee later heard submissions from **Nation First Policy Research** and the **Vidhi Centre for Legal Policy**, both of which suggested that the law in its present form has many infirmities.
समिति ने बाद में **Nation First Policy Research** और **Vidhi Centre for Legal Policy** की प्रस्तुतियाँ सुनीं, दोनों ने सुझाव दिया कि कानून का वर्तमान स्वरूप कई खामियों से युक्त है।
- The organisations called for clearly defined and judicially reviewable grounds for postponing Assembly elections, fixed outer limits for any deferment, and mandatory parliamentary oversight.
इन संगठनों ने विधानसभा चुनावों को स्थगित करने के लिए स्पष्ट और न्यायिक समीक्षा योग्य आधार, किसी भी स्थगन के लिए निश्चित अधिकतम समय-सीमा तथा अनिवार्य संसदीय निगरानी की माँग की।
- They also stressed the need to avoid governance vacuums during election deferrals, suggesting either structured limits on **President's Rule** or caretaker governments restricted to routine administration.
उन्होंने चुनाव स्थगन के दौरान शासन संबंधी रिक्तता से बचने की आवश्यकता पर भी जोर दिया और या तो राष्ट्रपति शासन पर संरचित सीमाएँ लगाने अथवा केवल नियमित प्रशासन तक सीमित कार्यवाहक सरकारों का सुझाव दिया।

Its objective is to make simultaneous elections constitutionally possible by inserting a new **Article 82A** and amending **Articles 83, 172 and 327**.

Proposed Article 82A — Core of the System

The Bill proposes that the **President** may issue a notification on the date of the first sitting of the Lok Sabha following a general election. This becomes the “**appointed date**.”

After this point, the terms of State Assemblies constituted during the transition would be adjusted so that eventually their terms terminate with the term of the Lok Sabha.

The **Election Commission of India (ECI)** would then conduct general elections to the Lok

Sabha and all State Legislative Assemblies simultaneously.

What if an Assembly cannot vote simultaneously?

This is an important exception.

If the ECI considers that an election to a particular State Assembly **cannot be conducted simultaneously**, it may recommend to the President that the Assembly election be held later.

However, even when such an election is deferred, that Assembly's term would end when the full term of the corresponding Lok Sabha ends.

What happens if a government falls early?

This is perhaps the easiest way to understand the proposed system.

At present:

Assembly elected → normally gets up to 5 years.

Under the proposed simultaneous-election framework:

Common election cycle → Legislature falls early → fresh election → new House serves only the remaining “unexpired term.”

Suppose simultaneous elections occur and the Lok Sabha and Uttar Pradesh Assembly are supposed to continue until **2034**.

If the UP Assembly is dissolved in **2032**, an election can still be conducted.

But the newly elected Assembly would ordinarily serve only the **remaining period until 2034**, rather than beginning a fresh five-year cycle.

The same principle is proposed for an early dissolution of the **Lok Sabha**. This is essential because otherwise one premature dissolution could again break the simultaneous-election cycle.

Why amend Articles 83 and 172?

Article 83 deals with the duration of Parliament, including the normal five-year duration of the Lok Sabha.

Article 172 similarly deals with the duration of State Legislatures.

The Bill introduces the concept of the **“unexpired term”** so that a House elected following premature dissolution serves only the remainder of the original electoral cycle.

Why amend Article 327?



Article 327 gives Parliament power to make laws concerning elections to Parliament and State Legislatures.

The proposed amendment expressly accommodates Parliament's law-making power concerning the **conduct of simultaneous elections**.

GS II: Polity

Invisible actors

The ECI must stop filing of bulk applications for deletion of voters

The Election Commission of India (ECI)'s Special Intensive Revision (SIR) of electoral rolls has seen allegations of bulk filing of applications seeking to delete voters' names from draft lists using Form 7 in Rajasthan, Gujarat, Uttar Pradesh and, more recently Uttarakhand. Ground reports by *The Hindu* from Karnataka, Rajasthan and Gujarat noted that these forms were often filed in bulk fraudulently using names of people who were unaware of the filing. In several instances, hundreds of objections were filed under a single person's name. Form 7 is filed to object to an existing name – or to request its deletion – on the electoral rolls for reasons such as death, shifting, or ineligibility. The ECI's Booth Level Officer or the Electoral Registration Officer (ERO) has to conduct an inquiry on the application and issue a notice to the voter before taking any action. While Booth Level Agents (BLA) of political parties can file up to 10 Form 7s a day, totalling 30, there is no limit on how many forms an individual registered as a voter from the same constituency can submit. To prevent misuse, the ECI has said that if a person files more than five objections, it will trigger a mandatory review by the ERO to ensure the legitimacy of the claims.

The Opposition parties have alleged that the form was being misused through "systemic and coordinated efforts" to delete names of eligible voters and embolden the BJP's efforts to wrongfully gain electoral advantage. In the case of Uttarakhand, the Congress has alleged that the manner in which the bulk forms were submitted online pointed to "institutional" access being granted to some in the process. These parties have also sent delegations and submitted representations to the ECI. What is important to note is that in most cases, voters were unaware that applications for deletion of their names had been filed at all, leaving it to workers of political parties active in the constituency to bring it to their notice. According to ECI data, for the third phase of the SIR covering 16 States/three Union Territories there are 3,42,409 BLAs of political parties for an electorate of 36,73,87,831 or one BLA for approximately 1,073 voters. These numbers include agents from ruling and Opposition parties. In such a situation, it is incumbent upon the ECI to step in and protect the voting rights of an individual rather than leave it to the grassroots strength of political parties. The ECI should thus take immediate steps to address this concern. Abnormal patterns should be investigated and the process should be monitored, with a uniform, country-wide Standard Operating Procedure, requiring verification of identity and constituency of the objector and the following of due process before any elector is deleted pursuant to a Form 7.

25A8. Invisible actors

अदृश्य कर्ता

- The Election Commission of India (ECI)'s Special Intensive Revision (SIR) of electoral rolls has seen allegations of **bulk filing of applications seeking to delete voters' names from draft lists using Form 7** in Rajasthan, Gujarat, Uttar Pradesh and, more recently, Uttarakhand.

भारत निर्वाचन आयोग (ECI) द्वारा निर्वाचक नामावलियों के विशेष गहन पुनरीक्षण (SIR) के दौरान राजस्थान, गुजरात, उत्तर प्रदेश और हाल ही में उत्तराखंड में प्रपत्र 7 (Form 7) का उपयोग करके मसौदा सूचियों से मतदाताओं के नाम हटाने के लिए बड़ी संख्या में आवेदन दाखिल किए जाने के आरोप सामने आए हैं।

- Ground reports by *The Hindu* from Karnataka, Rajasthan and Gujarat noted that these forms were often filed in bulk fraudulently using names of people who were unaware of the filing. कर्नाटक, राजस्थान और गुजरात से **द हिंदू** की जमीनी रिपोर्टों में उल्लेख किया गया है कि ये प्रपत्र अक्सर ऐसे लोगों के नामों का उपयोग करके **धोखाधड़ीपूर्वक बड़ी संख्या में दाखिल किए गए**, जिन्हें इस दाखिले की जानकारी ही नहीं थी।

- In several instances, hundreds of objections were filed under a single person's name. कई मामलों में, **एक ही व्यक्ति के नाम पर सैकड़ों आपतियाँ** दाखिल की गईं।

- Form 7 is filed to object to an existing name — or to request its deletion — on the electoral rolls for reasons such as death, shifting, or ineligibility.

प्रपत्र 7 का उपयोग निर्वाचक नामावली में पहले से दर्ज किसी नाम पर आपति दर्ज करने या मृत्यु, स्थानांतरण अथवा अपात्रता जैसे कारणों से उसका नाम हटाने का अनुरोध करने के लिए किया जाता है।

- The ECI's Booth Level Officer or the Electoral Registration Officer (ERO) has to conduct an inquiry on the application and issue a notice to the voter before taking any action.

ECI के बूथ लेवल अधिकारी (BLO) या निर्वाचक पंजीकरण अधिकारी (ERO) को आवेदन पर जाँच करनी होती है और कोई कार्रवाई करने से पहले संबंधित मतदाता को नोटिस जारी करना होता है।

- While Booth Level Agents (BLA) of political parties can file up to 10 Form 7s a day, totalling 30, there is no limit on how many forms an individual registered as a voter from the same constituency can submit. **जहाँ राजनीतिक दलों के बूथ लेवल एजेंट (BLA) प्रतिदिन अधिकतम 10 प्रपत्र 7 दाखिल कर सकते हैं, जिनकी कुल संख्या 30 हो सकती है, वहीं उसी निर्वाचन क्षेत्र में**



मतदाता के रूप में पंजीकृत किसी व्यक्ति द्वारा कितने प्रपत्र दाखिल किए जा सकते हैं, इसकी कोई सीमा नहीं है।

- To prevent misuse, the ECI has said that if a person files more than five objections, it will trigger a mandatory review by the ERO to ensure the legitimacy of the claims.

दुरुपयोग को रोकने के लिए ECI ने कहा है कि यदि कोई व्यक्ति पाँच से अधिक आपतियाँ दाखिल करता है, तो दावों की वैधता सुनिश्चित करने के लिए **ERO द्वारा अनिवार्य समीक्षा** की जाएगी।

- The Opposition parties have alleged that the form was being misused through “systemic and coordinated efforts” to delete names of eligible voters and embolden the BJP’s efforts to wrongfully gain electoral advantage.

विपक्षी दलों ने आरोप लगाया है कि पात्र मतदाताओं के नाम हटाने के लिए इस प्रपत्र का “व्यवस्थित और समन्वित प्रयासों” के माध्यम से दुरुपयोग किया जा रहा है और इससे BJP को अनुचित रूप से **चुनावी लाभ प्राप्त करने के प्रयासों** को बढ़ावा मिल रहा है।

- In the case of Uttarakhand, the Congress has alleged that the manner in which the bulk forms were submitted online pointed to “institutional” access being granted to some in the process.

उत्तराखंड के मामले में कांग्रेस ने आरोप लगाया है कि जिस तरीके से बड़ी संख्या में प्रपत्र ऑनलाइन दाखिल किए गए, उससे संकेत मिलता है कि इस प्रक्रिया में कुछ लोगों को “संस्थागत” पहुँच प्रदान की गई थी।

- These parties have also sent delegations and submitted representations to the ECI. इन दलों ने **ECI को प्रतिनिधिमंडल भेजे और जापन भी प्रस्तुत किए हैं।**

- What is important to note is that in most cases, voters were unaware that applications for deletion of their names had been filed at all, leaving it to workers of political parties active in the constituency to bring it to their notice.

यह ध्यान देना महत्वपूर्ण है कि अधिकांश मामलों में मतदाताओं को इस बात की जानकारी ही नहीं थी कि उनके नाम हटाने के लिए आवेदन दाखिल किए गए हैं, और **निर्वाचन क्षेत्र में सक्रिय राजनीतिक दलों के कार्यकर्ताओं** को ही यह मामला उनके संज्ञान में लाना पड़ा।

- According to ECI data, for the third phase of the SIR covering 16 States/three Union Territories there are 3,42,409 BLAs of political parties for an electorate of 36,73,87,831 or one BLA for approximately 1,073 voters.

ECI के आँकड़ों के अनुसार, **SIR के तीसरे चरण**, जिसमें 16 राज्य/तीन केंद्र शासित प्रदेश शामिल हैं, में **36,73,87,831 मतदाताओं** के लिए राजनीतिक दलों के **3,42,409 BLA** हैं, अर्थात् लगभग **1,073 मतदाताओं पर एक BLA** है।

- These numbers include agents from ruling and Opposition parties. इन संख्याओं में **सत्तारूढ़ और विपक्षी दलों के एजेंट** दोनों शामिल हैं।

- In such a situation, it is incumbent upon the ECI to step in and protect the voting rights of an individual rather than leave it to the grassroots strength of political parties.

ऐसी स्थिति में यह **ECI का दायित्व** है कि वह हस्तक्षेप करके किसी व्यक्ति के **मतदान के अधिकार की रक्षा** करे, न कि इसे राजनीतिक दलों की जमीनी शक्ति पर छोड़ दे।

- The ECI should thus take immediate steps to address this concern. अतः ECI को इस चिंता का समाधान करने के लिए **तत्काल कदम उठाने चाहिए।**

- Abnormal patterns should be investigated and the process should be monitored, with a uniform, countrywide Standard Operating Procedure, requiring verification of identity and constituency of the objector and the following of due process before any elector is deleted pursuant to a Form 7.

असामान्य पैटर्न की जाँच की जानी चाहिए और प्रक्रिया की निगरानी की जानी चाहिए, जिसके लिए पूरे देश में एक समान **मानक संचालन प्रक्रिया (Standard Operating Procedure)** लागू होनी चाहिए, जिसमें किसी भी मतदाता को प्रपत्र 7 के आधार पर हटाने से पहले **आपति दर्ज करने वाले व्यक्ति की पहचान और निर्वाचन क्षेत्र का सत्यापन तथा उचित प्रक्रिया का पालन** अनिवार्य किया जाए।



inclusion and deletion:

Purpose	Form	What it means
Inclusion of name	Form 6	Used by an eligible person to apply for inclusion of their name in the electoral roll , such as a new voter.
Deletion/objection	Form 7	Used to seek deletion of an existing name from the electoral roll or to object to a proposed inclusion, subject to the prescribed grounds and verification.
Correction/Shifting within constituency	Form 8	Used for specified corrections, shifting of residence within the constituency, replacement EPIC and related updates.

What does “bulk filing of Form 7” mean?

Suppose the draft electoral roll of a constituency contains **2,00,000 voters**.

Normally, if a person has evidence that a particular voter has **died, permanently shifted, is already enrolled elsewhere, or is otherwise not entitled to remain on that roll**, an application can be made seeking deletion according to the prescribed procedure.

But imagine that an individual or group submits **hundreds or thousands of Form 7 applications together**, asking election authorities to remove the names of a large number of voters.

This is what is meant by:

“Bulk filing of applications seeking to delete voters’ names from draft lists using Form 7.”

Importantly, **filing Form 7 does not itself automatically delete a voter’s name**. It is an application/objection. The **Electoral Registration Officer (ERO)** must deal with the claim according to the prescribed procedure before deletion.

GS Paper II: Governance		25 August 2026
TOPICS COVERED		
25A8	Centre moves to simplify medical device regulations केंद्र ने चिकित्सा उपकरणों के विनियमन को सरल बनाने की दिशा में कदम बढ़ाया	

Centre moves to simplify medical device regulations

GS II: Governance

Bindu Shajan Perappadan
NEW DELHI

The Union Health Ministry has proposed amendments to the Medical Devices Rules, 2017, to promote ease of doing business. The amendments seek to simplify regulatory requirements, standardise testing fees and facilitate faster market access for eligible medical devices.

The Centre has eased regulatory requirements for medical device manufacturers by removing the need for a separate licence for outsourced sterilisation and expanding the list of countries and regulatory jurisdictions whose approvals can facilitate waiver of clinical investigation requirements in India, a release issued by the Ministry said on Monday.

Under the proposed amendment to Rule 44, manufacturers that outsource sterilisation of their medical devices to a facility holding a valid licence under the Medical Devices Rules, 2017, will no longer have to obtain a separate



The change is intended to balance regulatory oversight with ease of doing business.

loan licence for the sterilisation activity.

Earlier, manufacturers had to secure a separate loan licence even when the outsourced sterilisation facility itself held a valid licence. The government said removing the duplication would reduce paperwork, administrative burden and compliance costs, particularly for manufacturers without their own sterilisation facilities.

However, a traceability requirement has been retained. Manufacturers will have to mention the licence number of the sterilisation facility on the medical device label. A six-month transition pe-

riod has been provided to allow companies to modify labels, packaging and related processes.

The government said the change was intended to balance regulatory oversight with ease of doing business by retaining traceability while simplifying the licensing framework.

In another change, the amendment to Rule 63 includes the European Union (EU) among the stringent regulatory jurisdictions recognised for waiving clinical investigation requirements for medical devices that do not have predicate devices in India. The provision already recognises the United States, the United Kingdom, Australia, Canada and Japan. With the EU now included, medical devices approved in the EU that meet the eligibility conditions can benefit from the waiver provisions in India. The move is expected to reduce regulatory timelines for importers and manufacturers and facilitate quicker availability of newer medical technologies to Indian patients.

25A8. Centre moves to simplify medical device regulations

केंद्र ने चिकित्सा उपकरणों के विनियमन को सरल बनाने की दिशा में कदम बढ़ाया

- The **Union Health Ministry** has proposed amendments to the Medical Devices Rules, 2017, to promote ease of doing business.

केंद्रीय स्वास्थ्य मंत्रालय ने कारोबार करने में सुगमता को बढ़ावा देने के लिए चिकित्सा उपकरण नियम, 2017 में संशोधन का प्रस्ताव दिया है।

- The amendments seek to simplify regulatory requirements, standardise testing fees and facilitate faster market access for eligible medical devices.

इन संशोधनों का उद्देश्य नियामक आवश्यकताओं को सरल बनाना, परीक्षण शुल्क को मानकीकृत करना और पात्र चिकित्सा उपकरणों के लिए बाजार तक त्वरित पहुँच सुगम बनाना है।



- The Centre has eased regulatory requirements for medical device manufacturers by removing the need for a separate licence for outsourced sterilisation and expanding the list of countries and regulatory jurisdictions whose approvals can facilitate waiver of clinical investigation requirements in India, a release issued by the Ministry said on Monday.
मंत्रालय द्वारा सोमवार को जारी एक विज्ञप्ति में कहा गया कि केंद्र ने चिकित्सा उपकरण निर्माताओं के लिए नियामक आवश्यकताओं में ढील दी है। इसके तहत बाहरी एजेंसी से कराए जाने वाले नसबंदी (sterilisation) कार्य के लिए अलग लाइसेंस की आवश्यकता समाप्त की गई है और उन देशों तथा नियामक अधिकार-क्षेत्रों की सूची का विस्तार किया गया है, जिनकी मंजूरीयाँ भारत में नैदानिक जाँच संबंधी आवश्यकताओं से छूट दिलाने में सहायक हो सकती हैं।
- Under the proposed amendment to Rule 44, manufacturers that outsource sterilisation of their medical devices to a facility holding a valid licence under the Medical Devices Rules, 2017, will no longer have to obtain a separate loan licence for the sterilisation activity.
प्रस्तावित नियम 44 संशोधन के तहत, जो निर्माता अपने चिकित्सा उपकरणों की नसबंदी का कार्य ऐसी सुविधा को आउटसोर्स करते हैं, जिसके पास चिकित्सा उपकरण नियम, 2017 के अंतर्गत वैध लाइसेंस है, उन्हें नसबंदी गतिविधि के लिए अब अलग लोन लाइसेंस प्राप्त करने की आवश्यकता नहीं होगी।
- Earlier, manufacturers had to secure a separate loan licence even when the outsourced sterilisation facility itself held a valid licence.
पहले, आउटसोर्स की गई नसबंदी सुविधा के पास स्वयं वैध लाइसेंस होने के बावजूद निर्माताओं को अलग लोन लाइसेंस प्राप्त करना पड़ता था।
- The government said removing the duplication would reduce paperwork, administrative burden and compliance costs, particularly for manufacturers without their own sterilisation facilities.
सरकार ने कहा कि इस दोहराव को समाप्त करने से विशेष रूप से उन निर्माताओं के लिए कागजी कार्रवाई, प्रशासनिक बोझ और अनुपालन लागत कम होगी, जिनके पास अपनी स्वयं की नसबंदी सुविधाएँ नहीं हैं।
- However, a traceability requirement has been retained.
हालाँकि, ट्रेसबिलिटी (पता लगाने की क्षमता) संबंधी आवश्यकता को बरकरार रखा गया है।
- Manufacturers will have to mention the licence number of the sterilisation facility on the medical device label.
निर्माताओं को चिकित्सा उपकरण के लेबल पर नसबंदी सुविधा का लाइसेंस नंबर अंकित करना होगा।
- A six-month transition period has been provided to allow companies to modify labels, packaging and related processes.
कंपनियों को लेबल, पैकेजिंग और संबंधित प्रक्रियाओं में बदलाव करने के लिए छह महीने की संक्रमण अवधि प्रदान की गई है।
- The government said the change was intended to balance regulatory oversight with ease of doing business by retaining traceability while simplifying the licensing framework.
सरकार ने कहा कि इस बदलाव का उद्देश्य नियामक निगरानी और कारोबार करने में सुगमता के बीच संतुलन स्थापित करना है, जिसमें ट्रेसबिलिटी को बनाए रखते हुए लाइसेंसिंग ढाँचे को सरल बनाया जाएगा।
- In another change, the amendment to Rule 63 includes the European Union (EU) among the stringent regulatory jurisdictions recognised for waiving clinical investigation requirements for medical devices that do not have predicate devices in India.
एक अन्य बदलाव के तहत, नियम 63 में संशोधन यूरोपीय संघ (EU) को उन कड़े नियामक अधिकार-क्षेत्रों में शामिल करता है, जिन्हें भारत में ऐसे चिकित्सा उपकरणों के लिए नैदानिक जाँच संबंधी आवश्यकताओं से छूट देने हेतु मान्यता प्राप्त है, जिनके भारत में कोई पूर्ववर्ती समकक्ष उपकरण (predicate device) नहीं हैं।
- The provision already recognises the United States, the United Kingdom, Australia, Canada and Japan.
इस प्रावधान में पहले से ही संयुक्त राज्य अमेरिका, यूनाइटेड किंगडम, ऑस्ट्रेलिया, कनाडा और जापान को मान्यता प्राप्त है।
- With the EU now included, medical devices approved in the EU that meet the eligibility conditions can benefit from the waiver provisions in India.



अब EU को शामिल किए जाने के बाद, EU में अनुमोदित ऐसे चिकित्सा उपकरण जो पात्रता शर्तों को पूरा करते हैं, भारत में छूट संबंधी प्रावधानों का लाभ उठा सकेंगे।

- The move is expected to reduce regulatory timelines for importers and manufacturers and facilitate quicker availability of newer medical technologies to Indian patients. इस कदम से आयातकों और निर्माताओं के लिए नियामक समय-सीमा कम होने तथा भारतीय रोगियों के लिए नई चिकित्सा प्रौद्योगिकियों की शीघ्र उपलब्धता सुगम होने की उम्मीद है।

GS Paper III: Economy		25 August 2026
TOPICS COVERED		
25A8	Farmers' body terms NCDC (Amendment) Act an onslaught on federal rights of States किसान संगठन ने NCDC (संशोधन) अधिनियम को राज्यों के संघीय अधिकारों पर हमला बताया	
25A8	Stone quarries and crushers in the vicinity put Assam's semiconductor plant at risk आसपास की पत्थर खदानें और क्रशर असम के सेमीकंडक्टर संयंत्र के लिए जोखिम उत्पन्न कर रहे हैं	
25A8	Labour rights beyond the shadow of BWSSB BWSSB की छाया से परे श्रमिक अधिकार	
25A8	How the SC ruling redefined 'industry' सर्वोच्च न्यायालय के फैसले ने 'उद्योग' को कैसे पुनर्परिभाषित किया	
25A8	Did Press Note 3 relaxations help attract more FDI? क्या प्रेस नोट 3 में दी गई छूट से अधिक FDI आकर्षित करने में मदद मिली?	
25A8	SEBI unveils index for market infrastructure institutions SEBI ने बाजार अवसंरचना संस्थानों के लिए सूचकांक पेश किया	

Farmers' body terms NCDC (Amendment) Act an onslaught on federal rights of States

GS III: Economy
The Hindu Bureau
NEW DELHI

The Samyukt Kisan Morcha (SKM) on Monday said the National Cooperative Development Corporation (Amendment) Act, 2026 is an onslaught on the federal rights of States. The umbrella organisation of farmer groups, in an official statement, alleged that the new law would divert resources from the priority sector of agriculture and agriculture-based rural industrial and infrastructure development. It also alleged that the new law was framed to suit the "corporate model of urban-centric development".

The Parliament of India passed the NCDC (Amendment) Bill, 2026, in August to amend the NCDC Act of 1962, expanding the financial and operational scope of the statutory corporation. Citing the Constitution's Seventh Schedule, the SKM said "cooperation"



The law also does away with the old rule that required eligible industrial and village cooperatives to be based only in rural areas. FILE PHOTO

was in the State list, and the NCDC (Amendment) Act, 2026, is a "naked intrusion" by the Union government into the powers of the States. "As per International Cooperative Alliance principles, autonomy and independence are basic principles of cooperation along with democratic control. The law, which permits NCDC to directly intervene in the cooperative societies and take their shares openly, violates the basic principles of cooperation and facilitates centralisation of power into the

hands of the Union government," the SKM's statement read.

The SKM argued that by directly extending financial aid to cooperative societies, the NCDC would centralise cooperative institutions under the power of the Union government for political dominance over States. "This reflects the authoritarian character of the corporate class fully endorsed by BJP-RSS (Rashtriya Swayamsevak Sangh) combine," the statement added.

The SKM said the Supreme Court, through an

order in 2021, had stated that the Union government has limited powers to intervene in cooperative societies that are under State governments. The new amendment had been brought to nullify the apex court's order, it added.

The law also does away with the old rule that required eligible industrial and village cooperatives to be based only in rural locations. "Cooperatives are the soul of rural India and are capable of bringing widespread developments in the villages. The NCDC (Amendment) Act permits its operations to extend to non-agricultural sectors and abolish the stipulation of developing industries in the rural regions... means the resources meant to use for agriculture and rural industrial and infrastructure expansion will be diverted for urban-centric development suitable for corporate development model," the statement read.

25A8. Farmers' body terms NCDC (Amendment) Act an onslaught on federal rights of States

किसान संगठन ने NCDC (संशोधन) अधिनियम को राज्यों के संघीय अधिकारों पर हमला बताया

- The **Samyukt Kisan Morcha (SKM)** on Monday said the **National Cooperative Development Corporation (Amendment) Act, 2026** is an onslaught on the federal rights of States.
संयुक्त किसान मोर्चा (SKM) ने सोमवार को कहा कि राष्ट्रीय सहकारी विकास निगम (संशोधन) अधिनियम, 2026 राज्यों के संघीय अधिकारों पर हमला है।
- The umbrella organisation of farmer groups, in an official statement, alleged that the **new law would divert resources from the priority sector of agriculture and agriculture-based rural industrial and infrastructure development.**
किसान संगठनों के शीर्ष संगठन ने एक आधिकारिक बयान में आरोप लगाया कि नया कानून कृषि के प्राथमिक क्षेत्र तथा कृषि-आधारित ग्रामीण औद्योगिक और बुनियादी ढाँचा विकास से संसाधनों को अन्यत्र मोड़ देगा।
- It also alleged that the **new law was framed to suit the "corporate model of urban-centric development".**
उसने यह भी आरोप लगाया कि नया कानून "शहरी-केंद्रित विकास के कॉर्पोरेट मॉडल" के अनुरूप तैयार किया गया है।
- The **Parliament of India passed the NCDC (Amendment) Bill, 2026**, in August to amend the NCDC Act of 1962, expanding the financial and operational scope of the statutory corporation.
भारत की संसद ने NCDC (संशोधन) विधेयक, 2026 को अगस्त में पारित किया, जिसका उद्देश्य 1962 के NCDC अधिनियम में संशोधन करना और इस वैधानिक निगम के वित्तीय एवं परिचालन दायरे का विस्तार करना है।
- Citing the Constitution's Seventh Schedule**, the SKM said "cooperation" was in the State list, and the NCDC (Amendment) Act, 2026, is a "naked intrusion" by the Union government into the powers of the States.
संविधान की सातवीं अनुसूची का उल्लेख करते हुए SKM ने कहा कि "सहकारिता" राज्य सूची में है और NCDC (संशोधन) अधिनियम, 2026, राज्यों की शक्तियों में केंद्र सरकार का "खुला हस्तक्षेप" है।
- "As per International Cooperative Alliance principles, autonomy and independence are basic principles of cooperation along with democratic control.**
"अंतरराष्ट्रीय सहकारी गठबंधन के सिद्धांतों के अनुसार, लोकतांत्रिक नियंत्रण के साथ स्वायत्तता और स्वतंत्रता सहकारिता के मूल सिद्धांत हैं।
- The law, which permits NCDC to directly intervene in the cooperative societies and take their shares openly, violates the basic principles of cooperation and facilitates centralisation of power into the hands of the Union government," the SKM's statement read.
SKM के बयान में कहा गया, "यह कानून NCDC को सहकारी समितियों में सीधे हस्तक्षेप करने और खुले तौर पर उनके शेयर लेने की अनुमति देता है, जो सहकारिता के मूल सिद्धांतों का उल्लंघन करता है और सत्ता के केंद्र सरकार के हाथों में केंद्रीकरण को सुगम बनाता है।"
- The SKM argued that **by directly extending financial aid to cooperative societies, the NCDC would centralise cooperative institutions under the power of the Union government for political dominance over States.**
SKM ने तर्क दिया कि सहकारी समितियों को सीधे वित्तीय सहायता प्रदान करके NCDC सहकारी संस्थाओं को केंद्र सरकार के अधिकार के अधीन केंद्रीकृत कर देगा, ताकि राज्यों पर राजनीतिक प्रभुत्व स्थापित किया जा सके।
- "This reflects the authoritarian character of the corporate class fully endorsed by BJP-RSS (Rashtriya Swayamsevak Sangh) combine," the statement added.
बयान में आगे कहा गया, "यह BJP-RSS (राष्ट्रीय स्वयंसेवक संघ) गठजोड़ द्वारा पूर्णतः समर्थित कॉर्पोरेट वर्ग के अधिनायकवादी चरित्र को दर्शाता है।"

- The SKM said the Supreme Court, through an order in 2021, had stated that the Union government has limited powers to intervene in cooperative societies that are under State governments.
SKM ने कहा कि सर्वोच्च न्यायालय ने 2021 में एक आदेश के माध्यम से कहा था कि राज्य सरकारों के अधीन आने वाली सहकारी समितियों में हस्तक्षेप करने के लिए केंद्र सरकार की शक्तियाँ सीमित हैं।
- The new amendment had been brought to nullify the apex court's order, it added.
उसने आगे कहा कि नया संशोधन सर्वोच्च न्यायालय के आदेश को निष्प्रभावी करने के लिए लाया गया है।
- The law also does away with the old rule that required eligible industrial and village cooperatives to be based only in rural locations.
यह कानून उस पुराने नियम को भी समाप्त करता है, जिसके तहत पात्र औद्योगिक और ग्राम सहकारी समितियों का केवल ग्रामीण क्षेत्रों में स्थित होना आवश्यक था।
- "Cooperatives are the soul of rural India and are capable of bringing widespread developments in the villages.
"सहकारी समितियाँ ग्रामीण भारत की आत्मा हैं और वे गाँवों में व्यापक विकास लाने में सक्षम हैं।
- The NCDC (Amendment) Act permits its operations to extend to non-agricultural sectors and abolishes the stipulation of developing industries in the rural regions... means the resources meant to use for agriculture and rural industrial and infrastructure expansion will be diverted for urban-centric development suitable for corporate development model," the statement read.
बयान में कहा गया, "NCDC (संशोधन) अधिनियम अपने परिचालन को गैर-कृषि क्षेत्रों तक विस्तारित करने की अनुमति देता है और ग्रामीण क्षेत्रों में उद्योगों के विकास की शर्त को समाप्त करता है... इसका अर्थ है कि कृषि तथा ग्रामीण औद्योगिक और बुनियादी ढाँचे के विस्तार के लिए निर्धारित संसाधनों को कॉर्पोरेट विकास मॉडल के अनुकूल शहरी-केंद्रित विकास के लिए मोड़ दिया जाएगा।"

Stone quarries and crushers in the vicinity put Assam's semiconductor plant at risk

GS III: Economy
Rahul Karmakar
GUWAHATI

Dust-producing stone quarries and crushers in the vicinity could cripple Assam's semiconductor unit, a signature pet project of Prime Minister Narendra Modi, before it can start, an environmental activist has warned.

The ₹27,000 crore Tata Semiconductor Assembly and Test (TSAT) facility is being developed in Morigaon district's Jagiroad, about 55 km east of Guwahati. It is a major component of India's chip-making ambitions and is linked to the vision of building a self-reliant ecosystem under the India Semiconductor Mission (ISM).

Over 60% of the work at the TSAT facility, coming up where a unit of the Hin-



Chief Minister Himanta Biswa Sarma inspecting progress of the semiconductor project at Jagiroad near Guwahati. FILE PHOTO

dustan Paper Corporation once stood, is complete.

According to the ISM guidelines, a semiconductor plant requires ISO Class 1 to 5 vibration-damped clean-rooms to prevent microscopic dust contamination, and millions of gallons of ultra-pure water daily for wafer-rising, chemical processing, and cooling.

However, stone quarries

and crushers within a 5 km radius of the facility have reportedly been covering the Jagiroad area with a blanket of dust. Local organisations said excavation and blasting carried out in the hills of Sonaikuchi Reserve Forest (near the semiconductor plant) have caused flash floods and threatened public health.

Raising concerns over

the potential impact of dust and pollution on Assam's flagship industrial project, Golaghat district-based environmental activist Rohit Choudhury urged the State government to enforce restrictions on polluting industries and activities within a 15-km radius of the TSAT facility.

RTI response

In a letter to the Assam Chief Secretary on August 22, he cited an RTI reply from the State's Industries, Commerce, and Public Enterprise Department and an earlier government directive to argue that exemption granted to pre-existing and pipeline polluting industries could undermine the very objective of protecting the proposed Ratan Tata Electronic City at Jagiroad.

25A8. Stone quarries and crushers in the vicinity put Assam's semiconductor plant at risk

आसपास की पत्थर खदानें और क्रशर असम के सेमीकंडक्टर संयंत्र के लिए जोखिम उत्पन्न कर रहे हैं

- Dust-producing stone quarries and crushers in the vicinity could cripple Assam's semiconductor unit, a signature pet project of Prime Minister Narendra Modi, before it can start, an environmental activist has warned.
एक पर्यावरण कार्यकर्ता ने चेतावनी दी है कि आसपास स्थित धूल उत्पन्न करने वाली पत्थर खदानें और क्रशर असम की सेमीकंडक्टर इकाई को, जो प्रधानमंत्री नरेंद्र मोदी की प्रमुख परियोजनाओं में से एक है, शुरू होने से पहले ही निष्क्रिय कर सकते हैं।
- The ₹27,000 crore **Tata Semiconductor Assembly and Test (TSAT)** facility is being developed in Morigaon district's Jagiroad, about 55 km east of Guwahati.
₹27,000 करोड़ की **Tata Semiconductor Assembly and Test (TSAT)** सुविधा गुवाहाटी से लगभग 55 किलोमीटर पूर्व स्थित मोरीगाँव जिले के जागीरोड में विकसित की जा रही है।
- It is a major component of India's chip-making ambitions and is linked to the vision of building a self-reliant ecosystem under the **India Semiconductor Mission (ISM)**.
यह भारत की चिप-निर्माण महत्वाकांक्षाओं का एक प्रमुख घटक है और **India Semiconductor Mission (ISM)** के तहत आत्मनिर्भर पारिस्थितिकी तंत्र विकसित करने की दृष्टि से जुड़ा हुआ है।
- Over 60% of the work at the TSAT facility, coming up where a unit of the Hindustan Paper Corporation once stood, is complete.
TSAT सुविधा का 60% से अधिक निर्माण कार्य पूरा हो चुका है; यह सुविधा उस स्थान पर बनाई जा रही है जहाँ कभी **Hindustan Paper Corporation** की एक इकाई स्थित थी।
- According to the **ISM guidelines**, a semiconductor plant requires ISO Class 1 to 5 vibration-damped clean rooms to prevent microscopic dust contamination, and millions of gallons of ultra-pure water daily for wafer-rising, chemical processing, and cooling.
ISM दिशानिर्देशों के अनुसार, एक सेमीकंडक्टर संयंत्र में सूक्ष्म धूल से होने वाले संदूषण को रोकने के लिए **ISO Class 1 से 5 कंपन-नियंत्रित क्लीन रूम** आवश्यक होते हैं तथा वेफर रिसिंग, रासायनिक प्रसंस्करण और शीतलन के लिए प्रतिदिन लाखों गैलन अति-शुद्ध जल की आवश्यकता होती है।
- However, stone quarries and crushers within a 5 km radius of the facility have reportedly been covering the Jagiroad area with a blanket of dust.
हालाँकि, सुविधा के 5 किलोमीटर के दायरे में स्थित पत्थर की खदानें और क्रशर कथित रूप से जागीरोड क्षेत्र को धूल की एक मोटी परत से ढक रहे हैं।
- Local organisations said excavation and blasting carried out in the hills of **Sonaikuchi Reserve Forest** (near the semiconductor plant) have caused flash floods and threatened public health.
स्थानीय संगठनों ने कहा कि **सेमीकंडक्टर संयंत्र के निकट सोनाइकुची आरक्षित वन** की पहाड़ियों में की गई खुदाई और विस्फोटों के कारण अचानक बाढ़ आई है और सार्वजनिक स्वास्थ्य के लिए खतरा उत्पन्न हुआ है।
- Raising concerns over the potential impact of dust and pollution on Assam's flagship industrial project, Golaghat district-based environmental activist Rohit Choudhury urged the State government to enforce restrictions on polluting industries and activities within a 15-km radius of the TSAT facility.
असम की प्रमुख औद्योगिक परियोजना पर धूल और प्रदूषण के संभावित प्रभाव को लेकर चिंता जताते हुए, गोलाघाट जिले के पर्यावरण कार्यकर्ता **रोहित चौधरी** ने राज्य सरकार से TSAT सुविधा के 15 किलोमीटर के दायरे में प्रदूषणकारी उद्योगों और गतिविधियों पर प्रतिबंध लागू करने का आग्रह किया।

RTI response

RTI का उत्तर



- In a letter to the Assam Chief Secretary on August 22, he cited an RTI reply from the State's Industries, Commerce, and Public Enterprise Department and an earlier government directive to argue that exemption granted to pre-existing and pipeline polluting industries could undermine the very objective of protecting the proposed **Ratan Tata Electronic City** at Jagir Road.

22 अगस्त को असम के मुख्य सचिव को लिखे एक पत्र में उन्होंने राज्य के उद्योग, वाणिज्य और सार्वजनिक उद्यम विभाग से प्राप्त RTI उत्तर तथा सरकार के एक पूर्व निर्देश का हवाला देते हुए तर्क दिया कि पहले से मौजूद और निर्माणाधीन प्रदूषणकारी उद्योगों को दी गई छूट जागीरोड में प्रस्तावित **Ratan Tata Electronic City** की सुरक्षा के मूल उद्देश्य को ही कमजोर कर सकती है।

How the SC ruling redefined 'industry'

The majority held that 'industry' under the IRC must be interpreted based on its own specific text and statutory context, unburdened by the legacy of the 1978 precedent. Justices B.V. Nagarathna, Dipankar Datta, and Ujjal Bhuyan formed the minority view that a re-evaluation of the 1978 judgment was 'unwarranted'

GS III: Economy

EXPLAINER

Krishnadas Rajagopal

The story so far:

A nine-member Constitution Bench of the Supreme Court of India recently held that the nearly half-century-old interpretation of the term 'industry' will not automatically apply to the Industrial Relations Code (IRC), 2020, which came into force in November 2025 and replaced the legacy Industrial Disputes Act, 1947. This decision effectively severs the new labour regime from an expansive, worker-friendly precedent set in 1978, establishing a clean slate for future labour law disputes.

The scope of 'industry'

To understand the significance of this judgment, one must look back to the historic 1978 ruling in *Bangalore Water Supply and Sewerage Board v. R. Rajappa*.

Authorised by Justice V.R. Krishna Iyer, that seven-judge Bench significantly broadened the definition of Section 2(j) under the 1947 Act. The 1978 judgment introduced the triple test, which classified systematic or organised operations based on employer-employee cooperation to provide goods or services for consumers as an industry.

This sweeping definition brought various activities, including hospitals, educational institutions, and municipalities, under the legal definition of an industry. The only exclusions were core sovereign functions of the state, such as defence, judiciary, and law enforcement. For nearly half a century, this judgment had enabled workers across diverse sectors to access legal recourse, enforce labour rights, and engage in collective bargaining against unfair practices.

The crux of the judgment

The Constitution Bench, led by Chief Justice of India Surya Kant, addressed the



Word of caution: Justice B.V. Nagarathna stressed that altering the definition of industry could create uncertainty and disrupt industrial peace. AFP

question whether the 1978 definition of 'industry' should govern Section 2(p) of the IRC.

The majority held that 'industry' under the IRC must be interpreted based on its own specific text and statutory context, unburdened by the legacy of the 1978 precedent. Chief Justice Kant noted that while the core principles of the 1978 ruling had stood the test of time, the 1978 judgment would no longer act as the 'sheet anchor' for interpreting 'industry' under the IRC.

Pending cases under the 1947 Act will continue to be governed by the 1978 Bangalore Water Supply precedent. All future disputes governed by the new Industrial Relations Code will be interpreted afresh.

Differing points of view on the Bench

The nine-judge Bench reflected nuanced positions on the balance between worker

protections and modern economic realities.

An opinion authored by Chief Justice Kant, and shared with Justices Satish Chandra Sharma, Alok Aradhe and Vipul M. Pancholi, held that the 'triple test' of 1978 Bangalore Water Supply and Sewerage Board case judgment will continue to be applied to pending industrial disputes.

The Chief Justice, however, found that the 1978 verdict could have been articulated differently and set down a 'reformulated' triple test, which would operate prospectively. However, the possibility of using the recast triple test to determine if an operation was an industry or not under Section 2(j) of the repealed 1947 Act is non-existent as the new labour law, The Industrial Relations Code 2020, has already come into force. The Bench has unanimously made it clear that 'industry' under the 2020 Code will be

'interpreted independently' to align with contemporary industrial dynamics, and not be burdened by the 1978 verdict.

Justices B.V. Nagarathna, Dipankar Datta, and Ujjal Bhuyan formed the minority view on the Bench that a re-evaluation of the 1978 judgment was 'unwarranted'. Justice Nagarathna cautioned that altering the definition could create uncertainty and disrupt industrial peace.

Justice Nagarathna argued that the 1978 judgment had offered a broad-based definition of 'industry'. She highlighted that the judgment was a child of its time, when public sector workers were transitioning into private employment due to a changing industrial landscape inspired by privatisation, liberalisation and globalisation of the Indian economy.

Justice Joymalya Bagchi supported the need for the reference to the nine-judge Bench, but expressed his inability to agree to a 'reformulated' triple test. Justice Bagchi said an apprehension that the triple test conceived in the 1978 judgment converted any organised activity into an industry was misplaced.

The judge agreed with Justice Nagarathna that even the state could enter into seemingly non-sovereign functions. The concept of 'sovereignty' has itself undergone changes with the passage of time. Absence of a profit motive did not take an activity outside the realm of industry, he observed. He said it was unwise to 're-draft' Justice Iyer's triple test. Justice Datta echoed the need for judicial consistency. Sharing his opinion with Justice Bhuyan, Justice Datta remarked that institutional credibility relies on respecting finality rather than perpetuating doubt over established law.

A step towards a new era

By severing the IRC from the 1978 precedent, the Supreme Court has set the stage for a new chapter in Indian labour law, leaving it to future courts to decide where the lines between employer authority and worker protections will ultimately be drawn.

THE GIST

A nine-member Constitution Bench of the Supreme Court recently held that the nearly half-century-old interpretation of the term 'industry' will not automatically apply to the Industrial Relations Code, 2020.

A 1978 ruling had introduced the triple test, which classified organised operations based on employer-employee cooperation to provide goods or services for consumers as an industry. This judgment had enabled workers across diverse sectors to enforce labour rights.

How the SC ruling redefined 'industry'

सर्वोच्च न्यायालय के फैसले ने 'उद्योग' को कैसे पुनर्परिभाषित किया

- A nine-member Constitution Bench of the Supreme Court of India recently held that the nearly half-century-old interpretation of the term 'industry' will not automatically apply to the Industrial Relations Code (IRC), 2020, which came into force in November 2025 and replaced the legacy Industrial Disputes Act, 1947.

भारत के सर्वोच्च न्यायालय की नौ-सदस्यीय संविधान पीठ ने हाल ही में निर्णय दिया कि 'उद्योग' शब्द की लगभग आधी सदी पुरानी व्याख्या औद्योगिक संबंध संहिता (IRC), 2020 पर स्वतः लागू नहीं होगी, जो नवंबर 2025 में लागू हुई और जिसने पुराने औद्योगिक विवाद अधिनियम, 1947 का स्थान लिया।

- This decision effectively severs the new labour regime from an expansive, worker-friendly precedent set in 1978, establishing a clean slate for future labour law disputes. यह निर्णय प्रभावी रूप से नई श्रम व्यवस्था को 1978 में स्थापित एक व्यापक और श्रमिक-अनुकूल न्यायिक मिसाल से अलग करता है तथा भविष्य के श्रम कानून विवादों के लिए एक नई आधारभूमि तैयार करता है।

The scope of 'industry'

'उद्योग' का दायरा

- To understand the significance of this judgment, one must look back to the historic 1978 ruling in **Bangalore Water Supply and Sewerage Board v. R. Rajappa**. इस निर्णय के महत्व को समझने के लिए 1978 के ऐतिहासिक **Bangalore Water Supply and Sewerage Board v. R. Rajappa** फैसले पर ध्यान देना आवश्यक है।
- Authored by Justice V.R. Krishna Iyer, that seven-judge Bench significantly broadened the definition of Section 2(j) under the 1947 Act. न्यायमूर्ति वी.आर. कृष्ण अय्यर द्वारा लिखे गए इस सात-सदस्यीय पीठ के निर्णय ने 1947 के अधिनियम की धारा 2(j) के अंतर्गत 'उद्योग' की परिभाषा को महत्वपूर्ण रूप से व्यापक बनाया।
- The 1978 judgment introduced the triple test, which classified systematic or organised operations based on employer-employee cooperation to provide goods or services for consumers as an industry. 1978 के निर्णय ने ट्रिपल टेस्ट प्रस्तुत किया, जिसके तहत उपभोक्ताओं को वस्तुओं या सेवाओं की आपूर्ति करने के लिए नियोक्ता-कर्मचारी सहयोग पर आधारित व्यवस्थित या संगठित गतिविधियों को उद्योग के रूप में वर्गीकृत किया गया।
- This sweeping definition brought various activities, including hospitals, educational institutions, and municipalities, under the legal definition of an industry. इस व्यापक परिभाषा ने अस्पतालों, शैक्षणिक संस्थानों और नगरपालिकाओं सहित विभिन्न गतिविधियों को 'उद्योग' की कानूनी परिभाषा के अंतर्गत ला दिया।
- The only exclusions were core sovereign functions of the state, such as defence, judiciary, and law enforcement. इसमें केवल राज्य के मूल संप्रभु कार्यों, जैसे रक्षा, न्यायपालिका और कानून-प्रवर्तन को बाहर रखा गया।
- For nearly half a century, this judgment had enabled workers across diverse sectors to access legal recourse, enforce labour rights, and engage in collective bargaining against unfair practices. लगभग आधी सदी तक इस निर्णय ने विभिन्न क्षेत्रों के श्रमिकों को कानूनी उपचार प्राप्त करने, श्रम अधिकारों को लागू कराने और अनुचित प्रथाओं के विरुद्ध सामूहिक सौदेबाजी करने में सक्षम बनाया।

The crux of the judgment

निर्णय का सार

- The Constitution Bench, led by **Chief Justice of India Surya Kant**, addressed the question **whether the 1978 definition of 'industry' should govern Section 2(p) of the IRC.**
भारत के मुख्य न्यायाधीश सूर्यकांत के नेतृत्व वाली संविधान पीठ ने इस प्रश्न पर विचार किया कि क्या 1978 में दी गई 'उद्योग' की परिभाषा IRC की धारा 2(p) को नियंत्रित करनी चाहिए।
- The **majority held that 'industry' under the IRC must be interpreted based on its own specific text and statutory context, unburdened by the legacy of the 1978 precedent.**
बहुमत ने माना कि IRC के अंतर्गत 'उद्योग' की व्याख्या उसके स्वयं के विशिष्ट पाठ और वैधानिक संदर्भ के आधार पर की जानी चाहिए और 1978 की मिसाल की विरासत से उसे प्रभावित नहीं किया जाना चाहिए।
- Chief Justice Kant noted that while the core principles of the 1978 ruling had stood the test of time, the 1978 judgment would no longer act as the "sheet anchor" for interpreting 'industry' under the IRC.
मुख्य न्यायाधीश कांत ने कहा कि यद्यपि 1978 के निर्णय के मूल सिद्धांत समय की कसौटी पर खरे उतरे हैं, फिर भी 1978 का निर्णय IRC के अंतर्गत 'उद्योग' की व्याख्या के लिए अब "मुख्य आधार" के रूप में कार्य नहीं करेगा।
- Pending cases under the 1947 Act will continue to be governed by the 1978 **Bangalore Water Supply** precedent.
1947 के अधिनियम के अंतर्गत लंबित मामलों को 1978 की **Bangalore Water Supply** न्यायिक मिसाल के अनुसार ही निर्धारित किया जाता रहेगा।
- All future disputes governed by the new **Industrial Relations Code** will be interpreted afresh.
नई औद्योगिक संबंध संहिता द्वारा नियंत्रित सभी भविष्य के विवादों की नए सिरे से व्याख्या की जाएगी।

Differing points of view on the Bench

पीठ में विभिन्न दृष्टिकोण

- The nine-judge Bench reflected nuanced positions on the balance between worker protections and modern economic realities.
नौ-सदस्यीय पीठ ने श्रमिक संरक्षण और आधुनिक आर्थिक वास्तविकताओं के बीच संतुलन को लेकर सूक्ष्म और भिन्न दृष्टिकोण प्रस्तुत किए।
- An opinion authored by Chief Justice Kant, and shared with Justices Satish Chandra Sharma, Alok Aradhe and Vipul M. Pancholi, held that the 'triple test' of 1978 **Bangalore Water Supply and Sewerage Board** case judgment will continue to be applied to pending industrial disputes.
मुख्य न्यायाधीश कांत द्वारा लिखी गई और न्यायमूर्ति सतीश चंद्र शर्मा, आलोक अराधे तथा विपुल एम. पंचोली द्वारा साझा की गई राय में कहा गया कि 1978 के **Bangalore Water Supply and Sewerage Board** मामले में निर्धारित 'ट्रिपल टेस्ट' को लंबित औद्योगिक विवादों में लागू किया जाता रहेगा।
- The Chief Justice, however, found that the 1978 verdict could have been articulated differently and set down a "reformulated" triple test, which would operate prospectively.
हालाँकि, मुख्य न्यायाधीश ने माना कि 1978 के फैसले को अलग तरीके से व्यक्त किया जा सकता था और उन्होंने एक "पुनर्गठित" ट्रिपल टेस्ट निर्धारित किया, जो भविष्य में लागू होगा।
- However, the possibility of using the recast triple test to determine if an operation was an industry or not **under Section 2(j) of the repealed 1947 Act** is non-existent as the new labour law, The Industrial Relations Code 2020, has already come into force.
हालाँकि, निरस्त किए जा चुके 1947 के अधिनियम की धारा 2(j) के तहत किसी गतिविधि को उद्योग मानने या न मानने के लिए पुनर्गठित ट्रिपल टेस्ट का उपयोग करने की संभावना अब नहीं है, क्योंकि नया श्रम कानून, औद्योगिक संबंध संहिता 2020, पहले ही लागू हो चुका है।
- The Bench has unanimously made it clear that 'industry' under the 2020 Code will be **"interpreted independently"** to align with contemporary industrial dynamics, and not be burdened by the 1978 verdict.
पीठ ने सर्वसम्मति से स्पष्ट किया है कि 2020 की संहिता के अंतर्गत 'उद्योग' की "स्वतंत्र रूप से व्याख्या" की

जाएगी, ताकि इसे समकालीन औद्योगिक गतिशीलता के अनुरूप रखा जा सके और 1978 के फैसले के भार से मुक्त रखा जा सके।

- Justices B.V. Nagarathna, Dipankar Datta, and Ujjal Bhuyan formed the minority view on the Bench that a re-evaluation of the 1978 judgment was “unwarranted”.
न्यायमूर्ति बी.वी. नागरत्ना, दीपांकर दत्ता और उज्जल भुइयाँ ने पीठ में अल्पमत का दृष्टिकोण अपनाया कि 1978 के निर्णय का पुनर्मूल्यांकन “अनावश्यक” था।
- Justice Nagarathna cautioned that altering the definition could create uncertainty and disrupt industrial peace.
न्यायमूर्ति नागरत्ना ने चेतावनी दी कि परिभाषा में बदलाव अनिश्चितता उत्पन्न कर सकता है और औद्योगिक शांति को बाधित कर सकता है।
- Justice Nagarathna argued that the 1978 judgment had offered a broad-based definition of ‘industry’.
न्यायमूर्ति नागरत्ना ने तर्क दिया कि 1978 के निर्णय ने ‘उद्योग’ की व्यापक परिभाषा प्रस्तुत की थी।
- She highlighted that the judgment was a child of its time, when public sector workers were transitioning into private employment due to a changing industrial landscape inspired by privatisation, liberalisation and globalisation of the Indian economy.
उन्होंने रेखांकित किया कि यह निर्णय अपने समय की परिस्थितियों का परिणाम था, जब भारतीय अर्थव्यवस्था के निजीकरण, उदारीकरण और वैश्वीकरण से प्रेरित बदलते औद्योगिक परिदृश्य के कारण सार्वजनिक क्षेत्र के श्रमिक निजी रोजगार की ओर संक्रमण कर रहे थे।
- Justice Joymalya Bagchi supported the need for the reference to the nine-judge Bench, but expressed his inability to agree to a “reformulated” triple test.
न्यायमूर्ति जॉयमाल्या बागची ने मामले को नौ-सदस्यीय पीठ के पास भेजने की आवश्यकता का समर्थन किया, लेकिन “पुनर्गठित” ट्रिपल टेस्ट से सहमत होने में अपनी असमर्थता व्यक्त की।
- Justice Bagchi said an apprehension that the triple test conceived in the 1978 judgment converted any organised activity into an industry was misplaced.
न्यायमूर्ति बागची ने कहा कि यह आशंका गलत थी कि 1978 के निर्णय में परिकल्पित ट्रिपल टेस्ट ने प्रत्येक संगठित गतिविधि को उद्योग में बदल दिया था।
- The judge agreed with Justice Nagarathna that even the state could enter into seemingly non-sovereign functions.
न्यायाधीश ने न्यायमूर्ति नागरत्ना से सहमति जताई कि राज्य भी ऐसे कार्यों में प्रवेश कर सकता है जो पहली दृष्टि में गैर-संप्रभु कार्य प्रतीत होते हैं।
- The concept of ‘sovereignty’ has itself undergone changes with the passage of time.
समय के साथ ‘संप्रभुता’ की अवधारणा में भी स्वयं परिवर्तन आया है।
- Absence of a profit motive did not take an activity outside the realm of industry, he observed.
उन्होंने कहा कि लाभ के उद्देश्य का अभाव किसी गतिविधि को उद्योग के दायरे से बाहर नहीं करता।
- He said it was unwise to “re-draft” Justice Iyer’s triple test.
उन्होंने कहा कि न्यायमूर्ति अय्यर के ट्रिपल टेस्ट को “पुनः तैयार करना” उचित नहीं था।
- Justice Datta echoed the need for judicial consistency.
न्यायमूर्ति दत्ता ने न्यायिक निरंतरता की आवश्यकता को दोहराया।
- Sharing his opinion with Justice Bhuyan, Justice Datta remarked that institutional credibility relies on respecting finality rather than perpetuating doubt over established law.
न्यायमूर्ति भुइयाँ के साथ अपनी राय साझा करते हुए, न्यायमूर्ति दत्ता ने कहा कि संस्थागत विश्वसनीयता स्थापित कानून के संबंध में संदेह को बनाए रखने के बजाय अंतिमता का सम्मान करने पर निर्भर करती है।

A step towards a new era

एक नए युग की ओर कदम

- By severing the IRC from the 1978 precedent, the Supreme Court has set the stage for a new chapter in Indian labour law, leaving it to future courts to decide where the lines between



employer authority and worker protections will ultimately be drawn.

IRC को 1978 की न्यायिक मिसाल से अलग करके, **सर्वोच्च न्यायालय** ने भारतीय श्रम कानून में एक नए अध्याय की नींव रख दी है और अब यह भविष्य की अदालतों पर निर्भर करेगा कि **नियोक्ता के अधिकार और श्रमिक संरक्षण** के बीच अंतिम सीमाएँ कहाँ निर्धारित की जाती हैं।

Labour rights beyond the shadow of BWSSB

ISS III: Economy

On August 20, 2026, the Supreme Court of India delivered its judgment on the Reference made on the correctness of the judgment in Bangalore Water Supply and Sewerage Board vs A. Rajappa (BWSSB), 1978, particularly the test for determining whether an activity falls within the definition of "industry" under Section 2(j) of the Industrial Disputes (ID) Act, 1947. A brief history of the Reference. In *State of U.P. vs Jai Bir Singh* (2005), 5 SCC 1, a five-judge Bench referred the seven-judge Bench decision in BWSSB for reconsideration. A seven-judge Bench was constituted and, by order dated January 2, 2017, referred the matter to a nine-judge Bench. By order dated February 16 2026, the nine-judge Bench framed four questions concerning the correctness of the test in BWSSB, the impact of the 1982 Amendment and the Industrial Relations Code (IRC), 2020, whether government welfare activities count as "industrial activities," and the scope of "sovereign functions" under Section 2(j). By the time the questions were framed, the IRC, 2020 had been brought into force from November 21, 2025, also repealing the ID Act, 1947. By virtue of this repeal, the Reference had effectively been rendered otiose. Even so, the nine-judge Bench proceeded to hear the matter.

Judges and reactions

Of the nine judges, Justice D. Datta and Justice U. Bhuyan held that "the reference requires no answer". Justice B.V. Nagarathna found the exercise "unnecessary and only academic in nature". Justice P.S. Narasimha held that "an authoritative interpretation of the definition industry" was compelling at the time of the Reference", but "such a determination has now become unnecessary, with the repeal of the said provision".

Importantly, even the opinion written by the Chief Justice of India (CJI) for four judges acknowledges this. Even as it sought to re-formulate the Triple Test laid down by BWSSB, it describes its reformulation of the Triple Test as merely "hypothetical", and expressly states that it will not apply to any pending case. The ID Act has been repealed, and there can be no future cases under it either. Even the reformulated test framed by four judges was prospective and would not alter pending disputes, which would continue to be governed by the BWSSB framework, and since the ID Act, 1947 has been repealed, there can be no future cases under it.

The four questions framed on February 16, 2026 concern only Section 2(j) of the ID Act. The interpretation of Section 2(p) of the IRC was not before the Court.

The CJI, writing for four judges, recognises that the IRC "is an independent legislative enactment and must be interpreted on its own terms, having



V. Gopala Gowda

Former Judge of the Supreme Court of India



Maitreyi Krishnan

Practising advocate

regard to its text, scheme, and object". At the same time, the same opinion says, in view of the reformulated Triple Test in their opinion, the principles laid down in BWSSB shall not be regarded as the "sheet anchor for the interpretation of the IRC should such a question arise in the future". While on the one hand it refuses to construe a provision, in the same breath it rules on how BWSSB, as a precedent, may not be used to construe it. This in itself is a form of construing it, and is an attempt to police the tools available for a future interpretive exercise.

Justice Narasimha also says that it is important to ensure that the interpretation of the definition of "Industry" under the IRC "is not burdened by the existing interpretations" under the ID Act, 1947. Justice Nagarathna's opinion on this issue is important. While affirming the judgment in BWSSB, she recognised that the extent to which its reasoning carries over to the interpretation of "industry" under the IRC is to be tested by comparing the actual text of the two provisions. Such a comparison can be meaningfully undertaken only in a case arising under Section 2(p), and not in the abstract.

The interpretation of the definition of industry under the IRC cannot be seen in abstract and would have to be understood in light of the rich jurisprudence that has developed with BWSSB and after.

The importance of BWSSB

There is a deeper thread – an anxiety about the judgment in BWSSB, which needs to be addressed. This anxiety is what gave rise to the Reference itself. The five-judge Bench in *Jai Bir Singh* (2005) questioned the correctness of BWSSB, observing that its "worker-oriented approach" was "unmindful of the interests of the employer or owner of the industry".

This finds an echo in the CJI's opinion. Having hypothetically reformulated the tests in BWSSB, and having stated that BWSSB shall not be regarded as the sheet anchor for the interpretation of the IRC, the opinion of the CJI, for four judges, speaks of the judgment finally lifting a "burden" and permitting the law to "move forward unencumbered".

This again finds echo in the judgment of Justice Narasimha, who states that the interpretation of the definition of "industry" under the IRC, 2020 "must be freed of the bondage of ratio" in BWSSB. In this light, it is essential to recognise what "burden" of BWSSB causes such anxiety.

There can be no dispute about the asymmetry between capital and labour, or the imbalance in their respective bargaining power. Justice Bagchi recognises this when he reminds us that one must always "bear in mind that a workman seldom enters the field of negotiation as an

equal...." The Constitution recognises this, with Article 42 requiring the state to secure "just and humane conditions of work," while Article 23 prohibits "traffic in human beings", "begar, and other forms of forced labour". The conditions that necessitated these protections have simply changed form.

Labour legislation recognised this extreme imbalance and sought to ensure a modicum of bare protection. This is not a "pro-worker" understanding of the law, but just a check against the imbalance tilting toward the employer. The fact that such bare protection is described as "pro-worker" says less about the protection than about where the baseline has been unfortunately naturalised. While the freedom to dismiss without explanation is part of the ordinary run of business, a requirement to explain is called a burden. The warning of Dr. B.R. Ambedkar rings true – liberty from the control of the state is another name for "the dictatorship of the private employer".

The 13-judge Bench decision in *Kesavananda Bharati* (1973) recognised that justice, social, economic and political, formed part of the Constitution's basic structure. The underlying inequality between employer and workman has not narrowed since 1947. In fact, the policy of "ease of doing business" has widened it. This is exactly why the social justice vision of Part IV of the Constitution calls for more protection now, not less.

The issue of labour rights

The ID Act, 1947 – to maintain industrial peace – provided basic protections and a forum for adjudicating disputes, where the labour courts and tribunals have been given wide powers to adjudicate on the same. To be excluded from its definition of "industry" is to be excluded from that bare minimum protection, and from the remedy available under it. The significance of BWSSB's definition of "industry" lay in ensuring that this protection reached everyone the Act was meant to cover, rather than excluding workers from the one recourse the law offered them.

Given the overarching objective of industrial peace, there was never a reason to treat BWSSB's interpretation as a burden rather than as the Act doing precisely what it was designed to do. The anxiety surrounding it has always rested on the same premise: an eagerness to remove workers from the protection of the law.

As the ID Act stands repealed and the IRC takes its place, it is necessary to return to the promise of social justice in the Constitution. The labour codes that have replaced the ID Act, including the IRC, are built on a premise of exclusion – narrowing who falls within the protection of the law – and will have to answer to that mandate.

25A8. Labour rights beyond the shadow of BWSSB

BWSSB की छाया से परे श्रमिक अधिकार

- On August 20, 2026, the Supreme Court of India delivered its judgment on the Reference made on the correctness of the judgment in Bangalore Water Supply and Sewerage Board vs A. Rajappa (BWSSB), 1978, particularly the test for determining whether an activity falls within the definition of "industry" under Section 2(j) of the Industrial Disputes (ID) Act, 1947. 20 अगस्त, 2026 को **भारत के सर्वोच्च न्यायालय** ने *Bangalore Water Supply and Sewerage Board vs A. Rajappa (BWSSB), 1978* के निर्णय की शुद्धता के संबंध में किए गए **Reference (संदर्भ)** पर अपना निर्णय सुनाया, विशेष रूप से इस प्रश्न पर कि किसी गतिविधि को **औद्योगिक विवाद अधिनियम (ID**

Act), 1947 की धारा 2(j) के अंतर्गत “उद्योग” की परिभाषा में शामिल करने के लिए कौन-सा परीक्षण लागू किया जाना चाहिए।

A brief history of the Reference.

संदर्भ का संक्षिप्त इतिहास।

- In State of U.P. vs Jai Bir Singh (2005), 5 SCC 1, a five-judge Bench referred the seven-judge Bench decision in BWSSB for reconsideration.
State of U.P. vs Jai Bir Singh (2005), 5 SCC 1 में पाँच न्यायाधीशों की पीठ ने BWSSB में सात न्यायाधीशों की पीठ के निर्णय को पुनर्विचार के लिए संदर्भित किया।
- A seven-judge Bench was constituted and, by order dated January 2, 2017, referred the matter to a nine-judge Bench.
सात न्यायाधीशों की पीठ गठित की गई और 2 जनवरी, 2017 के आदेश द्वारा मामले को नौ न्यायाधीशों की पीठ को संदर्भित कर दिया गया।
- By order dated February 16, 2026, the nine-Judge Bench framed four questions concerning the correctness of the test in BWSSB, the impact of the 1982 Amendment and the Industrial Relations Code (IRC), 2020, whether government welfare activities count as “industrial activities,” and the scope of “sovereign functions” under Section 2(j).
16 फरवरी, 2026 के आदेश द्वारा नौ न्यायाधीशों की पीठ ने चार प्रश्न निर्धारित किए, जो BWSSB में निर्धारित परीक्षण की शुद्धता, 1982 के संशोधन और औद्योगिक संबंध संहिता (IRC), 2020 के प्रभाव, सरकारी कल्याणकारी गतिविधियों को “औद्योगिक गतिविधियों” के रूप में माने जाने तथा धारा 2(j) के अंतर्गत “संप्रभु कार्यों” के दायरे से संबंधित थे।
- By the time the questions were framed, the IRC, 2020 had been brought into force from November 21, 2025, also repealing the ID Act, 1947.
जब तक ये प्रश्न निर्धारित किए गए, तब तक IRC, 2020 को 21 नवंबर, 2025 से लागू किया जा चुका था और इसके साथ ID Act, 1947 को निरस्त भी कर दिया गया था।
- By virtue of this repeal, the Reference had effectively been rendered otiose.
इस निरसन के कारण संदर्भ प्रभावी रूप से निरर्थक हो गया था।
- Even so, the nine-judge Bench proceeded to hear the matter.
इसके बावजूद, नौ न्यायाधीशों की पीठ ने मामले की सुनवाई जारी रखी।

Judges and reactions

न्यायाधीश और प्रतिक्रियाएँ

- Of the nine judges, Justice D. Datta and Justice U. Bhuyan held that “the reference requires no answer”.
नौ न्यायाधीशों में से न्यायमूर्ति डी. दत्ता और न्यायमूर्ति यू. भुइयाँ ने माना कि “इस संदर्भ में किसी उत्तर की आवश्यकता नहीं है।”
- Justice B.V. Nagarathna found the exercise “unnecessary and only academic in nature”.
न्यायमूर्ति बी.वी. नागरत्ना ने इस कवायद को “अनावश्यक और केवल अकादमिक प्रकृति की” माना।
- Justice P.S. Narasimha held that “an authoritative interpretation of the definition ‘industry’ was compelling at the time of the Reference”, but “such a determination has now become unnecessary, with the repeal of the said provision.”
न्यायमूर्ति पी.एस. नरसिम्हा ने कहा कि “संदर्भ के समय ‘उद्योग’ की परिभाषा की प्रामाणिक व्याख्या आवश्यक थी”, लेकिन “उक्त प्रावधान के निरसन के बाद अब ऐसा निर्धारण अनावश्यक हो गया है।”
- Importantly, even the opinion written by the Chief Justice of India (CJI) for four judges acknowledges this.

महत्वपूर्ण रूप से, भारत के मुख्य न्यायाधीश (CJI) द्वारा चार न्यायाधीशों की ओर से लिखी गई राय भी इसे स्वीकार करती है।

- Even as it sought to re-formulate the Triple Test laid down by BWSSB, it describes its reformulation of the Triple Test as merely “hypothetical”, and expressly states that it will not apply to any pending case.

BWSSB द्वारा निर्धारित Triple Test को पुनः तैयार करने का प्रयास करते हुए भी, राय में इसके पुनर्गठन को केवल “काल्पनिक” बताया गया है और स्पष्ट रूप से कहा गया है कि यह किसी भी लंबित मामले पर लागू नहीं होगा।

- The ID Act has been repealed, and there can be no future cases under it either.
ID Act को निरस्त किया जा चुका है, और इसके अंतर्गत भविष्य में भी कोई मामला नहीं हो सकता।
- Even the reformulated test framed by four judges was prospective and would not alter pending disputes, which would continue to be governed by the BWSSB framework, and since the ID Act, 1947 has been repealed, there can be no future cases under it.

चार न्यायाधीशों द्वारा निर्धारित पुनर्गठित परीक्षण भी भावी प्रभाव वाला था और यह लंबित विवादों को प्रभावित नहीं करेगा, जो BWSSB के ढाँचे द्वारा ही नियंत्रित होते रहेंगे; और चूँकि ID Act, 1947 निरस्त हो चुका है, इसलिए इसके अंतर्गत भविष्य में कोई मामला नहीं हो सकता।

- The four questions framed on February 16, 2026 concern only Section 2(j) of the ID Act. 16 फरवरी, 2026 को निर्धारित चार प्रश्न केवल ID Act की धारा 2(j) से संबंधित हैं।
- The interpretation of Section 2(p) of the IRC was not before the Court.

IRC की धारा 2(p) की व्याख्या न्यायालय के समक्ष विचाराधीन नहीं थी।

- The CJI, writing for four judges, recognises that the IRC “is an independent legislative enactment and must be interpreted on its own terms, having regard to its text, scheme, and object”.

चार न्यायाधीशों की ओर से लिखते हुए CJI ने स्वीकार किया कि IRC “एक स्वतंत्र विधायी अधिनियम है और इसकी व्याख्या इसके अपने शब्दों, योजना तथा उद्देश्य को ध्यान में रखते हुए की जानी चाहिए।”

- At the same time, the same opinion says, in view of the reformulated Triple Test in their opinion, the principles laid down in BWSSB shall not be regarded as the “sheet anchor for the interpretation of the IRC should such a question arise in the future”.

साथ ही, उसी राय में कहा गया है कि उनकी राय में पुनर्गठित Triple Test को देखते हुए, यदि भविष्य में ऐसा प्रश्न उठता है, तो BWSSB में निर्धारित सिद्धांतों को “IRC की व्याख्या का मुख्य आधार” नहीं माना जाएगा।

- While on the one hand it refuses to construe a provision, in the same breath it rules on how BWSSB, as a precedent, may not be used to construe it.

एक ओर यह किसी प्रावधान की व्याख्या करने से इनकार करता है, जबकि उसी समय यह भी निर्धारित करता है कि पूर्व निर्णय के रूप में BWSSB का उपयोग उसकी व्याख्या के लिए किस प्रकार नहीं किया जा सकता।

- This in itself is a form of construing it, and is an attempt to police the tools available for a future interpretive exercise.

यह अपने आप में उसकी व्याख्या का एक रूप है और भविष्य की व्याख्यात्मक प्रक्रिया के लिए उपलब्ध साधनों को नियंत्रित करने का प्रयास है।

- Justice Narasimha also says that it is important to ensure that the interpretation of the definition of “Industry” under the IRC “is not burdened by the existing interpretations” under the ID Act, 1947.

न्यायमूर्ति नरसिम्हा ने यह भी कहा कि यह सुनिश्चित करना महत्वपूर्ण है कि IRC के अंतर्गत “उद्योग” की परिभाषा की व्याख्या ID Act, 1947 के अंतर्गत मौजूद “वर्तमान व्याख्याओं के बोझ” से प्रभावित न हो।

- Justice Nagarathna’s opinion on this issue is important.

इस मुद्दे पर न्यायमूर्ति नागरत्ना की राय महत्वपूर्ण है।

- While affirming the judgment in BWSSB, she recognised that the extent to which its reasoning carries over to the interpretation of “industry” under the IRC is to be tested by comparing the actual text of the two provisions.

BWSSB के निर्णय की पुष्टि करते हुए उन्होंने माना कि उसकी तर्क-पद्धति किस सीमा तक IRC के अंतर्गत

“उद्योग” की व्याख्या में लागू होती है, इसका परीक्षण दोनों प्रावधानों के वास्तविक पाठ की तुलना करके किया जाना चाहिए।

- Such a comparison can be meaningfully undertaken only in a case arising under Section 2(p), and not in the abstract.
ऐसी तुलना सार्थक रूप से केवल धारा 2(p) के अंतर्गत उत्पन्न किसी मामले में की जा सकती है, न कि अमूर्त रूप से।
- The interpretation of the definition of industry under the IRC cannot be seen in abstract and would have to be understood in light of the rich jurisprudence that has developed with BWSSB and after.
IRC के अंतर्गत उद्योग की परिभाषा की व्याख्या को अमूर्त रूप में नहीं देखा जा सकता और इसे BWSSB तथा उसके बाद विकसित हुए समृद्ध न्यायिक सिद्धांतों के आलोक में समझना होगा।

The importance of BWSSB

BWSSB का महत्व

- There is a deeper thread — an anxiety about the judgment in BWSSB, which needs to be addressed.
इसके पीछे एक गहरी चिंता है—BWSSB के निर्णय को लेकर एक आशंका, जिसका समाधान किया जाना आवश्यक है।
- This anxiety is what gave rise to the Reference itself.
यही चिंता स्वयं इस संदर्भ का आधार बनी।
- The five-Judge Bench in *Jai Bir Singh* (2005) questioned the correctness of BWSSB, observing that its “worker-oriented approach” was “unmindful of the interests of the employer or owner of the industry”.
Jai Bir Singh (2005) में पाँच न्यायाधीशों की पीठ ने BWSSB की शुद्धता पर प्रश्न उठाते हुए कहा था कि इसका “श्रमिक-केंद्रित दृष्टिकोण” “नियोक्ता या उद्योग के स्वामी के हितों के प्रति असावधान” था।
- This finds an echo in the CJI's opinion.
इसका प्रतिबिंब CJI की राय में भी दिखाई देता है।
- Having hypothetically reformulated the tests in BWSSB, and having stated that BWSSB shall not be regarded as the sheet anchor for the interpretation of the IRC, the opinion of the CJI, for four judges, speaks of the judgment finally lifting a “burden” and permitting the law to “move forward unencumbered”.
BWSSB में निर्धारित परीक्षणों को काल्पनिक रूप से पुनर्गठित करने और यह कहने के बाद कि BWSSB को IRC की व्याख्या का मुख्य आधार नहीं माना जाएगा, चार न्यायाधीशों की ओर से CJI की राय में कहा गया है कि यह निर्णय अंततः एक “बोझ” को हटाता है और कानून को “बिना किसी बाधा के आगे बढ़ने” की अनुमति देता है।
- This again finds echo in the judgment of Justice Narasimha, who states that the interpretation of the definition of “industry” under the IRC, 2020 “must be freed of the bondage of ratio” in BWSSB.
यह बात न्यायमूर्ति नरसिम्हा के निर्णय में भी दिखाई देती है, जिसमें उन्होंने कहा कि IRC, 2020 के अंतर्गत “उद्योग” की परिभाषा की व्याख्या को BWSSB में निर्धारित ratio के बंधन से मुक्त किया जाना चाहिए।
- In this light, it is essential to recognise what “burden” of BWSSB causes such anxiety.
इस संदर्भ में यह समझना आवश्यक है कि BWSSB का कौन-सा “बोझ” ऐसी चिंता उत्पन्न करता है।
- There can be no dispute about the asymmetry between capital and labour, or the imbalance in their respective bargaining power.
पूँजी और श्रम के बीच असमानता या उनकी संबंधित सौदेबाजी की शक्ति में असंतुलन के बारे में कोई विवाद नहीं हो सकता।
- Justice Bagchi recognises this when he reminds us that one must always “bear in mind that a workman seldom enters the field of negotiation as an equal....”



न्यायमूर्ति बागची इसे स्वीकार करते हुए हमें याद दिलाते हैं कि हमें हमेशा यह “ध्यान में रखना चाहिए कि एक श्रमिक शायद ही कभी समान पक्ष के रूप में बातचीत के क्षेत्र में प्रवेश करता है।”

- The Constitution recognises this, with Article 42 requiring the state to secure “just and humane conditions of work,” while Article 23 prohibits “traffic in human beings”, “begar, and other forms of forced labour”.
संविधान इसे मान्यता देता है; अनुच्छेद 42 राज्य को “न्यायसंगत और मानवीय कार्य परिस्थितियाँ” सुनिश्चित करने का निर्देश देता है, जबकि अनुच्छेद 23 “मानवों के व्यापार”, “बेगार और अन्य प्रकार के बलात् श्रम” पर रोक लगाता है।
- The conditions that necessitated these protections have simply changed form.
जिन परिस्थितियों के कारण इन संवैधानिक संरक्षणों की आवश्यकता पड़ी थी, उन्होंने केवल अपना स्वरूप बदला है।
- Labour legislation recognised this extreme imbalance and sought to ensure a modicum of bare protection.
श्रम कानून ने इस अत्यधिक असंतुलन को पहचाना और न्यूनतम स्तर की मूलभूत सुरक्षा सुनिश्चित करने का प्रयास किया।
- This is not a “pro-worker” understanding of the law, but just a check against the imbalance tilting toward the employer.
यह कानून की “श्रमिक-समर्थक” समझ नहीं है, बल्कि केवल उस असंतुलन के विरुद्ध एक नियंत्रण है जो नियोक्ता के पक्ष में झुक सकता है।
- The fact that such bare protection is described as “pro-worker” says less about the protection than about where the baseline has been unfortunately naturalised.
इस प्रकार की न्यूनतम सुरक्षा को “श्रमिक-समर्थक” कहा जाना सुरक्षा के बारे में कम और इस बात के बारे में अधिक बताता है कि न्यूनतम मानक को दुर्भाग्यवश किस स्तर पर सामान्य मान लिया गया है।
- While the freedom to dismiss without explanation is part of the ordinary run of business, a requirement to explain is called a burden.
जहाँ बिना कारण बताए बर्खास्त करने की स्वतंत्रता को सामान्य व्यावसायिक प्रक्रिया का हिस्सा माना जाता है, वहीं कारण बताने की आवश्यकता को बोझ कहा जाता है।
- The warning of Dr. B.R. Ambedkar rings true — liberty from the control of the state is another name for “the dictatorship of the private employer”.
डॉ. बी.आर. आंबेडकर की चेतावनी आज भी प्रासंगिक है—राज्य के नियंत्रण से मुक्ति “निजी नियोक्ता की तानाशाही” का दूसरा नाम है।
- The 13-judge Bench decision in Kesavananda Bharati (1973) recognised that justice, social, economic and political, formed part of the Constitution’s basic structure.
केशवानंद भारती (1973) में 13 न्यायाधीशों की पीठ ने माना कि सामाजिक, आर्थिक और राजनीतिक न्याय संविधान की मूल संरचना का हिस्सा हैं।
- The underlying inequality between employer and workman has not narrowed since 1947.
नियोक्ता और श्रमिक के बीच अंतर्निहित असमानता 1947 के बाद से कम नहीं हुई है।
- In fact, the policy of “ease of doing business” has widened it.
वास्तव में, “Ease of Doing Business” की नीति ने इसे और बढ़ाया है।
- This is exactly why the social justice vision of Part IV of the Constitution calls for more protection now, not less.
यही कारण है कि संविधान के भाग IV में निहित सामाजिक न्याय की दृष्टि अब कम नहीं, बल्कि अधिक संरक्षण की माँग करती है।

The issue of labour rights
श्रमिक अधिकारों का मुद्दा



- The ID Act, 1947 — to maintain industrial peace — provided basic protections and a forum for adjudicating disputes, where the labour courts and tribunals have been given wide powers to adjudicate on the same.
औद्योगिक शांति बनाए रखने के लिए ID Act, 1947 ने मूलभूत सुरक्षा और विवादों के न्यायनिर्णयन के लिए एक मंच प्रदान किया, जहाँ **श्रम न्यायालयों और अधिकरणों** को इन विवादों पर निर्णय करने के लिए व्यापक शक्तियाँ दी गई थीं।
- To be excluded from its definition of “industry” is to be excluded from that bare minimum protection, and from the remedy available under it.
इसकी **“उद्योग” की परिभाषा से बाहर रखा जाना** उस न्यूनतम सुरक्षा से और इसके अंतर्गत उपलब्ध **उपचार** से वंचित किए जाने के समान है।
- The significance of BWSSB’s definition of “industry” lay in ensuring that this protection reached everyone the Act was meant to cover, rather than excluding workers from the one recourse the law offered them.
BWSSB द्वारा दी गई **“उद्योग” की परिभाषा** का महत्व यह सुनिश्चित करने में था कि यह सुरक्षा उन सभी लोगों तक पहुँचे जिन्हें अधिनियम के दायरे में लाने का उद्देश्य था, न कि श्रमिकों को कानून द्वारा उपलब्ध **एकमात्र उपाय** से बाहर कर दिया जाए।
- Given the overarching objective of industrial peace, there was never a reason to treat BWSSB’s interpretation as a burden rather than as the Act doing precisely what it was designed to do.
औद्योगिक शांति के व्यापक उद्देश्य को देखते हुए, BWSSB की व्याख्या को बोझ मानने का कोई कारण नहीं था; इसके बजाय इसे इस रूप में देखा जाना चाहिए था कि अधिनियम वही कर रहा था जिसके लिए उसे बनाया गया था।
- The anxiety surrounding it has always rested on the same premise: an eagerness to remove workers from the protection of the law.
इसके चारों ओर मौजूद चिंता हमेशा इसी आधार पर टिकी रही है: **श्रमिकों को कानून के संरक्षण से बाहर करने की उत्सुकता।**
- As the ID Act stands repealed and the IRC takes its place, it is necessary to return to the promise of social justice in the Constitution.
चूँकि **ID Act निरस्त हो चुका है और IRC ने उसका स्थान ले लिया है**, इसलिए संविधान में निहित **सामाजिक न्याय के वादे** की ओर लौटना आवश्यक है।
- The labour codes that have replaced the ID Act, including the IRC, are built on a premise of exclusion — narrowing who falls within the protection of the law — and will have to answer to that mandate.
ID Act का स्थान लेने वाली **श्रम संहिताएँ**, जिनमें IRC भी शामिल है, एक **बहिष्करण की धारणा** पर आधारित हैं—अर्थात् कानून के संरक्षण के दायरे में आने वाले लोगों की संख्या को सीमित करना—और उन्हें इस **संवैधानिक दायित्व** का उत्तर देना होगा।

25A8. Did Press Note 3 relaxations help attract more FDI?

क्या प्रेस नोट 3 में दी गई छूट से अधिक FDI आकर्षित करने में मदद मिली?

- The Union government on Friday said that India had received foreign direct investment (FDI) worth ₹4,895 crore over just the last few months, from companies that have benefited from recent relaxations made to India’s FDI rules.
केंद्र सरकार ने शुक्रवार को कहा कि भारत को पिछले कुछ महीनों में ही उन कंपनियों से **₹4,895 करोड़ का**

प्रत्यक्ष विदेशी निवेश (FDI) प्राप्त हुआ है, जिन्हें भारत के FDI नियमों में हाल ही में दी गई छूटों से लाभ मिला है।

- The aim of the relaxations was precisely to ease the flow of investments that had earlier been locked out of India.
इन छूटों का उद्देश्य ठीक यही था कि उन निवेशों के प्रवाह को सुगम बनाया जाए, जिन्हें पहले भारत में आने से रोक दिया गया था।

What was the earlier rule?

पहले का नियम क्या था?

- The Union government had issued Press Note 3 in April 2020, in which it amended India's FDI policy.
केंद्र सरकार ने अप्रैल 2020 में प्रेस नोट 3 जारी किया था, जिसके माध्यम से उसने भारत की FDI नीति में संशोधन किया।
- The existing rule at the time stated that any entity of Bangladesh and Pakistan could invest in India only after securing Government approval.
उस समय लागू नियम में कहा गया था कि बांग्लादेश और पाकिस्तान की किसी भी इकाई को भारत में निवेश करने के लिए पहले सरकार की मंजूरी प्राप्त करनी होगी।
- Press Note 3 widened this stipulation to include any country that shared a land border with India.
प्रेस नोट 3 ने इस प्रावधान का दायरा बढ़ाकर उन सभी देशों को इसमें शामिल कर दिया, जिनकी भारत के साथ स्थलीय सीमा लगती है।
- So, this included Pakistan, China, Bangladesh, Nepal, and Bhutan.
इसमें पाकिस्तान, चीन, बांग्लादेश, नेपाल और भूटान शामिल थे।
- The popular perception is that the government took this decision as a result of border clashes between India and China at Galwan.
आम धारणा यह है कि सरकार ने यह निर्णय गलवान में भारत और चीन के बीच सीमा संघर्ष के परिणामस्वरूप लिया था।
- However, Press Note 3 was issued in April 2020, before those clashes took place in May.
हालाँकि, प्रेस नोट 3 अप्रैल 2020 में जारी किया गया था, जबकि वे संघर्ष मई में हुए थे।
- The reason the change was made was to prevent hostile takeovers of companies ailing due to the COVID-19 pandemic.
इस बदलाव का कारण COVID-19 महामारी के कारण संकटग्रस्त कंपनियों के शत्रुतापूर्ण अधिग्रहण को रोकना था।
- India and a few other countries had noticed that, early on in the pandemic, Chinese companies were buying up majority stakes in companies in the countries whose stock prices had plummeted due to the pandemic.
भारत और कुछ अन्य देशों ने देखा था कि महामारी के शुरुआती दौर में चीनी कंपनियाँ उन देशों की कंपनियों में बहुमत हिस्सेदारी खरीद रही थीं, जिनके शेयरों की कीमतें महामारी के कारण तेजी से गिर गई थीं।
- The FDI restriction was aimed at curbing this.
FDI प्रतिबंध का उद्देश्य इसी प्रवृत्ति पर अंकुश लगाना था।
- While the origin of the rule was not directly linked to the border clashes, its extension over the years was certainly a result of the frigid relationship between India and China.
हालाँकि इस नियम की शुरुआत सीधे तौर पर सीमा संघर्षों से जुड़ी नहीं थी, लेकिन वर्षों के दौरान इसका विस्तार निश्चित रूप से भारत और चीन के बीच तनावपूर्ण संबंधों का परिणाम था।

What was the relaxation?

छूट क्या दी गई थी?

- In March 2026, the Centre eased the Press Note 3 restrictions somewhat.
मार्च 2026 में केंद्र सरकार ने प्रेस नोट 3 के प्रतिबंधों में कुछ हद तक ढील दी।
- It said that **FDI from entities would be allowed in India through the automatic route, without needing express government approval, if these entities had less than 10% stake based in countries that share a land border with India.**
सरकार ने कहा कि ऐसी संस्थाओं से प्राप्त **FDI को स्वचालित मार्ग (automatic route)** के माध्यम से भारत में निवेश की अनुमति दी जाएगी, जिसके लिए स्पष्ट सरकारी मंजूरी की आवश्यकता नहीं होगी, यदि इन संस्थाओं में भारत के साथ स्थलीय सीमा साझा करने वाले देशों में स्थित संस्थाओं की **10% से कम हिस्सेदारी** हो।
- In other words, companies that had minority and non-controlling stakes held by these land-border countries could invest in India through the easier route.
दूसरे शब्दों में, जिन कंपनियों में इन **स्थलीय सीमा वाले देशों की अल्पांश और गैर-नियंत्रणकारी हिस्सेदारी** थी, वे आसान मार्ग के माध्यम से भारत में निवेश कर सकती थीं।
- The government did this because it said that a lot of investment into India had been held up because even companies that had tiny stakes owned by Chinese entities faced stricter restrictions on their investments into India.
सरकार ने यह कदम इसलिए उठाया क्योंकि उसके अनुसार भारत में आने वाला काफी निवेश रुका हुआ था, क्योंकि **चीनी संस्थाओं की बहुत छोटी हिस्सेदारी वाली कंपनियों** को भी भारत में अपने निवेश के संबंध में अधिक कड़े प्रतिबंधों का सामना करना पड़ता था।
- "It is expected that the new guidelines will provide clarity and ease of doing business in India, and facilitate investments which can contribute towards greater FDI inflows, access to new technologies, domestic value addition, expansion of domestic firms and integration with global supply chain," the government had said in March when it eased the rules.
मार्च में नियमों में ढील देते समय सरकार ने कहा था, "उम्मीद है कि नए दिशानिर्देश भारत में **स्पष्टता और कारोबार करने में सुगमता** प्रदान करेंगे तथा ऐसे निवेशों को सुगम बनाएँगे, जो अधिक **FDI प्रवाह, नई प्रौद्योगिकियों तक पहुँच, घरेलू मूल्य संवर्धन, घरेलू कंपनियों के विस्तार और वैश्विक आपूर्ति शृंखला के साथ एकीकरण** में योगदान कर सकते हैं।"

What has been the benefit?

इससे क्या लाभ हुआ है?

- The Ministry of Commerce and Industry said on Friday that a total of 29 FDI projects worth ₹4,895.65 crore had been reported to it under its revised framework up to August 10, 2026.
वाणिज्य और उद्योग मंत्रालय ने शुक्रवार को कहा कि 10 अगस्त, 2026 तक उसके संशोधित ढाँचे के अंतर्गत कुल **29 FDI परियोजनाएँ**, जिनका मूल्य ₹4,895.65 करोड़ है, रिपोर्ट की गई थीं।
- It added that **these investments span a range of sectors, including information technology, artificial intelligence, information and communication, manufacturing, pharmaceuticals, data centres and transport services, among others.**
मंत्रालय ने कहा कि ये निवेश विभिन्न क्षेत्रों में किए गए हैं, जिनमें **सूचना प्रौद्योगिकी, कृत्रिम बुद्धिमत्ता, सूचना एवं संचार, विनिर्माण, फार्मास्यूटिकल्स, डेटा सेंटर और परिवहन सेवाएँ** आदि शामिल हैं।
- Further, the **investments have come from several countries, including Mauritius, the U.S., the Republic of Korea, Japan, Singapore, Luxembourg, and the Cayman Islands.**
इसके अतिरिक्त, ये निवेश **मॉरीशस, अमेरिका, दक्षिण कोरिया, जापान, सिंगापुर, लक्ज़मबर्ग और कैमैन द्वीपसमूह** सहित कई देशों से आए हैं।
- In relative terms, this investment amount is not all that significant.
सापेक्ष रूप से, निवेश की यह राशि बहुत अधिक महत्वपूर्ण नहीं है।
- For instance, it amounts to less than 1% of the total FDI India received in 2025-26.
उदाहरण के लिए, यह राशि **2025-26 में भारत को प्राप्त कुल FDI के 1% से भी कम है।**



- But it is still early days, and for India and FDI, every little bit helps.
लेकिन अभी यह शुरुआती दौर है और भारत तथा FDI के लिए हर छोटी वृद्धि भी उपयोगी है।



GS III: Economy SEBI unveils index for market infrastructure institutions

The Securities and Exchange Board of India (SEBI) has introduced an Information Technology Resilience Index (ITRI) for market infrastructure institutions (MIIs), including stock exchanges and depositories, as part of efforts to strengthen the resilience of their IT systems. In a circular, the markets regulator said the index would assess the MIIs across nine parameters, including availability, security, integrity, governance, reliability and monitoring, business continuity, modularity and flexibility, scalability, and other relevant factors. SEBI said that the MIIs would be required to develop an Early Warning System (EWS) to detect any deterioration in ITRI parameters that could potentially lead to performance issues, system slowness or other disruptions, and take remedial measures.

25A8. SEBI unveils index for market infrastructure institutions

SEBI ने बाजार अवसंरचना संस्थानों के लिए सूचकांक पेश किया

- The Securities and Exchange Board of India (SEBI) has introduced an **Information Technology Resilience Index (ITRI)** for **market infrastructure institutions (MIIs)**, including stock exchanges and depositories, as part of efforts to strengthen the resilience of their IT systems.

भारतीय प्रतिभूति और विनियम बोर्ड (SEBI) ने स्टॉक एक्सचेंजों और डिपॉजिटरी सहित बाजार अवसंरचना संस्थानों (MIIs) के लिए सूचना प्रौद्योगिकी लचीलापन सूचकांक (ITRI) पेश किया है, जिसका उद्देश्य उनके IT सिस्टम की लचीलेपन और प्रतिरोधक क्षमता को मजबूत करना है।

- In a circular, the markets regulator said the index would assess the MIIs across nine parameters, including availability, security, integrity, governance, reliability and monitoring, business continuity, modularity and flexibility, scalability, and other relevant factors.

बाजार नियामक ने एक परिपत्र में कहा कि यह सूचकांक MIIs का नौ मानकों के आधार पर आकलन करेगा, जिनमें उपलब्धता, सुरक्षा, अखंडता, शासन,

विश्वसनीयता एवं निगरानी, व्यवसाय निरंतरता, मॉड्यूलरिटी एवं लचीलापन, स्केलेबिलिटी तथा अन्य प्रासंगिक कारक शामिल हैं।

- SEBI said that the MIIs would be required to develop an **Early Warning System (EWS)** to detect any deterioration in ITRI parameters that could potentially lead to performance issues, system slowness or other disruptions, and take remedial measures.

SEBI ने कहा कि MIIs को एक प्रारंभिक चेतावनी प्रणाली (EWS) विकसित करनी होगी, ताकि ITRI के मानकों में होने वाली ऐसी किसी भी गिरावट का पता लगाया जा सके, जो संभावित रूप से प्रदर्शन संबंधी समस्याओं, सिस्टम की धीमी गति या अन्य व्यवधानों का कारण बन सकती है, और इसके लिए सुधारात्मक उपाय किए जा सकें।

GS Paper III: Science and Technology		25 August 2026
TOPICS COVERED		
25A8	What Amul can teach us about helping rare-disease patients दुर्लभ-रोग से पीड़ित रोगियों की सहायता करने के बारे में अमूल हमें क्या सिखा सकता है	
25A8	Quiz	
25A8	Smart glasses highlight gaps in privacy laws स्मार्ट चश्मे निजता संबंधी कानूनों की कमियों को उजागर करते हैं	
25A8	What has fueled the backlash against Flock cameras in the U.S.? अमेरिका में Flock कैमरों के विरुद्ध विरोध को किसने बढ़ावा दिया है?	

25A8 Workers in China fear job loss as AI and robots are poised to take their place
चीन में कामगारों को नौकरी जाने का भय, क्योंकि एआई और रोबोट उनकी जगह लेने को तैयार हैं

What Amul can teach us about helping rare-disease patients

Just as Amul and the other cooperatives it inspired made India milk-secure and secured the livelihoods of millions of farmers, so too could a patient data collective have an outsized impact on drug discovery for most rare diseases, contributing to the health of patients with few treatment options

ASPIRE
Alok Bhattacharya
Gayatri Saberwal

Patient data, including medical records and patient experiences, are essential for scientists to develop new treatments, especially for rare diseases. The data help identify diagnostic biomarkers, predict disease progression, and help investigators design better clinical trials.

This is important because clinical trials are required to show that a new treatment is safe and effective before a country's regulators approve it. Conventional clinical trials involve a large number of participants and include both treatment and control groups. However, for rare diseases, too few people are eligible to participate, and it is not possible to have a control group.

In these situations, patient registries and natural-history studies can provide real-world data that can serve as 'external' controls. Natural-history studies record clinical parameters, including those reported by patients, over time, allowing clinicians to model disease progression in the absence of treatments. Patient data can also help scientists identify suitable participants and meaningful clinical endpoints to properly evaluate complicated treatments.

Thus, by improving trial design and reducing uncertainty, comprehensive patient datasets can help researchers develop drugs faster, increase the chances of their receiving regulatory approval, and ultimately help bring safe and effective treatments to patients with rare diseases more quickly.

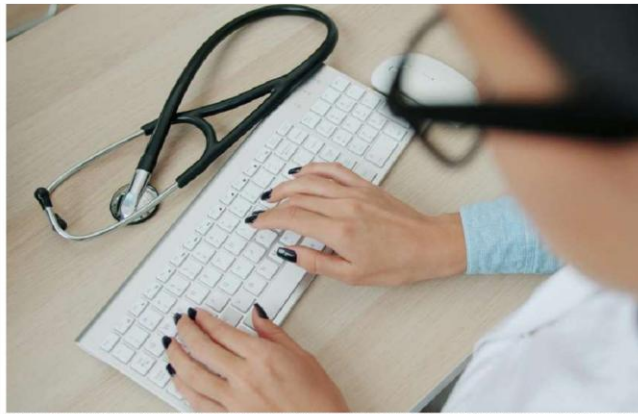
Patient data collective

For example, patient information collected over many years helped doctors understand how spinal muscular atrophy – a rare genetic condition that damages the spinal cord – progresses, identify the best ways to measure improvement, design good clinical trials, prove treatments work, and show that treating patients early gives the best results.

Recent advances in artificial intelligence (AI) models now make these goals possible in new ways – provided good patient data are available. Researchers can collect this data in two steps: first, create a community of patients with a given condition; and second, collect a range of medical and diagnostic records for these patients.

To implement this, the authors propose a cooperative model to create a 'Patient Data Collective' (PDC). The inspiration comes from the dairy cooperative Amul, which serves lakhs of farmers in India and ploughs back most of the profits from milk and milk-derived products to them. Amul also offers veterinary care and at-cost feed for cattle.

Similarly, a PDC for rare diseases in India can serve as a cooperative that holds patients' data on their behalf to facilitate research, and which returns most, if any, of the revenue back to them. And the PDC can act on behalf of patients just as Amul does on behalf of farmers. It will access data from patient advocacy



A patient data collective for rare diseases in India can serve as a cooperative that holds patients' data on their behalf to facilitate research, and which returns most, if any, of the revenue back to them. Representative image. VITALY GABRIEL/UNSPASH

groups, the Ayushman Bharat Digital Health Mission, hospital records, the Centres of Excellence for Rare Diseases, clinicians, and other repositories.

In addition to its centralised repository, the PDC could have AI-based data analytics, with safeguards in place. That is, once a patient is registered, their consent to have their data collected, stored, analysed, and, indeed, protected. Worldwide, patient advocacy groups are already helping research communities accelerate the development of drugs for rare diseases and navigate the approval ecosystem.

This movement has also reached India, and active disease-specific groups could play a critical role in setting up and operating the PDC as well.

Setting up a collective

The Indian Council of Medical Research (ICMR) has already set up a rare disease registry based on data uploaded by a few experts from 19 specialised hospitals. The registry has collected data on around 4,000 patients with select diseases over the last five years.

Valuable though this resource is, it is also minuscule compared to India's population. Given Indians' experience with public registries, the data collection exercise behind the PDC should be flexible and inclusive, while maintaining accuracy and abiding by the highest ethical and legal standards.

This, in turn, is possible only as a patient-centric initiative with support from non-governmental organisations. Although setting up the proposed portal and backend database to accept data from all stakeholders while adhering to standards about accuracy, ethics, safety, and legality will be difficult, it is feasible,

Patients' medical records are essential for scientists to develop new treatments, especially for rare diseases; the data help researchers identify diagnostic biomarkers, predict disease progression, and design better clinical trials

as demonstrated by the Citizen Health Platform operating in the U.S.

Once the portal is set up, patient data will need to be made easily available to the PDC through digital health records maintained by both public and private health providers. To aggregate scattered medical histories, genetic reports, and clinical notes, India can leverage its Ayushman Bharat Digital Health Mission: to mandate a clear governance model for a specialised, secure digital health locker or for the PDC to maintain patient records as such a locker.

Alongside a data repository, generative AI can be used as a tool to synthesise from large volumes of medical records medically relevant patterns that can inform doctors' and patients' decisions. Indeed, if an AI model is trained to engage with users in their local language, it can help analyse medical information to suggest possible diagnoses and lay out the various options, and thus encourage participation from diverse groups of patients.

Attracting drug developers

Support from the government or philanthropic organisations is needed to develop a platform with such AI capabilities, with clear governance and

oversight. In fact, the PDC should deliberately attempt to generate useful data. The authors suggest encouraging natural-history registries led by patient advocacy groups to generate longitudinal real-world evidence datasets. The groups can be funded to initiate natural history studies for their target diseases, with the data then channelled to the PDC.

Aggregating granular, everyday patient-reported metrics across India's unique, genetically diverse endogenous populations could also attract drug developers from abroad seeking ethnically specific target-validation cohorts.

Rare disease revolution

With recent updates to India's New Drugs and Clinical Trials Rules, which embrace advanced computational modelling and non-animal testing models, Indian biotechnology and pharmaceutical companies can use the PDC to rapidly pre-screen and construct virtual synthetic control groups, making small-batch orphan drug evaluation clinically and financially viable within domestic budgets. Just as Amul and the other cooperatives it inspired made India milk-secure and secured the livelihoods of millions of farmers, so too would a PDC have an outsized impact on drug discovery for most rare diseases, contributing to the good health of many patients who currently have few treatment options.

(Alok Bhattacharya is an honorary visiting professor at the Tata Institute for Genetics and Society, Bengaluru. Gayatri Saberwal is a consultant at the Institute. alok.bhattacharya@gmail.com, gayatri.saberwal@gmail.com)

25A8. What Amul can teach us about helping rare-disease patients

दुर्लभ-रोग से पीड़ित रोगियों की सहायता करने के बारे में अमूल हमें क्या सिखा सकता है

- Patient data, including **medical records** and **patient experiences**, are essential for scientists to develop new treatments, especially for **rare diseases**.
रोगी संबंधी आँकड़े, जिनमें चिकित्सीय अभिलेख और रोगियों के अनुभव शामिल हैं, वैज्ञानिकों के लिए नए उपचार विकसित करने हेतु आवश्यक हैं, विशेषकर दुर्लभ रोगों के लिए।
- The data help identify **diagnostic biomarkers**, predict disease progression, and help investigators design better clinical trials.

ये आँकड़े नैदानिक जैव-चिह्नों की पहचान करने, रोग की प्रगति का पूर्वानुमान लगाने तथा शोधकर्ताओं को बेहतर नैदानिक परीक्षण तैयार करने में सहायता करते हैं।

- This is important because **clinical trials** are required to show that a new treatment is safe and effective before a country's regulators approve it.
यह महत्वपूर्ण है क्योंकि किसी देश के नियामकों द्वारा किसी नए उपचार को स्वीकृति देने से पहले यह प्रदर्शित करने के लिए **नैदानिक परीक्षण** आवश्यक होते हैं कि नया उपचार सुरक्षित और प्रभावी है।
- Conventional clinical trials involve a large number of participants and include both treatment and control groups.
पारंपरिक नैदानिक परीक्षणों में बड़ी संख्या में प्रतिभागी शामिल होते हैं तथा इनमें **उपचार समूह** और **नियंत्रण समूह**, दोनों होते हैं।
- However, for rare diseases, too few people are eligible to participate, and it is not possible to have a control group.
हालाँकि, दुर्लभ रोगों के मामले में भाग लेने के लिए पात्र लोगों की संख्या बहुत कम होती है और नियंत्रण समूह रखना संभव नहीं होता है।
- In these situations, **patient registries** and **natural-history studies** can provide real-world data that can serve as 'external' controls.
इन परिस्थितियों में, **रोगी रजिस्ट्रियों** और **प्राकृतिक-इतिहास अध्ययनों** से वास्तविक-विश्व आँकड़े प्राप्त किए जा सकते हैं, जो 'बाह्य नियंत्रण' के रूप में कार्य कर सकते हैं।
- Natural-history studies record clinical parameters, including those reported by patients, over time, allowing clinicians to model disease progression in the absence of treatments.
प्राकृतिक-इतिहास अध्ययन समय के साथ रोगियों द्वारा बताए गए मापदंडों सहित **नैदानिक मापदंडों** को दर्ज करते हैं, जिससे चिकित्सक उपचार के अभाव में रोग की प्रगति का मॉडल तैयार कर सकते हैं।
- Patient data can also help scientists identify suitable participants and meaningful clinical endpoints to properly evaluate complicated treatments.
रोगी संबंधी आँकड़े वैज्ञानिकों को उपयुक्त प्रतिभागियों और सार्थक **नैदानिक अंतिम बिंदुओं** की पहचान करने में भी सहायता कर सकते हैं, ताकि जटिल उपचारों का उचित मूल्यांकन किया जा सके।
- Thus, by improving trial design and reducing uncertainty, comprehensive patient datasets can help researchers develop drugs faster, increase the chances of their receiving regulatory approval, and ultimately help bring safe and effective treatments to patients with rare diseases more quickly.
इस प्रकार, परीक्षण की रूपरेखा में सुधार और अनिश्चितता को कम करके, व्यापक रोगी आँकड़े शोधकर्ताओं को दवाएँ तेजी से विकसित करने, उनके **नियामकीय अनुमोदन** प्राप्त करने की संभावनाएँ बढ़ाने तथा अंततः दुर्लभ रोगों से पीड़ित रोगियों तक सुरक्षित और प्रभावी उपचार अधिक शीघ्र पहुँचाने में सहायता कर सकते हैं।

Patient data collective

रोगी आँकड़ा सामूहिक

- For example, patient information collected over many years helped doctors understand how **spinal muscular atrophy** — a rare genetic condition that damages the spinal cord — progresses, identify the best ways to measure improvement, design good clinical trials, prove treatments work, and show that treating patients early gives the best results.
उदाहरण के लिए, कई वर्षों में एकत्र की गई रोगी संबंधी जानकारी ने डॉक्टरों को यह समझने में सहायता की कि **स्पाइनल मस्क्युलर एट्रोफी** — एक दुर्लभ आनुवंशिक स्थिति, जो मेरुरज्जु को क्षति पहुँचाती है — किस प्रकार बढ़ती है, सुधार को मापने के सर्वोत्तम तरीकों की पहचान कैसे की जाए, बेहतर नैदानिक परीक्षण कैसे तैयार किए जाएँ, उपचारों की प्रभावशीलता कैसे सिद्ध की जाए तथा यह कैसे प्रदर्शित किया जाए कि रोगियों का प्रारंभिक उपचार सर्वोत्तम परिणाम देता है।
- Recent advances in **artificial intelligence (AI)** models now make these goals possible in new ways — provided good patient data are available.

कृत्रिम बुद्धिमत्ता (AI) मॉडलों में हालिया प्रगति ने अब इन लक्ष्यों को नए तरीकों से संभव बना दिया है — बशर्ते अच्छे रोगी आँकड़े उपलब्ध हों।

- Researchers can collect this data in two steps: first, create a community of patients with a given condition; and second, collect a range of medical and diagnostic records for those patients.
शोधकर्ता इन आँकड़ों को दो चरणों में एकत्र कर सकते हैं: पहला, किसी विशिष्ट रोग से पीड़ित रोगियों का एक समुदाय बनाना; और दूसरा, उन रोगियों के विभिन्न चिकित्सीय एवं नैदानिक अभिलेखों को एकत्र करना।
- To implement this, the authors propose a cooperative model to create a **'Patient Data Collective' (PDC)**.
इसे कार्यान्वित करने के लिए, लेखक एक **'रोगी आँकड़ा सामूहिक' (PDC)** बनाने हेतु एक सहकारी मॉडल का प्रस्ताव करते हैं।
- The inspiration comes from the dairy cooperative **Amul**, which serves lakhs of farmers in India and ploughs back most of the profits from milk and milk-derived products to them.
इसकी प्रेरणा भारत की डेयरी सहकारी संस्था **अमूल** से मिलती है, जो भारत में लाखों किसानों की सेवा करती है और दूध तथा दूध से बने उत्पादों से प्राप्त अधिकांश लाभ किसानों को वापस प्रदान करती है।
- Amul also offers veterinary care and at-cost feed for cattle.
अमूल पशुओं के लिए **पशु चिकित्सा सेवाएँ** और लागत-मूल्य पर पशु चारा भी उपलब्ध कराता है।
- Similarly, a PDC for rare diseases in India can serve as a cooperative that holds patients' data on their behalf to facilitate research, and which returns most, if any, of the revenue back to them.
इसी प्रकार, भारत में दुर्लभ रोगों के लिए एक PDC ऐसी सहकारी संस्था के रूप में कार्य कर सकता है, जो अनुसंधान को सुगम बनाने के लिए रोगियों की ओर से उनके आँकड़ों को सुरक्षित रखे और यदि कोई राजस्व प्राप्त हो, तो उसका अधिकांश भाग रोगियों को वापस प्रदान करे।
- And the PDC can act on behalf of patients just as Amul does on behalf of farmers.
और PDC रोगियों की ओर से उसी प्रकार कार्य कर सकता है, जिस प्रकार अमूल किसानों की ओर से कार्य करता है।
- It will access data from **patient advocacy groups**, the **Ayushman Bharat Digital Health Mission**, hospital records, the **Centres of Excellence for Rare Diseases**, clinicians, and other repositories.
यह रोगी-अधिकार समर्थक समूहों, आयुष्मान भारत डिजिटल हेल्थ मिशन, अस्पताल के अभिलेखों, दुर्लभ रोगों के उत्कृष्टता केंद्रों, चिकित्सकों तथा अन्य भंडारों से आँकड़े प्राप्त करेगा।
- In addition to its centralised repository, the PDC could have **AI-based data analytics**, with safeguards in place.
अपने केंद्रीकृत आँकड़ा भंडार के अतिरिक्त, PDC में उचित सुरक्षा उपायों के साथ **AI-आधारित आँकड़ा विश्लेषण** की सुविधा हो सकती है।
- That is, once a patient is registered, their consent to have their data collected, stored, analysed, and, indeed, protected.
अर्थात्, एक बार रोगी का पंजीकरण हो जाने के बाद, उनके आँकड़ों को एकत्र करने, संग्रहीत करने, विश्लेषित करने और वास्तव में **सुरक्षित रखने** के लिए उनकी सहमति आवश्यक होगी।
- Worldwide, **patient advocacy groups** are already helping research communities accelerate the development of drugs for rare diseases and navigate the approval ecosystem.
विश्वभर में रोगी-अधिकार समर्थक समूह पहले से ही अनुसंधान समुदायों को दुर्लभ रोगों के लिए दवाओं के विकास में तेजी लाने और **अनुमोदन पारिस्थितिकी तंत्र** को समझने तथा उसमें आगे बढ़ने में सहायता कर रहे हैं।
- This movement has also reached India, and active disease-specific groups could play a critical role in setting up and operating the PDC as well.
यह आंदोलन भारत तक भी पहुँच चुका है और सक्रिय रोग-विशिष्ट समूह PDC की स्थापना तथा संचालन में भी महत्वपूर्ण भूमिका निभा सकते हैं।

Setting up a collective

एक सामूहिक संस्था की स्थापना

- The **Indian Council of Medical Research (ICMR)** has already set up a rare disease registry based on data uploaded by a few experts from 19 specialised hospitals.
भारतीय आयुर्विज्ञान अनुसंधान परिषद (ICMR) ने पहले ही 19 विशिष्ट अस्पतालों के कुछ विशेषज्ञों द्वारा अपलोड किए गए आँकड़ों के आधार पर एक **दुर्लभ रोग रजिस्ट्री** स्थापित की है।
- The registry has collected data on around 4,000 patients with select diseases over the last five years.
इस रजिस्ट्री ने पिछले **पाँच वर्षों** में चयनित रोगों से पीड़ित लगभग **4,000 रोगियों** के आँकड़े एकत्र किए हैं।
- Valuable though this resource is, it is also minuscule compared to India's population.
यद्यपि यह संसाधन मूल्यवान है, फिर भी भारत की जनसंख्या की तुलना में इसका आकार अत्यंत छोटा है।
- Given Indians' experience with public registries, the data collection exercise behind the PDC should be flexible and inclusive, while maintaining accuracy and abiding by the highest ethical and legal standards.
सार्वजनिक रजिस्ट्रियों के साथ भारतीयों के अनुभव को देखते हुए, PDC के लिए आँकड़ा संग्रह की प्रक्रिया **लचीली और समावेशी** होनी चाहिए, साथ ही सटीकता बनाए रखनी चाहिए और उच्चतम **नैतिक एवं कानूनी मानकों** का पालन करना चाहिए।
- This, in turn, is possible only as a patient-centric initiative with support from non-governmental organisations.
यह, बदले में, केवल **रोगी-केंद्रित पहल** के रूप में गैर-सरकारी संगठनों के समर्थन से ही संभव है।
- Although setting up the proposed portal and backend database to accept data from all stakeholders while adhering to standards about accuracy, ethics, safety, and legality will be difficult, it is feasible, as demonstrated by the **Citizen Health Platform** operating in the U.S.
यद्यपि सटीकता, नैतिकता, सुरक्षा और वैधानिकता संबंधी मानकों का पालन करते हुए सभी हितधारकों से आँकड़े स्वीकार करने के लिए प्रस्तावित पोर्टल और बैकएंड डेटाबेस स्थापित करना कठिन होगा, फिर भी यह संभव है, जैसा कि अमेरिका में संचालित **Citizen Health Platform** द्वारा प्रदर्शित किया गया है।
- Once the portal is set up, patient data will need to be made easily available to the PDC through digital health records maintained by both public and private health providers.
एक बार पोर्टल स्थापित हो जाने के बाद, सार्वजनिक और निजी दोनों स्वास्थ्य सेवा प्रदाताओं द्वारा रखे गए **डिजिटल स्वास्थ्य अभिलेखों** के माध्यम से रोगी संबंधी आँकड़ों को PDC के लिए आसानी से उपलब्ध कराना होगा।
- To aggregate scattered medical histories, genetic reports, and clinical notes, India can leverage its **Ayushman Bharat Digital Health Mission**: to mandate a clear governance model for a specialised, secure digital health locker or for the PDC to maintain patient records as such a locker.
बिखरे हुए चिकित्सीय इतिहास, आनुवंशिक रिपोर्टों और नैदानिक टिप्पणियों को एकत्रित करने के लिए भारत अपने **आयुष्मान भारत डिजिटल हेल्थ मिशन** का लाभ उठा सकता है: एक विशिष्ट, सुरक्षित **डिजिटल स्वास्थ्य लॉकर** के लिए स्पष्ट शासन मॉडल को अनिवार्य करने अथवा PDC द्वारा रोगी अभिलेखों को ऐसे लॉकर के रूप में बनाए रखने हेतु।
- Alongside a data repository, **generative AI** can be used as a tool to synthesise from large volumes of medical records medically relevant patterns that can inform doctors' and patients' decisions.
आँकड़ा भंडार के साथ-साथ, **जनरेटिव AI** का उपयोग बड़ी मात्रा में चिकित्सीय अभिलेखों से चिकित्सकीय रूप से प्रासंगिक प्रतिरूपों को संश्लेषित करने के लिए एक उपकरण के रूप में किया जा सकता है, जो डॉक्टरों और रोगियों के निर्णयों को सूचित कर सकते हैं।
- Indeed, if an AI model is trained to engage with users in their local language, it can help analyse medical information to suggest possible diagnoses and lay out the various options, and thus encourage participation from diverse groups of patients.

वास्तव में, यदि किसी AI मॉडल को उपयोगकर्ताओं की **स्थानीय भाषा** में संवाद करने के लिए प्रशिक्षित किया जाए, तो यह संभावित निदानों का सुझाव देने और विभिन्न विकल्पों को प्रस्तुत करने के लिए चिकित्सीय जानकारी का विश्लेषण करने में सहायता कर सकता है और इस प्रकार विभिन्न रोगी समूहों की भागीदारी को प्रोत्साहित कर सकता है।

Attracting drug developers दवा निर्माताओं को आकर्षित करना

- Support from the government or philanthropic organisations is needed to develop a platform with such AI capabilities, with clear governance and oversight.
ऐसी AI क्षमताओं वाले मंच को विकसित करने के लिए स्पष्ट शासन और निगरानी के साथ सरकार या परोपकारी संगठनों के समर्थन की आवश्यकता है।
- In fact, the PDC should deliberately attempt to generate useful data.
वास्तव में, PDC को जानबूझकर उपयोगी आँकड़े उत्पन्न करने का प्रयास करना चाहिए।
- The authors suggest encouraging natural-history registries led by patient advocacy groups to generate longitudinal real-world evidence datasets.
लेखक रोगी-अधिकार समर्थक समूहों के नेतृत्व में प्राकृतिक-इतिहास रजिस्ट्रियों को प्रोत्साहित करने का सुझाव देते हैं, ताकि दीर्घकालिक वास्तविक-विश्व साक्ष्य आँकड़ा-समुच्चय तैयार किए जा सकें।
- The groups can be funded to initiate natural history studies for their target diseases, with the data then channelled to the PDC.
इन समूहों को अपने लक्षित रोगों के लिए प्राकृतिक-इतिहास अध्ययन शुरू करने हेतु वित्तपोषित किया जा सकता है, जिसके बाद आँकड़ों को PDC तक पहुँचाया जा सकता है।
- Aggregating granular, everyday patient-reported metrics across India's unique, genetically diverse endogamous populations could also attract drug developers from abroad seeking ethnically specific target-validation cohorts.
भारत की विशिष्ट और आनुवंशिक रूप से विविध अंतर्विवाही जनसंख्या के बीच दैनिक आधार पर रोगियों द्वारा बताए गए सूक्ष्म मापदंडों को एकत्रित करने से विदेशों के ऐसे दवा-निर्माताओं को भी आकर्षित किया जा सकता है, जो जातीय रूप से विशिष्ट लक्ष्य-सत्यापन समूहों की तलाश कर रहे हैं।

Rare disease revolution दुर्लभ रोगों में क्रांति

- With recent updates to India's **New Drugs and Clinical Trials Rules**, which embrace advanced computational modelling and non-animal testing models, Indian biotechnology and pharmaceutical companies can use the PDC to rapidly pre-screen and construct virtual synthetic control groups, making small-batch orphan drug evaluation clinically and financially viable within domestic budgets.
भारत के **New Drugs and Clinical Trials Rules** में हालिया अद्यतनों के साथ, जो उन्नत कम्प्यूटेशनल मॉडलिंग और गैर-पशु परीक्षण मॉडल को अपनाते हैं, भारतीय जैव-प्रौद्योगिकी और औषधि कंपनियाँ PDC का उपयोग तेजी से पूर्व-जाँच करने और आभासी कृत्रिम नियंत्रण समूह तैयार करने के लिए कर सकती हैं, जिससे छोटे बैच में अनाथ दवाओं का मूल्यांकन घरेलू बजट के भीतर चिकित्सकीय और वित्तीय रूप से व्यवहार्य हो सकता है।
- Just as Amul and the other cooperatives it inspired made India milk-secure and secured the livelihoods of millions of farmers, so too would a PDC have an outsized impact on drug discovery for most rare diseases, contributing to the good health of many patients who currently have few treatment options.
जिस प्रकार अमूल और उससे प्रेरित अन्य सहकारी संस्थाओं ने भारत को दूध के मामले में आत्मनिर्भर बनाया और लाखों किसानों की आजीविका सुरक्षित की, उसी प्रकार PDC का भी अधिकांश दुर्लभ रोगों के लिए दवा



खोज पर असाधारण प्रभाव पड़ सकता है और यह वर्तमान में सीमित उपचार विकल्पों वाले अनेक रोगियों के बेहतर स्वास्थ्य में योगदान दे सकता है।

25A8. Quiz

Answers to August 20 quiz:

1. When a version of a gene becomes randomly more/less common – **Ans: Genetic drift**
 2. Theory to explain complex life using mitochondria, chloroplasts – **Ans: Endosymbiotic theory**
 3. Eldredge's co-theorist who posited evolution could be rapid in bursts – **Ans: Stephen Gould**
 4. Organs exemplified by human appendix, whale pelvis, etc. – **Ans: Vestigial bones**
 5. Process that explains why animals sacrifice themselves for their kin – **Ans: Kin selection**
- Visual: **Red Queen**

1. Random Change in Gene Frequency — Genetic Drift

- **Genetic drift** is a random change in the frequency of an allele—a particular version of a gene—within a population.
- It occurs by chance rather than because one allele provides a survival or reproductive advantage.
- Its effect is strongest in **small populations**, where accidental deaths or reproduction by only a few individuals can considerably alter allele frequencies.
- The **founder effect** and **population bottleneck** are important forms of genetic drift.

- Drift may cause even a beneficial allele to disappear or a neutral or harmful allele to become fixed. It therefore differs from natural selection, which is non-random.

2. Origin of Mitochondria and Chloroplasts — Endosymbiotic Theory

- The **endosymbiotic theory** explains how complex eukaryotic cells acquired mitochondria and chloroplasts from formerly free-living bacteria.
- An ancestral host cell engulfed aerobic bacteria without digesting them. These bacteria eventually evolved into **mitochondria**, which generate cellular energy.
- In the lineage of plants and algae, engulfed photosynthetic cyanobacteria developed into **chloroplasts**.
- Evidence includes their **circular DNA**, **bacterial-type ribosomes**, **double membranes** and reproduction through binary fission.
- Many organelle genes were subsequently transferred to the host-cell nucleus.
- Lynn Margulis strongly developed and popularised this theory during the twentieth century.

3. Eldredge's Co-theorist — Stephen Jay Gould

- The correct full name is **Stephen Jay Gould**, an American evolutionary biologist and palaeontologist.
- Gould and palaeontologist **Niles Eldredge** jointly proposed the theory of **punctuated equilibria** in 1972.
- The theory holds that species commonly remain comparatively stable for long geological periods, a condition called **stasis**.
- These periods may be interrupted by relatively brief episodes of rapid evolutionary change, often associated with speciation.
- "Rapid" here means rapid on a geological timescale; it does not imply that complex species appear instantaneously.
- The theory explains why transitional changes may sometimes appear discontinuous in the fossil record.

4. Human Appendix and Whale Pelvis — Vestigial Structures

- The scientifically accurate answer is **vestigial structures or vestigial organs**, not "vestigial bones."
- These are inherited anatomical features that have become reduced or have lost much of their ancestral function during evolution.
- The **whale pelvis** is a reduced remnant inherited from terrestrial ancestors whose hind limbs supported locomotion.



- The human **appendix is not a bone**. It is a vestigial structure associated evolutionarily with a larger ancestral caecum, although it retains some immune and microbial functions.
- Therefore, “vestigial” does not necessarily mean entirely useless.
- Such structures provide evidence of **common ancestry and evolutionary modification**.

5. Self-sacrifice for Relatives — Kin Selection

- **Kin selection** explains how behaviour that benefits genetic relatives can evolve even when it imposes a cost on the individual performing it.
- Relatives are likely to possess copies of some of the same alleles; therefore, helping them reproduce can indirectly transmit shared genes.
- This contribution is included within an organism's **inclusive fitness**.
- Hamilton expressed the basic condition as $rB > C$, where r represents genetic relatedness, B the reproductive benefit received by the relative and C the cost to the helper.
- Alarm calls and sterile worker behaviour in social insects are commonly discussed examples.
- Not every apparent sacrifice is necessarily kin-selected.

6. Visual Concept — Red Queen Hypothesis

- The **Red Queen hypothesis** describes continual evolutionary change caused by interactions between competing or antagonistic species.
- It was proposed by evolutionary biologist **Leigh Van Valen in 1973** and named after the Red Queen in Lewis Carroll's *Through the Looking-Glass*.
- A species must continually adapt merely to maintain its relative fitness because its competitors, predators, parasites or hosts are also evolving.
- In host–parasite relationships, a host evolves stronger defences while the parasite evolves improved mechanisms of infection.
- The hypothesis is also used to explain how sexual reproduction may generate genetic variation that helps hosts resist rapidly evolving parasites.



Smart glasses highlight gaps in privacy laws

GS III: S&T

In June, reality star Kylie Jenner posted her latest collaboration on social media — a new design for Meta's line of AI-powered "smart glasses". Images of her wearing the glasses filled social media, as did videos of her teenage self lamenting the lack of privacy she was afforded because of her fame. The irony was unmissable: how is Ms. Jenner, who was once so worried about privacy, now promoting a device that enables surveillance?

Smart glasses are the latest addition to the wearable technology space. It is also a dangerous example of how current laws are unable to keep up with today's tech innovation.

According to Meta, these glasses allow you to see and answer calls, messages, and notifications via voice command. Built-in speakers help you listen to music and an integrated camera enables you to capture photos or videos through the lenses. Meta describes these glasses as "normal-looking eyewear with discreetly integrated glasses technology." Hidden from the naked eye, these glasses contain "tiny speakers, microphones, [and] a lightweight camera." The tech giant isn't shying away from how inconspicuous these features are; rather, it is flaunting it.

Privacy and data concerns

In India, the glasses, which have been advertised everywhere, retail at around ₹25,000. Stickers that claim to completely cover the LED recording indicator are also widely available. Meta says that if the LED is covered, the glasses will block the recording until the sticker is removed. Yet, workarounds are just a Google search away. The glasses also make a shutter sound when they start and stop recording, but this is not a strong indicator that you are being recorded. Further, Meta argues that the glasses are "designed for privacy, controlled by you." But this "control" is limited to the wearer, and not the recorded



Sonikka Loganathan

As wearable tech becomes more advanced, banning it will become increasingly difficult. Instead, laws should be framed with an understanding of how AI is changing the landscape

subject, such as requiring additional verification before use.

The website adds, "Meta collects data needed to help ensure that your glasses and app are reliable, secure and operating normally." An investigation by Swedish newspapers *Svenska Dagbladet* and *Goteborgs-Posten* found that Meta's contracted workers, who sometimes review the data to track user experience, were able to view sensitive content filmed on the smart glasses, including wearers using the toilet. In a comment to *BBC News*, Meta said its privacy policy states that it sometimes uses contractors to review data shared with them.

In this context, concerns about women's privacy have grown. Data from the National Crime Records Bureau (NCRB) show that in 2023, before the glasses entered the market, there were 3,678 cases of women-centred cybercrimes. Of these, 2,767 cases involved the transmission or publication of sexually explicit material.

Consider how much easier these glasses would make it to record people without their knowledge, including in private spaces. The potential risks to children are equally concerning. In 2023, the NCRB recorded over 698 cases related to the use or storage of child sexual abuse material. If adults cannot often recognise when the glasses are recording, a child certainly cannot.

These risks are compounded by the glasses' battery life, offering 4-9 hours of active use. This means entire movies can be recorded, university lectures can be taped, confidential documents scanned, and patient information collected. It also means that even those who are not intentionally engaging in malpractice could invariably do so — by capturing something private in the frame's periphery, for example. Ultimately, these glasses allow for the extensive, non-consensual collection of data.

Lacuna in the law

India's laws today do little to

protect people from this surveillance. The Digital Personal Data Protection Act, 2023 (DPDPA) is technologically agnostic, making the purpose of data collection the key consideration. In a public space, people can neither grant consent nor monitor how their information is used.

Following the landmark *K.S. Puttaswamy vs. Union of India* 2017 judgment, reasonable expectation of privacy was recognised as a fundamental right under Article 21. This means that people, even in public spaces, don't generally expect to be captured in detail. But the DPDPA excludes information that is made publicly available. Hence, the reasonable expectation of privacy granted by *Puttaswamy* is not met because the Act does not regulate how someone is being recorded in public. The Act's scope is diluted further since there are minimal indicators that you could be in someone's frame, unlike someone recording on their phone.

This combination of rapid tech innovation and a lack of legal regulation and public awareness creates the perfect storm. With devices such as these glasses becoming common, people may be collecting information with little knowledge of where the data are being used. Without legal safeguards, digital accountability risks becoming an afterthought.

Banning such devices isn't practical from a business or tech standpoint. Meta might be the biggest player in this space today, but Google and Reliance are also entering the smart glasses market. As wearable tech becomes more advanced, banning it will become increasingly difficult. Instead, laws should be framed with an understanding of how AI is changing the landscape. There is a need for assessments on how technology will evolve, the risks that may accompany it, and the government's responsibility in ensuring that citizens are adequately protected.

sonikka.l@thehindu.co.in

25A8. Smart glasses highlight gaps in privacy laws

स्मार्ट चश्मे निजता संबंधी कानूनों की कमियों को उजागर करते हैं

- In June, reality star Kylie Jenner posted her latest collaboration on social media — a new design for Meta's line of AI-powered "smart glasses".
जून में, रियलिटी स्टार काइली जेनर ने सोशल मीडिया पर अपना नवीनतम सहयोग साझा किया — Meta की AI-संचालित "स्मार्ट ग्लासेस" श्रृंखला के लिए एक नया डिज़ाइन।
- Images of her wearing the glasses filled social media, as did videos of her teenage self lamenting the lack of privacy she was afforded because of her fame.
चश्मा पहने हुए उनकी तस्वीरों से सोशल मीडिया भर गया, साथ ही उनके किशोरावस्था के ऐसे वीडियो भी प्रसारित हुए, जिनमें वे अपनी प्रसिद्धि के कारण प्राप्त निजता की कमी पर दुख व्यक्त करती दिखाई दीं।
- The irony was unmissable: how is Ms. Jenner, who was once so worried about privacy, now promoting a device that enables surveillance?

विडंबना स्पष्ट थी: **सुश्री जेनर**, जो कभी निजता को लेकर इतनी चिंतित थीं, अब ऐसे उपकरण का प्रचार कैसे कर रही हैं जो **निगरानी** को सक्षम बनाता है?

- **Smart glasses are the latest addition to the wearable technology space.**
स्मार्ट चश्मे पहनने योग्य प्रौद्योगिकी के क्षेत्र में नवीनतम जुड़ाव हैं।
- It is also a dangerous example of how current laws are unable to keep up with today's tech innovation.
यह इस बात का एक गंभीर उदाहरण भी है कि वर्तमान कानून आज के **तकनीकी नवाचारों** के साथ कदम मिलाने में असमर्थ हैं।
- According to Meta, **these glasses allow you to see and answer calls, messages, and notifications via voice command.**
Meta के अनुसार, ये चश्मे आपको **वॉइस कमांड** के माध्यम से कॉल, संदेश और सूचनाएँ देखने तथा उनका उत्तर देने की सुविधा देते हैं।
- Built-in speakers help you listen to music and an integrated camera enables you to capture photos or videos through the lenses.
अंतर्निर्मित स्पीकर संगीत सुनने में सहायता करते हैं और एकीकृत कैमरा आपको लेंस के माध्यम से **तस्वीरें या वीडियो रिकॉर्ड** करने में सक्षम बनाता है।
- Meta describes these glasses as "normal-looking eyewear with discreetly integrated glasses technology."
Meta इन चश्मों को **"सामान्य दिखने वाले चश्मे जिनमें सावधानीपूर्वक एकीकृत चश्मा प्रौद्योगिकी है"** के रूप में वर्णित करता है।
- Hidden from the naked eye, these glasses contain **"tiny speakers, microphones, [and] a lightweight camera."**
नंगी आँखों से दिखाई न देने वाले इन चश्मों में **"छोटे स्पीकर, माइक्रोफोन और हल्का कैमरा"** होता है।
- The tech giant isn't shying away from how inconspicuous these features are; rather, it is flaunting it.
यह प्रौद्योगिकी दिग्गज इन सुविधाओं के इतने **अदृश्य और अगोचर** होने से बचने का प्रयास नहीं कर रहा है; बल्कि वह इसका प्रदर्शन कर रहा है।

Privacy and data concerns निजता और आँकड़ों संबंधी चिंताएँ

- In India, the glasses, which have been advertised everywhere, retail at around ₹25,000.
भारत में, व्यापक रूप से विज्ञापित किए गए इन चश्मों की खुदरा कीमत लगभग **₹25,000** है।
- Stickers that claim to completely cover the LED recording indicator are also widely available.
ऐसे स्टिकर भी व्यापक रूप से उपलब्ध हैं, जो **LED रिकॉर्डिंग संकेतक** को पूरी तरह ढकने का दावा करते हैं।
- Meta says that if the LED is covered, the glasses will block the recording until the sticker is removed.
Meta का कहना है कि यदि LED को ढक दिया जाता है, तो स्टिकर हटाए जाने तक चश्मा **रिकॉर्डिंग को रोक देगा**।
- Yet, workarounds are just a Google search away.
फिर भी, इसके **वैकल्पिक उपाय** केवल एक Google खोज की दूरी पर उपलब्ध हैं।
- The glasses also make a shutter sound when they start and stop recording, but this is not a strong indicator that you are being recorded.
रिकॉर्डिंग शुरू और बंद करते समय चश्मे से **शटर की आवाज़** भी आती है, लेकिन यह इस बात का मजबूत संकेत नहीं है कि आपकी रिकॉर्डिंग की जा रही है।
- Further, Meta argues that the glasses are "designed for privacy, controlled by you."
इसके अतिरिक्त, Meta का तर्क है कि ये चश्मे **"निजता के लिए डिज़ाइन किए गए हैं और आपके द्वारा नियंत्रित किए जाते हैं।"**

- But this “control” is limited to the wearer, and not the recorded subject, such as requiring additional verification before use.
लेकिन यह “नियंत्रण” केवल चश्मा पहनने वाले व्यक्ति तक सीमित है, रिकॉर्ड किए जा रहे व्यक्ति तक नहीं, जैसे कि उपयोग से पहले अतिरिक्त सत्यापन की आवश्यकता होना।
- The website adds, “Meta collects data needed to help ensure that your glasses and app are reliable, secure and operating normally.”
वेबसाइट पर आगे कहा गया है, “Meta आपके चश्मे और ऐप को विश्वसनीय, सुरक्षित और सामान्य रूप से संचालित रखने में सहायता के लिए आवश्यक आँकड़े एकत्र करता है।”
- An investigation by Swedish newspapers Svenska Dagbladet and Goteborgs-Posten found that Meta’s contracted workers, who sometimes review the data to track user experience, were able to view sensitive content filmed on the smart glasses, including wearers using the toilet.
स्वीडिश समाचार पत्रों Svenska Dagbladet और Goteborgs-Posten की एक जाँच में पाया गया कि Meta के अनुबंधित कर्मचारी, जो कभी-कभी उपयोगकर्ता अनुभव पर नज़र रखने के लिए आँकड़ों की समीक्षा करते हैं, स्मार्ट चश्मों से रिकॉर्ड की गई संवेदनशील सामग्री देख सकते थे, जिसमें शौचालय का उपयोग करते हुए चश्मा पहनने वाले लोग भी शामिल थे।
- In a comment to BBC News, Meta said its privacy policy states that it sometimes uses contractors to review data shared with them.
BBC News को दिए गए एक बयान में Meta ने कहा कि उसकी निजता नीति में उल्लेख है कि वह कभी-कभी उसके साथ साझा किए गए आँकड़ों की समीक्षा करने के लिए अनुबंधित कर्मचारियों का उपयोग करता है।
- In this context, concerns about women’s privacy have grown.
इस संदर्भ में, महिलाओं की निजता को लेकर चिंताएँ बढ़ गई हैं।
- Data from the National Crime Records Bureau (NCRB) show that in 2023, before the glasses entered the market, there were 3,678 cases of women-centred cybercrimes.
राष्ट्रीय अपराध रिकॉर्ड ब्यूरो (NCRB) के आँकड़े बताते हैं कि 2023 में, इन चश्मों के बाजार में आने से पहले, महिलाओं को केंद्र में रखने वाले साइबर अपराधों के 3,678 मामले दर्ज किए गए थे।
- Of these, 2,767 cases involved the transmission or publication of sexually explicit material.
इनमें से 2,767 मामलों में यौन रूप से स्पष्ट सामग्री का प्रसारण या प्रकाशन शामिल था।
- Consider how much easier these glasses would make it to record people without their knowledge, including in private spaces.
विचार करें कि ये चश्मे लोगों की जानकारी के बिना, यहाँ तक कि निजी स्थानों में भी, उनकी रिकॉर्डिंग करना कितना आसान बना देंगे।
- The potential risks to children are equally concerning.
बच्चों के लिए संभावित जोखिम भी उतने ही चिंताजनक हैं।
- In 2023, the NCRB recorded over 698 cases related to the use or storage of child sexual abuse material.
2023 में, NCRB ने बाल यौन शोषण सामग्री के उपयोग या भंडारण से संबंधित 698 से अधिक मामले दर्ज किए।
- If adults cannot often recognise when the glasses are recording, a child certainly cannot.
यदि वयस्क भी अक्सर यह पहचान नहीं सकते कि चश्मे से कब रिकॉर्डिंग हो रही है, तो बच्चा निश्चित रूप से ऐसा नहीं कर सकता।
- These risks are compounded by the glasses’ battery life, offering 4-9 hours of active use.
इन जोखिमों को चश्मे की 4-9 घंटे की सक्रिय बैटरी अवधि और बढ़ा देती है।
- This means entire movies can be recorded, university lectures can be taped, confidential documents scanned, and patient information collected.
इसका अर्थ है कि पूरी फिल्मों को रिकॉर्ड किया जा सकता है, विश्वविद्यालय के व्याख्यान को रिकॉर्ड किया जा सकता है, गोपनीय दस्तावेज़ों को स्कैन किया जा सकता है और रोगियों की जानकारी एकत्र की जा सकती है।

- It also means that even those who are not intentionally engaging in malpractice could invariably do so — by capturing something private in the frame's periphery, for example. इसका यह भी अर्थ है कि वे लोग भी अनजाने में अनुचित आचरण कर सकते हैं, जिनका ऐसा करने का कोई इरादा नहीं है — उदाहरण के लिए, फ्रेम के किनारे किसी निजी वस्तु या गतिविधि को रिकॉर्ड करके।
- Ultimately, these glasses allow for the extensive, **non-consensual collection of data**. अंततः, ये चश्मे व्यापक स्तर पर बिना सहमति के आँकड़ों के संग्रह की अनुमति देते हैं।

Lacuna in the law

कानून में रिक्तता

- India's laws today do little to protect people from this surveillance. भारत के वर्तमान कानून लोगों को इस प्रकार की निगरानी से बचाने के लिए बहुत कम सुरक्षा प्रदान करते हैं।
- The **Digital Personal Data Protection Act, 2023 (DPDPA)** is technologically agnostic, making the purpose of data collection the key consideration. डिजिटल व्यक्तिगत आँकड़ा संरक्षण अधिनियम, 2023 (DPDPA) प्रौद्योगिकी-तटस्थ है, जिससे आँकड़ा संग्रह का उद्देश्य प्रमुख विचार बन जाता है।
- In a public space, people can neither grant consent nor monitor how their information is used. सार्वजनिक स्थान पर लोग न तो अपनी सहमति दे सकते हैं और न ही यह निगरानी कर सकते हैं कि उनकी जानकारी का उपयोग किस प्रकार किया जा रहा है।
- Following the landmark **K.S. Puttaswamy vs. Union of India 2017** judgment, reasonable expectation of privacy was recognised as a fundamental right under Article 21. ऐतिहासिक **K.S. Puttaswamy vs. Union of India 2017** निर्णय के बाद, निजता की उचित अपेक्षा को अनुच्छेद 21 के तहत मौलिक अधिकार के रूप में मान्यता दी गई।
- This means that people, even in public spaces, don't generally expect to be captured in detail. इसका अर्थ है कि लोग, यहाँ तक कि सार्वजनिक स्थानों पर भी, सामान्यतः यह अपेक्षा नहीं करते कि उन्हें विस्तार से रिकॉर्ड किया जाएगा।
- But the DPDPA excludes information that is made publicly available. लेकिन DPDPA सार्वजनिक रूप से उपलब्ध कराई गई जानकारी को अपने दायरे से बाहर रखता है।
- Hence, the reasonable expectation of privacy granted by Puttaswamy is not met because the Act does not regulate how someone is being recorded in public. इसलिए, Puttaswamy द्वारा प्रदान की गई निजता की उचित अपेक्षा पूरी नहीं होती, क्योंकि यह अधिनियम सार्वजनिक स्थान पर किसी व्यक्ति की रिकॉर्डिंग किस प्रकार की जा रही है, इसे विनियमित नहीं करता।
- The Act's scope is diluted further since there are minimal indicators that you could be in someone's frame, unlike someone recording on their phone. अधिनियम का दायरा और भी सीमित हो जाता है क्योंकि फोन से रिकॉर्डिंग करने वाले व्यक्ति के विपरीत, इस बात के बहुत कम संकेत होते हैं कि आप किसी के कैमरा फ्रेम में हो सकते हैं।
- This combination of rapid tech innovation and a lack of legal regulation and public awareness creates the perfect storm. तेज़ तकनीकी नवाचार और कानूनी विनियमन तथा जन-जागरूकता की कमी का यह संयोजन एक गंभीर स्थिति उत्पन्न करता है।
- With devices such as these glasses becoming common, people may be collecting information with little knowledge of where the data are being used. इन जैसे उपकरणों के आम होने के साथ, लोग इस बात की बहुत कम जानकारी के साथ आँकड़े एकत्र कर सकते हैं कि उन आँकड़ों का उपयोग कहाँ किया जा रहा है।
- Without legal safeguards, **digital accountability** risks becoming an afterthought. कानूनी सुरक्षा उपायों के अभाव में डिजिटल जवाबदेही एक बाद की चिंता बन जाने का जोखिम है।
- Banning such devices isn't practical from a business or tech standpoint. व्यावसायिक या तकनीकी दृष्टिकोण से ऐसे उपकरणों पर प्रतिबंध लगाना व्यावहारिक नहीं है।



- Meta might be the biggest player in this space today, but Google and Reliance are also entering the smart glasses market.
आज Meta इस क्षेत्र की सबसे बड़ी कंपनी हो सकती है, लेकिन **Google और Reliance** भी स्मार्ट चशमों के बाजार में प्रवेश कर रहे हैं।
- As wearable tech becomes more advanced, banning it will become increasingly difficult.
जैसे-जैसे **पहनने योग्य प्रौद्योगिकी** अधिक उन्नत होती जाएगी, इस पर प्रतिबंध लगाना और अधिक कठिन होता जाएगा।
- Instead, laws should be framed with an understanding of how AI is changing the landscape.
इसके बजाय, कानूनों का निर्माण इस समझ के साथ किया जाना चाहिए कि **AI परिदृश्य को किस प्रकार बदल रहा है**।
- There is a need for assessments on how technology will evolve, the risks that may accompany it, and the government's responsibility in ensuring that citizens are adequately protected.
यह आकलन करने की आवश्यकता है कि **प्रौद्योगिकी किस प्रकार विकसित होगी**, इसके साथ कौन-से जोखिम उत्पन्न हो सकते हैं और यह सुनिश्चित करने में सरकार की क्या जिम्मेदारी है कि नागरिकों को पर्याप्त रूप से **संरक्षित** किया जाए।

Workers in China fear job loss as AI and robots are poised to take their place

Associated Press
HONG KONG

Computer programmer Fei Zhaojun's boss asked him if artificial intelligence could soon replace humans in coding jobs. Two weeks later, he was laid off from his job in Beijing, together with about 160 of his colleagues.
It is an increasingly common scenario as AI, supported by government policies, reshapes China's massive job market. Some economists believe that might eventually undermine the overall strength of the world's second largest economy.
"There appears to be far less anti-AI sentiment in China (than elsewhere). Most people seem either positive, neutral, or mildly

interested in AI," said Shuang He, a Beijing-based senior analyst at advisory and research firm Plenum.
"Individuals who worry about being replaced, as well as those who have already left traditional workplaces, are often eager to experiment with AI-enabled businesses and independent ventures," she said. "The level of interest is striking."
Until recently, Mr. Fei had doubted AI could do programming work perfectly, even though his bosses thought it was close enough.
"Mid-level coders' job are essentially replaceable in most of the cases," said Mr. Fei, 40. "Even if it is a disaster that leads to replacing all humans, at this stage, you just have to use

it as everyone else is using it."
Now he is making vlog-style short videos during a career break while figuring out what he wants to do next. He is not making a living off of his videos, which are about ordinary people's lives, but hopes that they might help others.
No takers for languages
Du Qinchun, a part-time translator, has been helping to train an AI model to do translations. That has brought him more work, at least temporarily.
"But it's true that the pay in the industry has been cut by more than half compared to what it was years ago," said Mr. Du, who is based in southwestern China's Chengdu city. The trend is so evident



The referee shows yellow card to a robot during a football match at the 2nd World Humanoid Robot Games in Beijing on August 22. AP

that popular college programmes in foreign languages have increasingly fallen out of favour as AI-powered translation tools have become more widespread.
The share of Chinese industrial enterprises saying they use AI models and "agents" jumped to 47.5% last year from 9.6% in 2024, according to the market intelligence firm IDC.
"China's vibrant open-source model ecosystem fosters greater AI application innovation in industrial settings, gradually closing the gap between foundational model capabilities and real-world enterprise value creation," said Yanze Du, an IDC senior research manager in Beijing.
Humanoid robots can now, for example, sort parcels in postal centres, although still on a small-scale basis, and are pushing the boundaries in performing more human tasks such as directing traffic and making coffee. Food delivery robots are also gaining ground, potentially threatening the livelihoods of millions of Chinese food delivery workers.
Generative AI increasingly is used for creation, production and distribution in China's short drama industry. The number of live-action short and vertical video series designed for mobile phones fell

about 75% in the first quarter of this year from a year earlier, according to Chinese media reports.
A report from International Labour Organization, meanwhile, found that women face higher risks of losing employment due to use of AI than men, as they tend to work in areas more suitable for automation.
Under China's "AI Plus" initiative and its five-year plan through 2030, the government is pushing to infuse AI across many industries, aiming to gain an edge in China's technology rivalry with the U.S.
"What is specific to China is that the government is really into diffusing AI across the economy, so AI may get into different domains more quickly compared to other countries," said Zilan Qian, a research associate at Oxford China Policy Lab.

Ageing population
That said, in the longer run, some experts say unemployment rates could fall, since China's population of 1.4 billion is rapidly ageing and shrinking.
By 2050, China is projected to have fewer than two working-age adults to support each retiree, compared with more than 2.5 in the U.S., said Xuenan Gao, a professor at San Francisco Bay University whose focus includes technology and society.
"Automation could partially offset a shrinking workforce rather than being purely a threat to it," Mr. Gao said.

25A8. Workers in China fear job loss as AI and robots are poised to take their place

चीन में कामगारों को नौकरी जाने का भय, क्योंकि एआई और रोबोट उनकी जगह लेने को तैयार हैं

- Computer programmer **Fei Zhaojun's** boss asked him if **artificial intelligence** could soon replace humans in coding jobs.
- कंप्यूटर प्रोग्रामर **फेई झाओजुन** के बॉस ने उनसे पूछा कि क्या **कृत्रिम बुद्धिमत्ता** शीघ्र ही कोडिंग से जुड़ी नौकरियों में मनुष्यों का स्थान ले सकती है।
- Two weeks later, he was **laid off** from his job in Beijing, together with about **160 of his colleagues**.
- दो सप्ताह बाद, उन्हें बीजिंग स्थित नौकरी से उनके लगभग **160 सहकर्मियों सहित निकाल दिया गया**।
- It is an increasingly common scenario as **AI**, supported by **government policies**, reshapes China's massive job market.
- यह परिदृश्य लगातार आम होता जा रहा है, क्योंकि **सरकारी नीतियों से समर्थित एआई** चीन के विशाल रोजगार बाजार को नया स्वरूप दे रही है।
- Some economists believe that might eventually undermine the overall strength of the **world's second largest economy**.

- कुछ अर्थशास्त्रियों का मानना है कि यह अंततः विश्व की दूसरी सबसे बड़ी अर्थव्यवस्था की समग्र शक्ति को कमजोर कर सकता है।
- “There appears to be far less anti-AI sentiment in China (than elsewhere).
- “चीन में (अन्य स्थानों की तुलना में) एआई-विरोधी भावना बहुत कम दिखाई देती है।
- Most people seem either positive, neutral, or mildly interested in AI,” said Shujing He, a Beijing-based senior analyst at advisory and research firm Plenum.
- परामर्श एवं अनुसंधान संस्था प्लेनम की बीजिंग स्थित वरिष्ठ विश्लेषक शुजिंग हे ने कहा, “अधिकांश लोग एआई के प्रति सकारात्मक, तटस्थ अथवा सामान्य रूप से रुचि रखते हुए दिखाई देते हैं।”
- “Individuals who worry about being replaced, as well as those who have already left traditional workplaces, are often eager to experiment with AI-enabled businesses and independent ventures,” she said.
- उन्होंने कहा, “जो लोग अपना स्थान लिए जाने को लेकर चिंतित हैं और जो पहले ही पारंपरिक कार्यस्थलों को छोड़ चुके हैं, वे प्रायः एआई-सक्षम व्यवसायों और स्वतंत्र उद्यमों के साथ प्रयोग करने के लिए उत्सुक रहते हैं।”
- “The level of interest is striking.”
- “इसमें लोगों की रुचि का स्तर उल्लेखनीय है।”
- Until recently, Mr. Fei had doubted AI could do programming work perfectly, even though his bosses thought it was close enough.
- हाल तक श्री फेई को संदेह था कि एआई प्रोग्रामिंग का कार्य पूर्णता से कर सकती है, यद्यपि उनके बॉस मानते थे कि वह इसके लगभग निकट पहुँच चुकी है।
- “Mid-level coders’ job are essentially replaceable in most of the cases,” said Mr. Fei, 40.
- 40 वर्षीय श्री फेई ने कहा, “अधिकांश मामलों में मध्यम स्तर के कोडर की नौकरी को मूलतः प्रतिस्थापित किया जा सकता है।”
- “Even if it is a disaster that leads to replacing all humans, at this stage, you just have to use it as everyone else is using it.”
- “यदि यह सभी मनुष्यों को प्रतिस्थापित करने वाली आपदा भी बन जाए, तब भी इस चरण पर आपको इसका उपयोग करना ही होगा, क्योंकि अन्य सभी लोग भी इसका उपयोग कर रहे हैं।”
- Now he is making vlog-style short videos during a career break while figuring out what he wants to do next.
- अब वह अपने करियर से विराम के दौरान ब्लॉग-शैली के लघु वीडियो बना रहे हैं और यह तय करने का प्रयास कर रहे हैं कि आगे उन्हें क्या करना है।
- He is not making a living off of his videos, which are about ordinary people’s lives, but hopes that they might help others.
- वह सामान्य लोगों के जीवन पर आधारित अपने वीडियो से आजीविका अर्जित नहीं कर रहे हैं, किंतु उन्हें आशा है कि ये वीडियो अन्य लोगों की सहायता कर सकते हैं।

No takers for languages भाषाओं के लिए कोई इच्छुक नहीं

- Du Qinchun, a part-time translator, has been helping to train an AI model to do translations.
- अंशकालिक अनुवादक दू छिनचुन, अनुवाद करने के लिए एक एआई मॉडल को प्रशिक्षित करने में सहायता कर रहे हैं।
- That has brought him more work, at least temporarily.
- इससे उन्हें कम-से-कम अस्थायी रूप से अधिक काम मिला है।
- “But it’s true that the pay in the industry has been cut by more than half compared to what it was years ago,” said Mr. Du, who is based in southwestern China’s Chengdu city.
- दक्षिण-पश्चिमी चीन के चेंगदू शहर में रहने वाले श्री दू ने कहा, “लेकिन यह सत्य है कि वर्षों पहले की तुलना में इस उद्योग में मिलने वाला पारिश्रमिक आधे से भी अधिक कम हो गया है।”

- The trend is so evident that popular college programmes in **foreign languages** have increasingly fallen out of favour as **AI-powered translation tools** have become more widespread.
- यह प्रवृत्ति इतनी स्पष्ट है कि **एआई-संचालित अनुवाद उपकरणों** के अधिक व्यापक होने के साथ महाविद्यालयों में **विदेशी भाषाओं के लोकप्रिय पाठ्यक्रमों** के प्रति आकर्षण लगातार कम होता गया है।
- The share of Chinese industrial enterprises saying they use **AI models and “agents”** jumped to **47.5%**
- एआई मॉडल और “एजेंट”** का उपयोग करने की बात कहने वाले चीनी औद्योगिक उद्यमों का अनुपात बढ़कर **47.5%** हो गया।
- last year from **9.6% in 2024**, according to the market intelligence firm **IDC**.
- बाजार आसूचना संस्था **आईडीसी** के अनुसार, यह अनुपात **2024 के 9.6%** से बढ़कर पिछले वर्ष इस स्तर पर पहुँच गया।
- “China’s vibrant **open-source model ecosystem** fosters greater AI application innovation in industrial settings, gradually closing the gap between foundational model capabilities and real-world enterprise value creation,” said **Yanze Du**, an IDC senior research manager in Beijing.
- बीजिंग में आईडीसी के वरिष्ठ अनुसंधान प्रबंधक **यान्जे दू** ने कहा, “चीन का जीवंत **ओपन-सोर्स मॉडल पारिस्थितिकी तंत्र** औद्योगिक परिवेश में एआई अनुप्रयोगों से संबंधित अधिक नवाचार को प्रोत्साहित करता है तथा आधारभूत मॉडलों की क्षमताओं और वास्तविक उद्यम-मूल्य सृजन के बीच के अंतर को धीरे-धीरे कम कर रहा है।”
- Humanoid robots** can now, for example, sort parcels in postal centres, although still on a small-scale basis, and are pushing the boundaries in performing more human tasks such as **directing traffic and making coffee**.
- उदाहरण के लिए, **मानवरूपी रोबोट** अब डाक केंद्रों में पार्सलों की छँटाई कर सकते हैं, यद्यपि अभी यह कार्य छोटे स्तर पर हो रहा है, और वे **यातायात निर्देशित करने तथा कॉफी बनाने** जैसे अधिक मानवीय कार्यों को संपन्न करने की सीमाओं का विस्तार कर रहे हैं।
- Food delivery robots** are also gaining ground, potentially threatening the livelihoods of millions of Chinese food delivery workers.
- भोजन पहुँचाने वाले रोबोट** भी तेजी से प्रचलित हो रहे हैं, जिससे चीन के लाखों भोजन-वितरण कर्मचारियों की आजीविका को संभावित खतरा उत्पन्न हो रहा है।
- Generative AI** increasingly is used for creation, production and distribution in China’s **short drama industry**.
- चीन के **लघु नाटक उद्योग** में सृजन, निर्माण और वितरण के लिए **जनरेटिव एआई** का उपयोग लगातार बढ़ रहा है।
- The number of live-action short and vertical video series designed for mobile phones fell about **75% in the first quarter of this year** from a year earlier, according to Chinese media reports.
- चीनी मीडिया रिपोर्टों के अनुसार, मोबाइल फोन के लिए निर्मित लाइव-एक्शन लघु एवं वर्टिकल वीडियो श्रृंखलाओं की संख्या पिछले वर्ष की समान अवधि की तुलना में **इस वर्ष की पहली तिमाही में लगभग 75% घट गई**।
- A report from **International Labour Organization**, meanwhile, found that **women face higher risks of losing employment due to use of AI than men**, as they tend to work in areas more suitable for automation.
- इस बीच, **अंतरराष्ट्रीय श्रम संगठन** की एक रिपोर्ट में पाया गया कि **एआई के उपयोग के कारण महिलाओं के लिए पुरुषों की तुलना में रोजगार खोने का जोखिम अधिक है**, क्योंकि वे प्रायः ऐसे क्षेत्रों में कार्य करती हैं जो स्वचालन के लिए अधिक उपयुक्त हैं।
- Under China’s “**AI Plus**” initiative and its **five-year plan through 2030**, the government is pushing to infuse AI across many industries, aiming to gain an edge in China’s technology rivalry with the U.S.



- चीन की “एआई प्लस” पहल और 2030 तक की पंचवर्षीय योजना के अंतर्गत सरकार अनेक उद्योगों में एआई को समाहित करने पर बल दे रही है, जिसका उद्देश्य अमेरिका के साथ चीन की प्रौद्योगिकी प्रतिस्पर्धा में बढ़त प्राप्त करना है।
- “What is specific to China is that the government is really into **diffusing AI across the economy**, so AI may get into different domains more quickly compared to other countries,” said **Zilan Qian**, a research associate at Oxford China Policy Lab.
- ऑक्सफोर्ड चाइना पॉलिसी लैब की शोध सहयोगी **जिलान छियान** ने कहा, “चीन की विशिष्टता यह है कि यहाँ की सरकार वास्तव में **संपूर्ण अर्थव्यवस्था में एआई के प्रसार** के लिए सक्रिय है; इसलिए अन्य देशों की तुलना में एआई विभिन्न क्षेत्रों में अधिक तेजी से प्रवेश कर सकती है।”

Ageing population वृद्ध होती जनसंख्या

- That said, in the longer run, some experts say **unemployment rates could fall**, since China's population of **1.4 billion** is rapidly ageing and shrinking.
- इसके बावजूद, कुछ विशेषज्ञों का कहना है कि दीर्घावधि में **बेरोजगारी दर कम हो सकती है**, क्योंकि चीन की **1.4 अरब की जनसंख्या** तेजी से वृद्ध हो रही है और घट रही है।
- By **2050**, China is projected to have **fewer than two working-age adults to support each retiree**, compared with more than 2.5 in the U.S., said **Xuenan Cao**, a professor at San Francisco Bay University whose focus includes technology and society.
- प्रौद्योगिकी और समाज सहित विभिन्न विषयों पर अध्ययन करने वाले सैन फ्रांसिस्को बे यूनिवर्सिटी के प्रोफेसर **शुएनान काओ** ने कहा कि **2050 तक** चीन में प्रत्येक सेवानिवृत्त व्यक्ति को सहारा देने के लिए **दो से भी कम कार्यशील आयु के वयस्क** होने का अनुमान है, जबकि अमेरिका में यह संख्या 2.5 से अधिक होगी।
- “**Automation could partially offset a shrinking workforce** rather than being purely a threat to it,” Mr. Cao said.
- श्री काओ ने कहा, “**स्वचालन घटते हुए कार्यबल की आंशिक रूप से भरपाई कर सकता है**, न कि केवल उसके लिए खतरा बन सकता है।”

PCS Special:		25 August
25A8	Perfect host आदर्श मेज़बान	
25A8	Incumbent Tokayev wins key election in Kazakhstan मौजूदा राष्ट्रपति तोकायेव ने कज़ाखस्तान में महत्वपूर्ण चुनाव जीता	



PCS

Perfect host

India was successful as a host of
badminton World Championships

The 2026 BWF World Championships in New Delhi marked the rise of France as an on-court force and of India as a capable host. Alex Lanier's triumph in singles, and Thom Gicquel and Delphine Delrue's in mixed doubles, were the first golds in France's history. It was just over three months ago that the European nation finished a worthy runner-up to China in the Thomas Cup, the de facto World Cup in badminton. The Worlds success has established France as a serious contender in a sport otherwise dominated by Asian countries. In fact, Lanier is just the third non-Asian this century — after Spain's Carolina Marin and Denmark's Viktor Axelsen — to win the singles gold at the World Championships. The 21-year-old did that at a spruced-up Indira Gandhi Indoor Stadium, which was in the dock earlier in January when pigeons and monkeys intruded into the arena during the India Open. The massive facelift ensured that the marquee event's return to India after 17 years would be long remembered. An Se-Young will also go back with happy memories after reclaiming the women's singles crown from three-time titlist Akane Yamaguchi. The victory extended the 24-year-old reigning Olympic champion's stellar 2026, during which she has won an Uber Cup gold medal, and the individual and team trophies at the Badminton Asia Championships.

For India, the competition was the 12th straight edition where it secured at least one medal, with Gayatri Gopichand and Treasa Jolly bagging a bronze in women's doubles. The performance is the latest in a series of good outcomes for Indian badminton after an ordinary 2025, where Satwiksairaj Rankireddy and Chirag Shetty's World Championships doubles bronze was the best result. This year, Lakshya Sen reached the All England Open final, and Ayush Shetty at the Badminton Asia Championships. P.V. Sindhu's victory at the Japan Open Super 750 last month was only her second Tour title in the last four years, and there were also triumphs for Satwiksairaj and Chirag at Singapore Open Super 750, and for Devika Sihag, Tanvi Sharma and Ashmita Chaliha at the Super 300 level. Yet, the feeling is unmistakable that India should have done better at a home World Championships, with Lakshya's second-round defeat to the unheralded American teenager Garret Tan the most disappointing. There is no questioning the 25-year-old's capability; he is a World Championships bronze medallist, a two-time All England finalist and finished an agonising fourth at the Paris 2024 Olympics. But no Indian men's singles player has won an elite BWF Super 1000-level title since K. Srikanth in 2017. A swift end to this drought is essential for the overall health of the sport.

व्यापक नवीनीकरण ने यह सुनिश्चित किया कि 17 वर्षों के बाद इस प्रतिष्ठित आयोजन की भारत में वापसी लंबे समय तक याद रखी जाएगी।

- An Se-Young will also go back with happy memories after reclaiming the women's singles crown from three-time titlist Akane Yamaguchi.

अन से-यंग भी तीन बार की विजेता अकाने यामागुची से महिला एकल का खिताब वापस हासिल करने के बाद सुखद यादों के साथ लौटेंगी।

- The victory extended the 24-year-old reigning Olympic champion's stellar 2026, during which she has won an Uber Cup gold medal, and the individual and team trophies at the Badminton Asia Championships.

इस जीत ने 24 वर्षीय मौजूदा ओलंपिक चैंपियन के शानदार 2026 को और समृद्ध किया, जिसमें उन्होंने उबर कप का स्वर्ण पदक तथा बैडमिंटन एशिया चैंपियनशिप में व्यक्तिगत और टीम खिताब जीते हैं।

25A8. Perfect host

आदर्श मेज़बान

- The 2026 BWF World Championships in New Delhi marked the rise of France as an on-court force and of India as a capable host. नई दिल्ली में आयोजित 2026 BWF विश्व चैंपियनशिप ने फ्रांस के एक मजबूत ऑन-कोर्ट शक्ति के रूप में उभरने और भारत के एक सक्षम मेज़बान के रूप में स्थापित होने को चिह्नित किया।

- Alex Lanier's triumph in singles, and Thom Gicquel and Delphine Delrue's in mixed doubles, were the first golds in France's history.

एकल वर्ग में एलेक्स लानियर की जीत तथा मिश्रित युगल में थॉम गिक्वेल और डेलफीन डेलरू की जीत फ्रांस के इतिहास में पहली स्वर्ण पदक जीत थीं।

- It was just over three months ago that the European nation finished a worthy runner-up to China in the Thomas Cup, the de facto World Cup in badminton.

अभी तीन महीने से कुछ अधिक समय पहले ही इस यूरोपीय देश ने बैडमिंटन के वास्तविक विश्व कप, थॉमस कप में चीन के बाद एक योग्य उपविजेता के रूप में अभियान समाप्त किया था।

- The Worlds success has established France as a serious contender in a sport otherwise dominated by Asian countries. विश्व चैंपियनशिप की सफलता ने फ्रांस को ऐसे खेल में एक गंभीर दावेदार के रूप में स्थापित किया है, जिसमें अन्यथा एशियाई देशों का प्रभुत्व रहा है।

- In fact, Lanier is just the third non-Asian this century — after Spain's Carolina Marin and Denmark's Viktor Axelsen — to win the singles gold at the World Championships.

वास्तव में, इस सदी में लानियर विश्व चैंपियनशिप में एकल वर्ग का स्वर्ण जीतने वाले केवल तीसरे गैर-एशियाई खिलाड़ी हैं — उनसे पहले स्पेन की कैरोलिना मारिन और डेनमार्क के विक्टर एक्सेलसन यह उपलब्धि हासिल कर चुके हैं।

- The 21-year-old did that at a spruced-up Indira Gandhi Indoor Stadium, which was in the dock earlier in January when pigeons and monkeys intruded into the arena during the India Open.

21 वर्षीय खिलाड़ी ने यह उपलब्धि नए सिरे से सुसज्जित इंदिरा गांधी इंडोर स्टेडियम में हासिल की, जो जनवरी की शुरुआत में उस समय आलोचनाओं के घेरे में आ गया था, जब इंडिया ओपन के दौरान कबूतर और बंदर मैदान में घुस आए थे।

- The massive facelift ensured that the marquee event's return to India after 17 years would be long remembered.

- For India, the competition was the 12th straight edition where it secured at least one medal, with Gayatri Gopichand and Treesa Jolly bagging a bronze in women's doubles.
भारत के लिए यह लगातार **12वाँ संस्करण** था, जिसमें उसने कम-से-कम एक पदक हासिल किया, जबकि **गायत्री गोपीचंद और त्रीसा जॉली** ने महिला युगल में कांस्य पदक जीता।
- The performance is the latest in a series of good outcomes for Indian badminton after an ordinary 2025, where Satwiksairaj Rankireddy and Chirag Shetty's World Championships doubles bronze was the best result.
यह प्रदर्शन एक सामान्य 2025 के बाद भारतीय बैडमिंटन के लिए अच्छे परिणामों की श्रृंखला में नवीनतम है, जिसमें **सात्विकसाईराज रंकीरेड्डी और चिराग शेट्टी** का विश्व चैंपियनशिप युगल कांस्य पदक सर्वश्रेष्ठ परिणाम था।
- This year, Lakshya Sen reached the All England Open final, and Ayush Shetty at the Badminton Asia Championships.
इस वर्ष, **लक्ष्य सेन** ऑल इंग्लैंड ओपन के फाइनल में पहुँचे, जबकि **आयुष शेट्टी** बैडमिंटन एशिया चैंपियनशिप में फाइनल में पहुँचे।
- P.V. Sindhu's victory at the Japan Open Super 750 last month was only her second Tour title in the last four years, and there were also triumphs for Satwiksairaj and Chirag at Singapore Open Super 750, and for Devika Sihag, Tanvi Sharma and Ashmita Chaliha at the Super 300 level.
पिछले महीने **पी.वी. सिंधु** की Japan Open Super 750 में जीत पिछले चार वर्षों में उनका केवल दूसरा टूर खिताब था, जबकि **सात्विकसाईराज और चिराग** ने Singapore Open Super 750 में तथा **देविका सिहाग, तन्वी शर्मा और अस्मिता चालिहा** ने Super 300 स्तर पर जीत हासिल की।
- Yet, the feeling is unmistakable that India should have done better at a home World Championships, with Lakshya's second-round defeat to the unheralded American teenager Garret Tan the most disappointing.
फिर भी, यह भावना स्पष्ट है कि भारत को अपने घरेलू विश्व चैंपियनशिप में बेहतर प्रदर्शन करना चाहिए था, जिसमें **लक्ष्य की दूसरे दौर में अपेक्षाकृत अज्ञात अमेरिकी किशोर गैरेट टैन से हार** सबसे निराशाजनक रही।
- There is no questioning the 25-year-old's capability; he is a World Championships bronze medallist, a two-time All England finalist and finished an agonising fourth at the Paris 2024 Olympics.
25 वर्षीय खिलाड़ी की क्षमता पर कोई प्रश्न नहीं उठाया जा सकता; वह **विश्व चैंपियनशिप के कांस्य पदक विजेता**, दो बार के **ऑल इंग्लैंड फाइनलिस्ट** हैं और पेरिस 2024 ओलंपिक में बेहद निराशाजनक रूप से चौथे स्थान पर रहे थे।
- But no Indian men's singles player has won an elite **BWF Super 1000-level title** since K. Srikanth in 2017.
लेकिन 2017 में **के. श्रीकांत** के बाद से किसी भी भारतीय पुरुष एकल खिलाड़ी ने प्रतिष्ठित **BWF Super 1000 स्तर का खिताब** नहीं जीता है।
- A swift end to this drought is essential for the overall health of the sport.
इस **सूखे का शीघ्र अंत** खेल के समग्र स्वास्थ्य के लिए आवश्यक है।



Incumbent Tokayev wins key election in Kazakhstan

PCS

Associated Press

ASTANA

Kazakhstan's pro-government Adilet Party won 71% of votes in a parliamentary election, officials said on Monday, a result expected to strengthen President Kassym-Jomart Tokayev's grip on power in Central Asia's largest nation.

The Organization for Security and Cooperation in Europe said the vote was marred by a lack of distinct political opposition, with "all parties supporting the incumbent President's policies."

25A8. Incumbent Tokayev wins key election in Kazakhstan

मौजूदा राष्ट्रपति तोकायेव ने कज़ाखस्तान में महत्वपूर्ण चुनाव जीता

- Kazakhstan's pro-government Adilet Party won 71% of votes in a parliamentary election, officials said on Monday, a result expected to strengthen President Kassym-Jomart Tokayev's grip on power in Central Asia's largest nation.

कज़ाखस्तान की सरकार समर्थक आदिलेत पार्टी ने संसदीय चुनाव में 71% मत हासिल किए, अधिकारियों ने सोमवार को कहा; इस परिणाम से मध्य एशिया के सबसे बड़े देश में राष्ट्रपति कासिम-जोमार्ट तोकायेव की सत्ता पर पकड़ मजबूत होने की उम्मीद है।

- The Organization for Security and Cooperation in Europe said the vote was marred by a lack of distinct political opposition, with "all parties supporting the incumbent President's policies."

यूरोप में सुरक्षा और सहयोग संगठन (OSCE) ने कहा कि चुनाव में स्पष्ट राजनीतिक विपक्ष के अभाव के कारण इसकी निष्पक्षता प्रभावित हुई, क्योंकि "सभी दल मौजूदा राष्ट्रपति की नीतियों का समर्थन कर रहे थे।"