



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



PATRIOTIC IAS

DAILY CURRENT AFFAIRS

THE HINDU NEWSPAPER

22 DECEMBER 2025

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

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

PCS Special:

22 December 2025

1.

Top priority is to ensure selection process is transparent, merit-based:
new UPSSSC chief

चयन प्रक्रिया को पारदर्शी और मेरिट-आधारित सुनिश्चित करना शीर्ष प्राथमिकता: नए
UPSSSC प्रमुख

Address : 3rd Floor, KV Tower, Padleyganj Road, Gorakhpur
Email Id : info@patrioticias.in
Contact Number : 9971932488
Website : patrioticias.in



2.	Acres of illicit poppy cultivation destroyed in Manipur मणिपुर में अवैध अफीम की खेती के एकड़ नष्ट किए गए
3.	Amputees bear scars of conflict in eastern DR Congo पूर्वी डीआर कांगो में संघर्ष के घाव झेल रहे अपंग लोग

Top priority is to ensure selection process is transparent, merit-based: new UPSSSC chief

GS V: UPPCS Mains

Mayank Kumar
LUCKNOW

The newly-appointed chairman of the Uttar Pradesh Education Service Selection Commission (UPSSSC) Prashant Kumar on Sunday said that his top priority is to ensure that the selection process is completely transparent and merit-based with zero tolerance on impropriety. Mr. Kumar, a retired 1990-batch Indian Police Service (IPS) officer and former U.P. Director General

of Police (DGP), added that technology-based processes will be strengthened by the commission to carry out recruitment in a timely manner, so that every eligible candidate gets fair opportunity.

'Zero tolerance'

"My top priority is to ensure that the selection process is completely transparent and merit-based with zero tolerance on impropriety in line with the policies of the honourable

Chief Minister and the government," he said.

He added, "technology-based processes will be strengthened to carry out recruitment in a timely manner, so that every eligible candidate gets his/her fair opportunity." Speaking to *The Hindu*, Mr. Kumar said, "The goal is not just appointment, it is to win the trust of the youth of Uttar Pradesh and the guarantee of their golden future."

The Uttar Pradesh Edu-

cation Service Selection Commission, established in 2023, is entrusted with the responsibility for the selection of teachers in government schools, aided non-government colleges and aided minority colleges, higher secondary schools, schools run and managed by the U.P. Basic Education Board, aided junior high schools and their affiliated primary schools. In recent times it has faced questions over postponement of various recruitment exams.

Top priority is to ensure selection process is transparent, merit-based: new UPSSSC chief

चयन प्रक्रिया को पारदर्शी और मेरिट-आधारित सुनिश्चित करना शीर्ष प्राथमिकता: नए UPSSSC प्रमुख

- The newly-appointed chairman of the **Uttar Pradesh Education Service Selection Commission (UPSSSC) Prashant Kumar** on **Sunday** said that his top priority is to ensure that the selection process is completely **transparent** and **merit-based** with **zero tolerance** on impropriety.

नव-नियुक्त उत्तर प्रदेश शिक्षा सेवा चयन आयोग (UPSSSC) के अध्यक्ष प्रशांत कुमार ने रविवार को कहा कि उनकी शीर्ष प्राथमिकता यह सुनिश्चित करना है कि चयन प्रक्रिया पूरी तरह पारदर्शी और मेरिट-आधारित हो तथा अनियमितता पर शून्य सहनशीलता हो।

- Mr. Kumar, a retired **1990-batch Indian Police Service (IPS) officer** and former **U.P. Director General of Police (DGP)**, added that **technology-based processes** will be strengthened by the commission to carry out recruitment in a timely manner, so that every eligible candidate gets fair opportunity.

श्री कुमार, सेवानिवृत्त **1990 बैच के भारतीय पुलिस सेवा (IPS) अधिकारी** और पूर्व **उत्तर प्रदेश पुलिस महानिदेशक (DGP)**, ने जोड़ा कि आयोग द्वारा **technology-based processes** को मज़बूत किया जाएगा ताकि समयबद्ध तरीके से भर्ती हो सके और हर पात्र उम्मीदवार को उचित अवसर मिल सके।



'Zero tolerance' 'शून्य सहनशीलता'

- "My top priority is to ensure that the selection process is completely **transparent and merit-based with zero tolerance** on impropriety in line with the policies of the honourable **Chief Minister** and the **government**," he said.
"मेरी शीर्ष प्राथमिकता यह सुनिश्चित करना है कि चयन प्रक्रिया पूरी तरह **पारदर्शी** और **मेरिट-आधारित** हो तथा माननीय **मुख्यमंत्री** और **सरकार** की नीतियों के अनुरूप अनियमितता पर **शून्य सहनशीलता** हो," उन्होंने **दाल**।
- He added, "technology-based **processes** will be strengthened to carry out recruitment in a **timely manner**, so that every eligible candidate gets his/her fair opportunity."
उन्होंने जोड़ा, "**technology based processes** को समयबद्ध तरीके से भर्ती कराने के लिए मज़बूत किया जाएगा, ताकि हर पात्र उम्मीदवार को उसका उचित अवसर मिल सके।"
- Speaking to **The Hindu**, Mr. Kumar said, "The goal is not just appointment, it is to win the trust of the youth of **Uttar Pradesh** and the guarantee of their golden future."
The Hindu से बात करते हुए, श्री कुमार ने कहा, "लक्ष्य केवल नियुक्ति नहीं है, बल्कि **उत्तर प्रदेश** के युवाओं का विश्वास जीतना और उनके स्वर्णिम भविष्य की गारंटी देना है।"
- The **Uttar Pradesh Education Service Selection Commission**, established in **2023**, is entrusted with the responsibility for the selection of teachers in **government schools, aided nongovernment colleges and aided minority colleges, higher secondary schools, schools run and managed by the U.P. Basic Education Board, aided junior high schools and their affiliated primary schools.**

Acres of illicit poppy cultivation destroyed in Manipur **मणिपुर में अवैध अफीम की खेती के एकड़ नष्ट किए गए**

Acres of illicit poppy cultivation destroyed in Manipur

PCS

600 Security forces destroyed over **600 acres of illicit poppy cultivation in the hill districts of Ukhrul and Kangpokpi in Manipur**, the police said.
Around 559 acres of poppy plantations were destroyed from December 16-20 in different locations of Ukhrul. पत्र

- **600**
- **600**
- **Security forces** destroyed over **600 acres of illicit poppy cultivation** in the hill districts of **Ukhrul and Kangpokpi** in **Manipur**, the **police** said.
सुरक्षा बलों ने **मणिपुर** के पहाड़ी ज़िलों **उखरूल** और **कांगपोकपी** में **600 एकड़** से अधिक **अवैध अफीम की खेती** को नष्ट किया, ऐसा **पुलिस** ने कहा।
- Around **559 acres of poppy plantations** were destroyed from **December 16-20** in different locations of **Ukhrul** लगभग **559 एकड़ अफीम की खेती** को **16-20 दिसंबर** के दौरान **उखरूल** के विभिन्न स्थानों पर नष्ट किया गया



Shattered lives: Residents at the site of a Russian air strike in Zaporizhzhia in Ukraine. REUTERS

Shattered lives: Residents at the site of a Russian air strike in Zaporizhzhia in Ukraine.

GS Paper 1: Society

22 December 2025

TOPICS COVERED

Heralding Sankranti



Gangireddula community members lead a decorated Gangireddu bull through the streets of Vijayawada ahead of Sankranti. G.N. RAO

Gangireddula community members lead a decorated Gangireddu bull through the streets of Vijayawada ahead of Sankranti.

Gangireddu Bull



The **Gangireddu bull** is a **decorated bull** traditionally associated with **folk culture and rural festivals of South India**, especially **Andhra Pradesh and Telangana**.

- Gangireddu is usually a **trained bull**, adorned with **colorful clothes, bells, painted horns, and ornaments**
- It is closely linked with **Sankranti celebrations**, particularly during **Kanuma**, the festival dedicated to cattle

GS Paper II: Polity,

TOPICS COVERED

22 December

1. **President grants assent to rural jobs Bill; Centre lists its four focus areas**
राष्ट्रपति ने ग्रामीण रोजगार विधेयक को मंजूरी दी; केंद्र ने चार फोकस क्षेत्रों को सूचीबद्ध किया
 2. **Winter is behind**
सर्दी पीछे छूट चुकी है
 3. **What is the Aland voter fraud case?**
आलंद मतदाता धोखाधड़ी मामला क्या है?
- Right to disconnect: A bridge too far?**
राइट टू डिस्कनेक्ट: क्या यह बहुत आगे की बात है?

President grants assent to rural jobs Bill; Centre lists its four focus areas

GS II: Polity

The Hindu Bureau
NEW DELHI

President Droupadi Murmu on Sunday gave assent to the **Viksit Bharat-Guarantee for Rozgar and Ajeevika Mission (Gramin) (VB-G Ram G) Bill**, which replaces the **Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)** enacted by the erstwhile Congress-led United Progressive Alliance government.

The new Act brings structural changes to the scheme while increasing the number of guaranteed days of work from 100 to 125, the Centre said.

Amid criticism, Union Minister Shivraj Singh Chouhan released a video message, defending the



new legislation. He criticised attempts to “mislead” the nation and create “confusion” in the name of the MGNREGA.

“Viksit Bharat-G Ram G is a step forward from MGNREGA,” Mr. Chouhan said, emphasising that provisions for unemployment allowance have been strengthened in the law.

There are provisions for penalty for delay in wages, he said, adding a budget of ₹1,51,282 crore has been reserved under the scheme for comprehensive development of villages.

A government note said the MGNREGA “created works”, while the VB-G Ram G would create “outcomes”. Works under the

Cong. takes to the streets over move

NEW DELHI

The Congress continued attack on the Centre for “dismantling” the Mahatma Gandhi National Rural Employment Guarantee Act. The party held protests on Sunday at all district headquarters. » PAGE 5

scheme would be undertaken across four focus areas – water security, core rural infrastructure, livelihood-related infrastructure, and extreme weather mitigation. The Centre continued to be the principal funding partner and the 60:40 model was followed in nearly all Centrally sponsored schemes, the note said.



President grants assent to rural jobs Bill; Centre lists its four focus areas राष्ट्रपति ने ग्रामीण रोजगार विधेयक को मंजूरी दी; केंद्र ने चार फोकस क्षेत्रों को सूचीबद्ध किया

- President **Droupadi Murmu** on **Sunday** gave assent to the **Viksit Bharat-Guarantee for Rozgar and Ajeevika Mission (Gramin) (VB-G Ram G) Bill**, which replaces the **Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)** enacted by the erstwhile **Congress-led United Progressive Alliance government**.
राष्ट्रपति द्रौपदी मुर्मू ने रविवार को विकसित भारत-गारंटी फॉर रोजगार एंड आजीविका मिशन (ग्रामीण) (VB-G Ram G) विधेयक को मंजूरी दी, जो पूर्ववर्ती कांग्रेस-नेतृत्व वाली संयुक्त प्रगतिशील गठबंधन सरकार द्वारा लागू किए गए महात्मा गांधी राष्ट्रीय ग्रामीण रोजगार गारंटी अधिनियम (MGNREGA) की जगह लेता है।
- The new Act brings structural changes to the scheme while increasing the number of guaranteed days of work from **100 to 125**, the **Centre** said.
नए अधिनियम से योजना में संरचनात्मक बदलाव होते हैं और साथ ही गारंटीकृत कार्यदिवसों की संख्या **100 से बढ़ाकर 125** की जाती है, ऐसा केंद्र ने कहा।
- Amid criticism, **Union Minister Shivraj Singh Chouhan** released a video message, defending the new legislation.
आलोचना के बीच, केंद्रीय मंत्री शिवराज सिंह चौहान ने नए कानून का बचाव करते हुए एक वीडियो संदेश जारी किया।
- He criticised attempts to “mislead” the nation and create “confusion” in the name of the **MGNREGA**.
उन्होंने **MGNREGA** के नाम पर देश को “गुमराह” करने और “भ्रम” पैदा करने के प्रयासों की आलोचना की।
- “**Viksit Bharat-G Ram G** is a step forward from **MGNREGA**,” Mr. **Chouhan** said, emphasising that provisions for **unemployment allowance** have been strengthened in the law.
“विकसित भारत-जी राम जी, **MGNREGA** से एक कदम आगे है,” श्री चौहान ने कहा, और जोर दिया कि कानून में बेरोजगारी भत्ते के प्रावधानों को मज़बूत किया गया है।
- There are provisions for **penalty for delay in wages**, he said, adding a budget of **₹1,51,282 crore** has been reserved under the scheme for comprehensive development of villages.
उन्होंने कहा कि मज़दूरी में देरी पर दंड के प्रावधान हैं, और जोड़ा कि गांवों के समग्र विकास के लिए योजना के तहत **₹1,51,282 करोड़** का बजट आरक्षित किया गया है।
- A government note said the **MGNREGA** “created works”, while the **VB-G Ram G** would create “outcomes”.
एक सरकारी नोट में कहा गया कि **MGNREGA** ने “काम” पैदा किए, जबकि **VB-G Ram G** “परिणाम” उत्पन्न करेगा।
- Works under the scheme would be undertaken across **four focus areas** — **water security, core rural infrastructure, livelihood-related infrastructure, and extreme weather mitigation**.
योजना के तहत कार्य चार फोकस क्षेत्रों में किए जाएंगे — जल सुरक्षा, मुख्य ग्रामीण अवसंरचना, आजीविका से जुड़ी अवसंरचना, और अत्यधिक मौसम शमन।
- The **Centre** continued to be the principal funding partner and the **60:40 model** was followed in nearly all **Centrally sponsored schemes**, the note said.
नोट में कहा गया कि केंद्र प्रमुख वित्तपोषण भागीदार बना रहेगा और लगभग सभी केंद्र प्रायोजित योजनाओं में **60:40 मॉडल** अपनाया गया है।



GS II: Polity

Winter is behind

A less acrimonious session is an opportunity to build upon

The winter session of Parliament, which had 15 sittings, witnessed significant and controversial legislative business, along with political grandstanding by the government to mark the 150th anniversary of the national song, *Vande Mataram*. Ten Bills were introduced and eight were passed by both Houses. Notable Bills that won parliamentary approval include one repealing or amending dozens of outdated laws; another allowing 100% FDI in the insurance sector; one facilitating private sector investment in nuclear power by reducing the liability of suppliers, and, importantly, major changes to the rural employment guarantee scheme, a flagship welfare programme started by the UPA government in 2005. The titles of several Bills, which were in Hindi, caused consternation among Members of Parliament from non-Hindi regions. They pointed to constitutional provisions that require legislation to be drafted in English, with translations made available as required. The insurance Bill is titled *Sabka Bima Sabki Raksha*, while the rural employment guarantee Bill is called *Viksit Bharat - Guarantee for Rozgar and Aajeevika Mission (Gramin)*, or *VB-G RAM G*, which became an Act on December 21 with the assent of the President. In the discussion on *Vande Mataram*, Members spent over 11 hours in the Lok Sabha, with 65 participants, and nearly 13 hours in the Rajya Sabha, with 81 participants. Parliament could instead have passed a unanimous resolution commemorating the song rather than using it as yet another occasion to question the patriotic credentials of political opponents.

A heated debate on electoral reforms went on for nearly 13 hours with 62 speakers in the Lok Sabha and for nearly 11 hours with 57 speakers in the Rajya Sabha. This too was a missed opportunity for an open-minded discussion beyond party lines to address the crisis of credibility in Indian elections. The closed-minded approaches of the BJP and the Congress towards questions of election integrity are not helping India's parliamentary democracy. The Opposition sought a discussion on air pollution in Delhi, a massive public health crisis, but the government did not allow it. Bills were rushed through, and the role of parliamentary committees in shaping legislation remains limited, though Question Hour and Zero Hour were more productive. This winter session was far less acrimonious than in the recent past, a fact acknowledged by Congress President Mallikarjun Kharge. As a result, Congress representatives accepted the customary invitation for tea by the Lok Sabha Speaker and the Rajya Sabha Chairman at the end of the session. These meetings also led to pleasant exchanges between the government and the Opposition. This practice is worth continuing and building upon.

बीमा विधेयक का शीर्षक सबका बीमा सबकी रक्षा है।

- The rural employment guarantee Bill is called *Viksit Bharat - Guarantee for Rozgar and Aajeevika Mission (Gramin)* or *VB-G RAM G*.

Winter is behind सर्दी पीछे छूट चुकी है

- A less acrimonious session is an opportunity to build upon
कम कटुता वाला सत्र आगे बढ़ने के लिए एक अवसर है

Winter Session of Parliament संसद का शीतकालीन सत्र

- The winter session of Parliament, which had 15 sittings, witnessed significant and controversial legislative business, along with political grandstanding by the government to mark the 150th anniversary of the national song, *Vande Mataram*.

संसद का शीतकालीन सत्र, जिसमें 15 बैठकें हुईं, में महत्वपूर्ण और विवादास्पद विधायी कार्य देखे गए, साथ ही सरकार द्वारा राष्ट्रीय गीत वंदे मातरम् की 150वीं वर्षगांठ मनाने के लिए राजनीतिक प्रदर्शन भी किया गया।

- Ten Bills were introduced and eight were passed by both Houses.

दस विधेयक पेश किए गए और आठ विधेयक दोनों सदनों से पारित हुए।

- Notable Bills that won parliamentary approval include one repealing or amending dozens of outdated laws.

संसदीय मंजूरी पाने वाले प्रमुख विधेयकों में एक ऐसा विधेयक शामिल था जो दर्जनों पुराने कानूनों को निरस्त या संशोधित करता है।

- Another Bill allowed 100% FDI in the insurance sector. एक अन्य विधेयक ने बीमा क्षेत्र में 100% प्रत्यक्ष विदेशी निवेश (FDI) की अनुमति दी।

- One Bill facilitated private sector investment in nuclear power by reducing the liability of suppliers.

एक विधेयक ने आपूर्तिकर्ताओं की देनदारी कम करके परमाणु ऊर्जा में निजी क्षेत्र के निवेश को सुगम बनाया।

- Importantly, major changes were made to the rural employment guarantee scheme, a flagship welfare programme started by the UPA government in 2005. महत्वपूर्ण रूप से, ग्रामीण रोजगार गारंटी योजना में बड़े बदलाव किए गए, जो 2005 में यूपीए सरकार द्वारा शुरू की गई एक प्रमुख कल्याणकारी योजना है।

- The titles of several Bills, which were in Hindi, caused consternation among Members of Parliament from non-Hindi regions.

कई विधेयकों के शीर्षक, जो हिंदी में थे, ने गैर-हिंदी क्षेत्रों के सांसदों में चिंता पैदा की।

- They pointed to constitutional provisions that require legislation to be drafted in English, with translations made available as required.

उन्होंने उन संवैधानिक प्रावधानों की ओर संकेत किया जिनके अनुसार कानून अंग्रेजी में बनाए जाने चाहिए, और आवश्यकतानुसार अनुवाद उपलब्ध कराए जाने चाहिए।

- The insurance Bill is titled *Sabka Bima Sabki Raksha*.



ग्रामीण रोजगार गारंटी विधेयक का नाम विकसित भारत – रोजगार और आजीविका मिशन (ग्रामीण) या VB-G RAM G है।

- It became an **Act on December 21** with the **assent of the President**.
यह 21 दिसंबर को राष्ट्रपति की स्वीकृति के साथ कानून बन गया।
- In the discussion on **Vande Mataram**, Members spent **over 11 hours in the Lok Sabha** with **65 participants**.
वंदे मातरम् पर चर्चा में लोकसभा में 65 प्रतिभागियों के साथ 11 घंटे से अधिक समय लगा।
- Nearly **13 hours in the Rajya Sabha** were spent with **81 participants**.
राज्यसभा में 81 प्रतिभागियों के साथ लगभग 13 घंटे की चर्चा हुई।
- Parliament could instead have passed a **unanimous resolution** commemorating the song.
संसद इस गीत की स्मृति में एक **सर्वसम्मत प्रस्ताव** भी पारित कर सकती थी।
- Rather than using it as yet another occasion to **question the patriotic credentials of political opponents**.
इसे राजनीतिक विरोधियों की देशभक्ति पर सवाल उठाने के एक और अवसर के रूप में उपयोग करने के बजाय।
- A **heated debate on electoral reforms** went on for nearly 13 hours with **62 speakers in the Lok Sabha**.
चुनावी सुधारों पर लोकसभा में 62 वक्ताओं के साथ लगभग 13 घंटे तक तीखी बहस चली।
- And for nearly 11 hours with **57 speakers in the Rajya Sabha**.
और राज्यसभा में 57 वक्ताओं के साथ लगभग 11 घंटे तक चर्चा हुई।
- This too was a **missed opportunity** for an **open-minded discussion beyond party lines**.
यह भी दलगत सीमाओं से ऊपर उठकर खुले विचारों से चर्चा करने का एक छूटा हुआ अवसर था।
- To address the **crisis of credibility in Indian elections**.
जिसका उद्देश्य भारतीय चुनावों में विश्वसनीयता के संकट को सुलझाना हो सकता था।
- The **closed-minded approaches** of the **BJP and the Congress** towards questions of **election integrity** are **not helping India's parliamentary democracy**.
चुनाव की निष्पक्षता के सवालों पर बीजेपी और कांग्रेस के संकीर्ण दृष्टिकोण भारत की संसदीय लोकतंत्र की मदद नहीं कर रहे हैं।
- The **Opposition sought a discussion on air pollution in Delhi**, a massive public health **crisis**.
विपक्ष ने दिल्ली में वायु प्रदूषण, जो एक बड़ा सार्वजनिक स्वास्थ्य संकट है, पर चर्चा की माँग की।
- But the **government did not allow it**.
लेकिन सरकार ने इसकी अनुमति नहीं दी।
- **Bills were rushed through**, and the role of **parliamentary committees** in shaping legislation **remains limited**.
विधेयकों को जल्दबाजी में पारित किया गया, और कानून निर्माण में संसदीय समितियों की भूमिका सीमित बनी रही।
- Though **Question Hour and Zero Hour** were **more productive**.
हालाँकि प्रश्नकाल और शून्यकाल अपेक्षाकृत अधिक उत्पादक रहे।
- This winter session was **far less acrimonious than in the recent past**.
यह शीतकालीन सत्र हाल के अतीत की तुलना में कहीं कम कटु रहा।
- A fact **acknowledged by Congress President Mallikarjun Kharge**.
यह तथ्य कांग्रेस अध्यक्ष मल्लिकार्जुन खड़गे ने भी स्वीकार किया।
- As a result, **Congress representatives accepted the customary invitation for tea** by the **Lok Sabha Speaker and the Rajya Sabha Chairman**.
परिणामस्वरूप, कांग्रेस प्रतिनिधियों ने लोकसभा अध्यक्ष और राज्यसभा के सभापति द्वारा दी गई चाय की पारंपरिक आमंत्रण को स्वीकार किया।
- At the **end of the session**.
सत्र के अंत में।
- These meetings also led to **pleasant exchanges** between the **government and the Opposition**.
इन बैठकों से सरकार और विपक्ष के बीच सौहार्दपूर्ण संवाद भी हुआ।
- This **practice is worth continuing and building upon**.
यह परंपरा आगे भी जारी रखने और मजबूत करने योग्य है।



What is the Aland voter fraud case?

When did the Election Commission file a complaint with respect to irregularities in Form 7s from the Aland assembly constituency in Kalaburagi? Why did the investigation hit a roadblock? What loopholes within the National Voters' Service Portal did the alleged fraudsters exploit?

GS II: Polity

EXPLAINER

K.V. Aditya Bharadwaj

The story so far:

The case of voter fraud in the Aland assembly constituency in Kalaburagi district in north Karnataka has emerged as one of the most well documented voter fraud cases, amidst a series of press conferences by Opposition leader Rahul Gandhi alleging widespread "vote chori" (vote fraud) in Karnataka, Maharashtra and Haryana.

Why is this case different?

Firstly, it was the **Returning Officer (RO) of Aland constituency** who lodged a complaint with the police in February 2023, alleging voter fraud, based on which an FIR was registered. The Election Commission (EC) itself alleged a mala fide attempt to delete the names of 5,994 genuine voters from the electoral rolls, by providing false information.

Secondly, the investigation into the FIR by a Special Investigation Team (SIT) formed by the Government of Karnataka, has led to a chargesheet being filed against former Bharatiya Janata Party (BJP) MLA Subhash Guttedar from Aland and his son Harshananda Guttedar for allegedly hiring a private firm to target voters they suspected will vote for his rival and delete their names through forged Form 7s.

This is the first case where a clear link has been drawn to the BJP and "vote chori" allegations made by the Congress.

How was the fraud uncovered?

In 2018, veteran socialist and now Congress MLA from Aland, B. R. Patil, lost the seat to BJP's Subhash Guttedar by a narrow margin of 697 votes. Mr. Patil was again the candidate for the seat from the Congress in the 2023 assembly polls, which he eventually won by 10,348 votes. In February 2023, a Booth Level Officer (BLO) got a Form 7 application, which, to her surprise, sought deletion of the name of her brother from the voter list saying he had "shifted out." The application was made in the name of a woman from the same village. When they checked, the woman denied making any application. Subsequently, a review of Form 7s from that village found that 40 such forms were forged.

Any voter of a specific assembly constituency can fill out a Form 7 seeking the deletion of names of other voters from the same constituency, after their death or if they have shifted out. These applications are sent to BLOs for an on-ground verification, after which they are processed. However, in most cases, BLOs blindly accept these applications without verification. In this case, the BLO's brother, whose name was sought to be removed, tipped off Mr. Patil about the forged Form 7s in his village, saying all people whose names were sought to be deleted were Congress voters. This set off alarm bells, pushing Mr. Patil to complain to the EC and demand a thorough verification of all Form 7s.

How did the investigation proceed?

Mamata Kumari, Assistant Commissioner and the RO of the Aland assembly constituency, tasked with the audit of Form 7s, in her eventual complaint to the Aland Police, said that there were 6,018 Form 7s in Aland assembly constituency between December 2022 and February 2023, of which only 24 were genuine while 5,994 forms were forged. She said that there was a conspiracy to



Inner workings: Police guard the residence of Subhash Guttedar, former MLA of Aland, in Kalaburagi during a raid by SIT officials on October 17. ARUN KULKARNI

disenfranchise genuine voters and sought a probe; an FIR was registered against unidentified individuals. The probe into the FIR was eventually transferred to the Criminal Investigation Department (CID) of Karnataka.

The EC shared data for over 5,700 forged Form 7s to the police, including the mobile numbers used to create login IDs and passwords on EC portals such as the National Voters' Service Portal (NVSP) through which all forged Form 7s were submitted. It also provided IP logs. The CID got the Public Internet Protocol Detail Record (IPDR) from Telecom Service Providers (TSPs), which were in the IPV4 format and each IP address had over 200 users attached to it in the form of dynamic IP addresses. This meant probing over 8 lakh devices. To narrow down the search, the CID sought destination IPs and ports of the sessions through which these forged Form 7s were made. Despite at least 12 letters written by the CID to the EC seeking this data, the Commission did not respond, as reported by *The Hindu* on September 7.

Then, on September 18, 2025, Mr. Gandhi held a press conference in Delhi questioning the EC over the Aland voter fraud. Even though the Commission initially claimed that there was no wrongful deletion of voters in Aland, a day later, the Chief Electoral Officer of Karnataka conceded that there were "unsuccessful attempts" to delete voters and that the EC itself had lodged a complaint.

Following this, the government in Karnataka formed an SIT led by B. K. Singh, Additional Director General of Police (ADGP), Karnataka.

How was the case eventually solved?

As the EC did not share the destination ports and IPs, the SIT found another route. Sources said the SIT scrutinised some of the 24 genuine Form 7s made in Aland, identified their IP addresses and reverse engineered them to narrow down the search for the devices used to make the forged Form 7s.

The SIT found that many of the 5,994 forged Form 7s could be traced to a mobile internet connection of one Mohammed Ashfaq, based out of

Kalaburagi. Ashfaq reportedly confessed to having submitted forged Form 7s, but said he was only working for his relatives, Akram Pasha and Aslam Pasha, who ran a "call-centre-like" firm in Kalaburagi which had a contract to make Form 7s. They were allegedly paid ₹80 for every forged Form 7. The Pasha brothers were then detained, questioned and their premises raided. The SIT claimed that they recovered multiple digital devices through which the forged Form 7s were made, which now forms the key evidence in the chargesheet the SIT has filed recently.

The trio reportedly said that they had a contract to do so from the then incumbent BJP MLA Subhash Guttedar, a four-time MLA from Aland, and his son Harshananda Guttedar, a three-time Kalaburagi Zilla Panchayat member. The SIT further raided their residences and that of their Chartered Accountant in Kalaburagi, and recovered digital devices and evidence of a money trail between the Guttedars and Akram Pasha. It is alleged that the Guttedars marked out voters they thought would vote for their rival and handed it over to Akram Pasha.

Additionally, the Guttedars were caught destroying evidence, including several bundles of voter lists stored at their Aland residence. They have been charged for destruction of evidence as well.

What was revealed in the course of the investigation?

In 2023, the EC had shared with the investigators as many as 64 mobile numbers using which accounts were created on the NVSP. It was through these accounts that the 5,994 forged forms were submitted. When a person creates an account on NVSP, s/he will have to key in his mobile number, which will be the Login ID, and get an OTP. This will lead the portal to verify the user, following which a password needs to be set.

The probe started with these phone numbers. The investigators found that the owners of these mobile numbers were from over 15 States of the country. None of them had either created these accounts or given out OTPs they received on their phones.

This puzzle was resolved when the

Pasha brothers pointed the investigators towards 'otpbazar.online', a website which, for a price, sold credentials to carry out transactions online in such a way that it could not be traced back. Once one registers on the website paying a fee, it will give you a random mobile number, which could be used for any transaction online. Within minutes, the website will give you the OTP sent to that mobile number, sources said, using which the brothers reportedly opened the accounts on the NVSP.

Through the money trail between the Pasha brothers and the website, the SIT also tracked down Rapi Adya, the man running the website from the Nadia district in West Bengal, and arrested him. However, how he was able to give OTPs to random mobile numbers the website selected still remains a mystery. His website is just an Indian franchise of a U.S.-based website called 'sms-activate.io'. The SIT has not been able to reach the servers of this website. However, they are taking steps to take down 'otpbazar.online', given its larger repercussions enabling cyber crime.

Is the voter portal compromised?

The chargesheet in the case lists six loopholes of the NVSP that the accused misused to make forged Form 7s, some of which have been fixed now.

Any mobile number and the OTP sent to it could be used to create an account and set the password.

Subsequent logins needed only the password and no OTP. Any number of applications could be made from these accounts. No alert was sent to either the person in whose name the application was being made or whose name was sought to be deleted from or added to the list. Moreover, there was no fixed session time on the portal.

Days after the press conference by Mr. Gandhi in September, 2025, the EC introduced a new e-sign feature, which mandates that those who make any applications online for addition, deletion or correction verify their identity through their Aadhar-linked mobile number.

While this will enhance security, there is no clarity whether all six loopholes flagged by the SIT have been fixed.

THE GIST

It was the Returning Officer (RO) of Aland constituency who lodged a complaint with the police in February 2023, alleging voter fraud, based on which an FIR was registered.

In 2023, the EC had shared with the investigators as many as 64 mobile numbers using which accounts were created on the NVSP. It was through these accounts that the 5,994 forged forms were submitted.

The chargesheet in the case lists six loopholes of the NVSP that the accused misused to make forged Form 7s, some of which have been fixed now.

What is the Aland voter fraud case? आलंद मतदाता धोखाधड़ी मामला क्या है?

The case of voter fraud in the Aland assembly constituency आलंद विधानसभा क्षेत्र में मतदाता धोखाधड़ी का मामला



- The case of **voter fraud** in the **Aland assembly constituency in Kalaburagi district in north Karnataka** has emerged as one of the most **well documented voter fraud cases**, amidst a series of press conferences by Opposition leader **Rahul Gandhi** alleging widespread **“vote chori” (vote fraud)** in **Karnataka, Maharashtra and Haryana**.
उत्तर कर्नाटक के कलबुर्गी ज़िले के आलंद विधानसभा क्षेत्र में मतदाता धोखाधड़ी का मामला, विपक्षी नेता राहुल गांधी द्वारा कर्नाटक, महाराष्ट्र और हरियाणा में व्यापक “वोट चोरी” के आरोपों के बीच, सबसे अच्छी तरह प्रलेखित मामलों में से एक बनकर उभरा है।

Why is this case different? यह मामला अलग क्यों है?

- Firstly, it was the **Returning Officer (RO) of Aland constituency** who lodged a **complaint with the police in February 2023**, alleging voter fraud, based on which an **FIR was registered**.
सबसे पहले, आलंद विधानसभा क्षेत्र के रिटर्निंग ऑफिसर (RO) ने फरवरी 2023 में पुलिस में शिकायत दर्ज कराई, जिसके आधार पर एफआईआर दर्ज की गई।
- The **Election Commission (EC)** itself alleged a **mala fide attempt to delete the names of 5,994 genuine voters** from the electoral rolls, by providing **false information**.
चुनाव आयोग (EC) ने स्वयं 5,994 वास्तविक मतदाताओं के नाम गलत जानकारी देकर मतदाता सूची से हटाने के दुर्भावनापूर्ण प्रयास का आरोप लगाया।
- Secondly, the investigation into the FIR by a **Special Investigation Team (SIT)** formed by the **Government of Karnataka**, has led to a **chargesheet** being filed against former **Bharatiya Janata Party (BJP) MLA Subhash Guttedar** from Aland and his son **Harshananda Guttedar** for allegedly hiring a **private firm** to target voters they suspected will vote for his rival and **delete their names through forged Form 7s**.
दूसरे, कर्नाटक सरकार द्वारा गठित विशेष जांच दल (SIT) की जांच के बाद, पूर्व भाजपा विधायक सुभाष गुट्टेदार और उनके पुत्र हर्षानंद गुट्टेदार के खिलाफ चार्जशीट दाखिल की गई, जिन पर कथित रूप से निजी फर्म को नियुक्त कर जाली फॉर्म 7 के माध्यम से प्रतिद्वंद्वी के पक्ष में वोट देने की आशंका वाले मतदाताओं के नाम हटवाने का आरोप है।
- This is the **first case** where a **clear link** has been drawn to the **BJP** and **“vote chori” allegations** made by the **Congress**.
यह पहला मामला है जहाँ भाजपा और कांग्रेस द्वारा लगाए गए “वोट चोरी” के आरोपों के बीच स्पष्ट संबंध स्थापित हुआ है।

How was the fraud uncovered? धोखाधड़ी का खुलासा कैसे हुआ?

- In **2018**, veteran socialist and now **Congress MLA** from Aland, **B. R. Patil**, lost the seat to **BJP’s Subhash Guttedar** by a narrow margin of **697 votes**.
2018 में, आलंद से वरिष्ठ समाजवादी नेता और वर्तमान कांग्रेस विधायक बी. आर. पाटिल, भाजपा के सुभाष गुट्टेदार से 697 मतों के मामूली अंतर से हार गए।
- Mr. Patil was again the candidate for the seat from the **Congress** in the **2023 assembly polls**, which he eventually won by **10,348 votes**.
2023 विधानसभा चुनाव में कांग्रेस की ओर से वही उम्मीदवार रहे बी. आर. पाटिल ने अंततः 10,348 मतों से जीत हासिल की।
- In **February 2023**, a **Booth Level Officer (BLO)** got a **Form 7 application**, which, to her surprise, sought deletion of the name of her **brother** from the voter list saying he had **“shifted out.”**
फरवरी 2023 में, एक बूथ लेवल ऑफिसर (BLO) को फॉर्म 7 आवेदन मिला, जिसमें आश्चर्यजनक रूप से उसके भाई का नाम “स्थानांतरित हो गया” बताकर मतदाता सूची से हटाने का अनुरोध किया गया था।
- The **application was made in the name of a woman from the same village**. When they checked, the woman **denied** making any application.
यह आवेदन उसी गाँव की एक महिला के नाम से किया गया था, जिसने जांच पर आवेदन करने से इनकार किया।
- Subsequently, a review of **Form 7s** from that village found that **40 such forms were forged**.
इसके बाद उस गाँव के फॉर्म 7 की समीक्षा में पाया गया कि 40 फॉर्म जाली थे।



- Any voter of a specific assembly constituency can fill out a **Form 7** seeking the deletion of names of other voters from the same constituency, after their **death** or if they have **shifted out**.
किसी विधानसभा क्षेत्र का कोई भी मतदाता, उसी क्षेत्र के अन्य मतदाताओं के **मृत्यु** या **स्थानांतरण** के बाद उनके नाम हटाने के लिए **फॉर्म 7** भर सकता है।
- These applications are sent to **BLOs** for an **on-ground verification**, after which they are processed.
ये आवेदन **स्थलीय सत्यापन** के लिए **BLO** को भेजे जाते हैं, जिसके बाद इन्हें संसाधित किया जाता है।
- However, in most cases, **BLOs** **blindly accept** these applications **without verification**.
हालाँकि, अधिकांश मामलों में **BLO** **बिना सत्यापन** के इन आवेदनों को **स्वीकार कर लेते हैं**।
- In this case, the **BLO's brother**, whose name was sought to be removed, **tipped off Mr. Patil** about the forged **Form 7s** in his village, saying all people whose names were sought to be deleted were **Congress voters**.
इस मामले में, **BLO के भाई**—जिसका नाम हटाने का प्रयास हुआ—ने **बी. आर. पाटिल** को अपने गाँव में जाली **फॉर्म 7** की जानकारी दी और बताया कि जिनके नाम हटाए जा रहे थे वे सभी **कांग्रेस मतदाता** थे।
- This set off **alarm bells**, pushing Mr. Patil to **complain to the EC** and demand a **thorough verification of all Form 7s**.
इससे **चेतावनी की घंटियाँ** बज उठीं और **बी. आर. पाटिल** ने **चुनाव आयोग** से शिकायत कर **सभी फॉर्म 7 की गहन जांच** की माँग की।

How did the investigation proceed? जांच कैसे आगे बढ़ी?

- Mamata Kumari, **Assistant Commissioner** and the then **Returning Officer (RO)** of the **Aland assembly constituency**, tasked with the audit of **Form 7s**, in her eventual complaint to the **Aland Police**, said that there were **6,018 Form 7s** in Aland assembly constituency between **December 2022 and February 2023**, of which only **24 were genuine** while **5,994 forms were forged**.
ममता कुमारी, सहायक आयुक्त और उस समय **आलंद विधानसभा क्षेत्र** की **रिटर्निंग ऑफिसर (RO)**, जिन्हें **फॉर्म 7** की ऑडिट की जिम्मेदारी दी गई थी, ने **आलंद पुलिस** को अपनी शिकायत में बताया कि **दिसंबर 2022 से फरवरी 2023** के बीच **आलंद विधानसभा क्षेत्र** में **6,018 फॉर्म 7** पाए गए, जिनमें से केवल **24 वास्तविक** थे जबकि **5,994 फॉर्म जाली** थे।
- She said that there was a **conspiracy to disenfranchise genuine voters** and sought a probe; an **FIR** was registered against **unidentified individuals**.
उन्होंने कहा कि **वास्तविक मतदाताओं को मताधिकार से वंचित करने की साजिश** थी और जांच की माँग की; इसके बाद **अज्ञात व्यक्तियों** के खिलाफ **एफआईआर** दर्ज की गई।
- The probe into the FIR was eventually transferred to the **Criminal Investigation Department (CID) of Karnataka**.
एफआईआर की जांच अंततः **कर्नाटक के अपराधिक जांच विभाग (CID)** को सौंप दी गई।
- The **Election Commission (EC)** shared data for over **5,700 forged Form 7s** to the police, including the **mobile numbers** used to create **login IDs and passwords** on EC portals such as the **National Voters' Service Portal (NVSP)** through which all forged Form 7s were submitted.

How was the case eventually solved? मामला अंततः कैसे सुलझाया गया?

- As the **Election Commission (EC)** did not share the **destination ports and IPs**, the **Special Investigation Team (SIT)** found another route.
चूँकि **चुनाव आयोग (EC)** ने **डेस्टिनेशन पोर्ट्स और आईपी** साझा नहीं किए, इसलिए **विशेष जांच दल (SIT)** ने एक वैकल्पिक रास्ता अपनाया।
- Sources said the **SIT scrutinised** some of the **24 genuine Form 7s** made in **Aland**, identified their **IP addresses** and **reverse engineered** them to narrow down the search for the devices used to make the **forged Form 7s**.
सूत्रों के अनुसार **SIT** ने **आलंद** में भरे गए **24 वास्तविक फॉर्म 7** की जांच की, उनके **आईपी पते** पहचाने और उन्हें **रिवर्स इंजीनियर** कर उन डिवाइसों की खोज को सीमित किया जिनसे **जाली फॉर्म 7** बनाए गए थे।



- The **SIT** found that many of the **5,994 forged Form 7s** could be traced to a **mobile internet connection** of one **Mohammed Ashfaq**, based out of **Kalaburagi**.
SIT को पता चला कि **5,994 जाली फॉर्म 7** में से कई **कलाबुरगी** निवासी **मोहम्मद अशफ़ाक** के **मोबाइल इंटरनेट कनेक्शन** से जुड़े हुए थे।
- Ashfaq reportedly **confessed** to having submitted **forged Form 7s**, but said he was only working for his relatives, **Akram Pasha and Aslam Pasha**, who ran a “call-centre-like” firm in **Kalaburagi** which had a contract to make **Form 7s**.
रिपोर्ट के अनुसार **अशफ़ाक** ने **जाली फॉर्म 7** जमा करने की **स्वीकारोक्ति** की, लेकिन कहा कि वह अपने रिश्तेदारों **अकरम पाशा और असलम पाशा** के लिए काम कर रहा था, जो **कलाबुरगी** में एक “**कॉल-सेंटर जैसी**” फर्म चलाते थे और जिनके पास **फॉर्म 7** बनाने का ठेका था।
- They were allegedly paid **₹80 for every forged Form 7**.
कथित तौर पर उन्हें प्रत्येक **जाली फॉर्म 7** के लिए **₹80** का भुगतान किया गया।
- The **Pasha brothers** were then **detained, questioned**, and their **premises raided**.
इसके बाद **पाशा भाइयों** को **हिरासत** में लिया गया, उनसे **पूछताछ** की गई और उनके **परिसरों पर छापे** मारे गए।
- The **SIT** claimed that they recovered **multiple digital devices** through which the **forged Form 7s** were made, which now forms the **key evidence** in the **chargesheet** the **SIT** has **filed recently**.
SIT का दावा है कि उन्होंने कई **डिजिटल डिवाइस** बरामद किए जिनके माध्यम से **जाली फॉर्म 7** बनाए गए थे, और यही अब हाल ही में दाखिल **चार्जशीट** का **मुख्य साक्ष्य** हैं।
- The trio reportedly said that they had a **contract** to do so from the then incumbent **BJP MLA Subhash Guttedar**, a **four-time MLA from Aland**, and his son **Harshananda Guttedar**, a **three-time Kalaburagi Zilla Panchayat member**.
रिपोर्ट के अनुसार तीनों ने कहा कि उन्हें यह काम करने का **ठेका** तत्कालीन **बीजेपी विधायक सुभाष गुट्टेदार**, जो **आलंद से चार बार विधायक** रह चुके हैं, और उनके बेटे **हर्षानंद गुट्टेदार**, जो **तीन बार कलाबुरगी ज़िला पंचायत सदस्य** रहे हैं, से मिला था।
- The **SIT** further **raided their residences** and that of their **Chartered Accountant** in **Kalaburagi**, and recovered **digital devices** and **evidence of a money trail** between the **Guttedars** and **Akram Pasha**.
इसके बाद **SIT** ने **कलाबुरगी** में उनके **आवासों** और उनके **चार्टर्ड अकाउंटेंट** के यहां भी **छापे** मारे, और **डिजिटल डिवाइस** तथा **गुट्टेदारों और अकरम पाशा के बीच धन के लेन-देन के साक्ष्य** बरामद किए।
- It is alleged that the **Guttedars** marked out **voters** they thought would vote for their **rival** and handed it over to **Akram Pasha**.
आरोप है कि **गुट्टेदारों** ने उन **मतदाताओं** की पहचान की जिन्हें वे अपने **प्रतिद्वंद्वी** के पक्ष में वोट करने वाला मानते थे और यह सूची **अकरम पाशा** को सौंप दी।
- Additionally, the **Guttedars** were caught **destroying evidence**, including several **bundles of voter lists** stored at their **Aland residence**.
इसके अलावा, **गुट्टेदारों** को **सबूत नष्ट करते हुए** पकड़ा गया, जिसमें उनके **आलंद स्थित आवास** में रखी गई **मतदाता सूचियों की कई गड़्डियां** शामिल थीं।
- They have been **charged for destruction of evidence** as well.
उन पर **सबूत नष्ट करने का भी आरोप** लगाया गया है।

What was revealed in the course of the investigation? जांच के दौरान क्या सामने आया?

- In **2023**, the **Election Commission (EC)** had shared with the investigators as many as **64 mobile numbers** using which accounts were created on the **NVSP**.
2023 में **चुनाव आयोग (EC)** ने जांचकर्ताओं के साथ **64 मोबाइल नंबर** साझा किए थे, जिनका उपयोग **NVSP** पर खाते बनाने के लिए किया गया था।
- It was through these accounts that the **5,994 forged forms** were submitted.
इन्हीं खातों के माध्यम से **5,994 जाली फॉर्म** जमा किए गए थे।
- When a person creates an account on **NVSP**, s/he will have to key in his **mobile number**, which will be the **Login ID**, and get an **OTP**.
जब कोई व्यक्ति **NVSP** पर खाता बनाता है, तो उसे अपना **मोबाइल नंबर** दर्ज करना होता है, जो **लॉगिन आईडी** बनता है, और फिर एक **OTP** प्राप्त होता है।



- This will lead the portal to **verify the user**, following which a **password** needs to be set. इसके बाद पोर्टल **उपयोगकर्ता का सत्यापन** करता है और फिर **पासवर्ड** सेट करना होता है।
- The probe started with these **phone numbers**.
जांच की शुरुआत इन्हीं **फोन नंबरों** से हुई।
- The investigators found that the owners of these mobile numbers were from over **15 States** of the country.
जांचकर्ताओं ने पाया कि इन मोबाइल नंबरों के मालिक देश के **15 से अधिक राज्यों** से थे।
- None of them had either **created these accounts** or **given out OTPs** they received on their phones.
इनमें से किसी ने भी न तो **ये खाते बनाए थे** और न ही अपने फोन पर प्राप्त **OTP साझा किए थे**।
- This puzzle was resolved when the **Pasha brothers** pointed the investigators towards '**otpbazar.online**', a website which, for a price, sold credentials to carry out transactions online in such a way that it could not be traced back.
यह पहेली तब सुलझी जब **पाशा भाइयों** ने जांचकर्ताओं को '**otpbazar.online**' नामक वेबसाइट के बारे में बताया, जो पैसे लेकर ऐसे ऑनलाइन लेनदेन के लिए क्रेडेंशियल बेचती थी जिन्हें ट्रेस नहीं किया जा सके।
- Once one registers on the website paying a **fee**, it will give you a **random mobile number**, which could be used for any transaction online.
- Within minutes, the website will give you the **OTP** sent to that mobile number, sources said, using which the brothers reportedly opened the accounts on the **NVSP**.
- Through the **money trail** between the Pasha brothers and the website, the **SIT** also tracked down **Bapi Adya**, the man running the website from the **Nadia district in West Bengal**, and

PATRIOTIC IAS



Right to disconnect: A bridge too far?



In India, key sectors are tied to global clients, making it complex to define when a workday ends. FILE PHOTO

GS II: Polity

MCQ

Kamal Karanth

It was yet another quiet morning in Bareilly for me until the knock on my hotel room door steadily grew louder. When I opened the door, there were four men seething in anger. They asked me to pack my bags and leave for my Lucknow headquarters immediately. My crime? The previous night I was spotted at a theatre, watching a movie with my reportee. In the rule book of the local pharma workers' union, no supervisor could be seen after 2 p.m. with their team member, even if it's for a meal or recreation. For them, being with a manager after the scheduled hours means work being stretched. The memory of the forced return train journey two decades ago resurfaced when I read about the proposed Right to Disconnect Bill (RTD) tabled as a private member's bill by NCP Member of Parliament Supriya Sule in the Lok Sabha recently.

Why do you need legislation when you can quit your job and choose a friendlier employer based on Glassdoor reviews? Of course, a private member's bill rarely becomes statute in India. But let's look at a few countries that have already tried to bring work-life balance through RTD.

Australia legislated RTD in 2024 and, after a year, the Australian HR Institute (AHRI) surveyed 619 employers and compiled insights from six focus groups. Overall, 58% reported that the legislation had either 'significantly increased' or 'somewhat increased' employee engagement and productivity levels at their organisation. However, only 39% of enterprises reported benefits of work-life balance among their employees. Globally, very few developing economies have adopted this law, and there is still no clear evidence that it directly boosts productivity or GDP. Of the 11 countries with effective RTD laws, only two – Ireland and Belgium – are among the top 10 countries by GDP per hour.

They were in the top 10 even before they introduced the law, so their current ranking is not directly attributable to RTD. If work-life balance were such a silver bullet for productivity or well-being, why haven't more countries followed suit with legislation?

India has traditionally been a highly protective employer in terms of policy, leading to a higher share of informal workforce. In the last four decades, the outsourcing wave has lifted the Indian tech economy to a significant extent, which required enterprises and the workforce to stay connected to global needs. NASDAQ has just proposed a 23-hour trading day from the second half of 2026, which would mean that the workforce at the global capability centres (GCC) catering to clients in the 'banking, financial services and insurance' (BFSI) sector would need to align with the changing demands.

The sector contributes to about 27% of Indian GDP. Imagine customers in need of urgent services from their bank or insurance company after office hours being stalled by RTD employees. In India, key sectors are deeply tied to global clients, which makes it structurally complex to define when a workday truly ends.

arrested him.

Right to disconnect: A bridge too far? राइट टू डिस्कनेक्ट: क्या यह बहुत आगे की बात है?

- It was yet another quiet morning in **Bareilly** for me until the knock on my hotel room door steadily grew louder.
मेरे लिए **बरेली** में यह एक और शांत सुबह थी, जब तक कि मेरे होटल के कमरे के दरवाजे पर दस्तक लगातार तेज़ नहीं हो गई।
- When I opened the door, there were **four men** seething in anger.
जब मैंने दरवाज़ा खोला, तो वहाँ **चार आदमी** गुस्से से भरे हुए थे।
- They asked me to pack my bags and leave for my **Lucknow headquarters** immediately.
उन्होंने मुझसे कहा कि मैं अपना सामान पैक कर तुरंत अपने **लखनऊ मुख्यालय** के लिए निकल जाऊँ।



- My crime?
मेरा अपराध?
- The previous night I was spotted at a **theatre**, watching a movie with my **reportee**.
पिछली रात मुझे एक **थिएटर** में अपने **रिपोर्टी** के साथ फ़िल्म देखते हुए देखा गया था।
- In the rule book of the local **pharma workers' union**, no supervisor could be seen after **2 p.m.** with their team member, even if it's for a meal or recreation.
स्थानीय **फार्मा वर्कर्स यूनियन** की नियमावली में, कोई भी सुपरवाइज़र **दोपहर 2 बजे** के बाद अपने टीम सदस्य के साथ नहीं दिख सकता, भले ही वह भोजन या मनोरंजन के लिए ही क्यों न हो।
- For them, being with a manager after the scheduled hours means work being stretched.
उनके लिए, तय समय के बाद मैनेजर के साथ होना काम के खिंचने का संकेत है।
- The memory of the forced return train journey **two decades ago** resurfaced when I read about the proposed **Right to Disconnect Bill (RTD)** tabled as a private member's bill by **NCP Member of Parliament Supriya Sule** in the **Lok Sabha** recently.
दो दशक पहले की ज़बरन वापसी वाली ट्रेन यात्रा की याद तब ताज़ा हो गई, जब मैंने हाल ही में **लोकसभा** में **एनसीपी सांसद सुप्रिया सुले** द्वारा निजी सदस्य विधेयक के रूप में पेश किए गए प्रस्तावित **राइट टू डिस्कनेक्ट बिल (RTD)** के बारे में पढ़ा।
- Why do you need legislation when you can quit your job and choose a friendlier employer based on **Glassdoor reviews**?
जब आप नौकरी छोड़कर **ग्लासडोर रिव्यू** के आधार पर एक बेहतर नियोक्ता चुन सकते हैं, तो आपको क़ानून की ज़रूरत क्यों है?
- Of course, a **private member's bill** rarely becomes statute in India.
बेशक, भारत में **निजी सदस्य विधेयक** शायद ही कभी क़ानून बन पाता है।
- But let's look at a few countries that have already tried to bring work-life balance through **RTD**.
लेकिन आइए उन कुछ देशों को देखें जिन्होंने पहले ही **RTD** के ज़रिए कार्य-जीवन संतुलन लाने की कोशिश की है।
- **Australia** legislated **RTD in 2024** and, after a year, the **Australian HR Institute (AHRI)** surveyed **619 employers** and compiled insights from **six focus groups**.
ऑस्ट्रेलिया ने **2024** में **RTD** को क़ानूनी रूप दिया और एक साल बाद **ऑस्ट्रेलियन एचआर इंस्टीट्यूट (AHRI)** ने **619 नियोक्ताओं** का सर्वे किया और **छह फ़ोकस ग्रुप्स** से जानकारीयाँ संकलित कीं।
- Overall, **58%** reported that the legislation had either '**significantly increased**' or '**somewhat increased**' employee engagement and productivity levels at their organisation.
कुल मिलाकर, **58%** ने बताया कि इस क़ानून से उनके संगठन में कर्मचारी सहभागिता और उत्पादकता स्तर '**काफी बढ़े**' या '**कुछ हद तक बढ़े**'।
- However, only **39% of enterprises** reported benefits of **work-life balance** among their employees.
हालाँकि, केवल **39% उद्यमों** ने अपने कर्मचारियों में **कार्य-जीवन संतुलन** के लाभ बताए।
- Globally, very few **developing economies** have adopted this law, and there is still no clear evidence that it directly boosts **productivity or GDP**.
वैश्विक स्तर पर, बहुत कम **विकासशील अर्थव्यवस्थाओं** ने इस क़ानून को अपनाया है, और अब भी ऐसा कोई स्पष्ट प्रमाण नहीं है कि यह सीधे **उत्पादकता या GDP** को बढ़ाता है।
- Of the **11 countries** with effective **RTD laws**, only **two — Ireland and Belgium —** are among the **top 10 countries by GDP per hour**.
RTD क़ानून वाले **11 देशों** में से केवल **दो — आयरलैंड और बेलजियम —** प्रति घंटे **GDP** के आधार पर **शीर्ष 10 देशों** में हैं।
- They were in the top 10 even before they introduced the law, so their current ranking is not directly attributable to **RTD**.
वे इस क़ानून को लागू करने से पहले भी शीर्ष 10 में थे, इसलिए उनकी मौजूदा रैंकिंग को सीधे **RTD** से नहीं जोड़ा जा सकता।
- If work-life balance were such a **silver bullet** for productivity or well-being, why haven't more countries followed suit with legislation?
अगर कार्य-जीवन संतुलन उत्पादकता या कल्याण के लिए इतना बड़ा **रामबाण** होता, तो और देशों ने क़ानून क्यों नहीं बनाए?
- India has traditionally been a highly **protective employer** in terms of policy, leading to a higher share of **informal workforce**.



नीतियों के लिहाज़ से भारत परंपरागत रूप से एक अत्यधिक **संरक्षणवादी नियोक्ता** रहा है, जिससे **असंगठित कार्यबल** का अनुपात अधिक है।

- In the last **four decades**, the **outsourcing wave** has lifted the Indian tech economy to a significant extent.
पिछले **चार दशकों** में, **आउटसोर्सिंग की लहर** ने भारतीय टेक अर्थव्यवस्था को काफ़ी हद तक ऊपर उठाया है।
- This required enterprises and the workforce to stay connected to **global needs**.
इसके लिए कंपनियों और कार्यबल को **वैश्विक ज़रूरतों** से जुड़े रहना पड़ा।
- **NASDAQ** has just proposed a **23-hour trading day** from the second half of **2026**.
नैस्डैक ने **2026** की दूसरी छमाही से **23 घंटे के ट्रेडिंग डे** का प्रस्ताव रखा है।
- This would mean that the workforce at the **global capability centres (GCC)** catering to clients in the '**banking, financial services and insurance**' (**BFSI**) sector would need to align with the changing demands.
इसका मतलब है कि '**बैंकिंग, वित्तीय सेवाएँ और बीमा**' (**BFSI**) क्षेत्र के ग्राहकों को सेवाएँ देने वाले **ग्लोबल कैपेबिलिटी सेंटर (GCC)** के कार्यबल को बदलती माँगों के अनुसार खुद को ढालना होगा।
- The sector contributes to about **27% of Indian GDP**.
यह क्षेत्र भारतीय **GDP में लगभग 27%** का योगदान देता है।
- Imagine customers in need of urgent services from their bank or insurance company after **office hours** being stalled by **RTD employees**.
कल्पना कीजिए कि **कार्यालय समय** के बाद बैंक या बीमा कंपनी से तात्कालिक सेवाओं की ज़रूरत वाले ग्राहक **RTD कर्मचारियों** के कारण रुक जाएँ।
- In India, key sectors are deeply tied to **global clients**, which makes it structurally complex to define when a **workday truly ends**.
भारत में, प्रमुख क्षेत्र **वैश्विक ग्राहकों** से गहराई से जुड़े हैं, जिससे यह संरचनात

GS Paper II: International Relations

TOPICS COVERED

22 December

- | | |
|----|---|
| 1. | Unlocking the potential of India-Africa economic ties
भारत-अफ्रीका आर्थिक संबंधों की संभावनाओं को खोलना |
| 2. | How South Asians became targets of racist hate on Elon Musk's X
एलन मस्क के X पर दक्षिण एशियाई कैसे नस्लवादी घृणा के निशाने बने |
| 3. | Beyond the optics
दिखावे से आगे |



Unlocking the potential of India-Africa economic ties

GS II: IR: India-Africa

MOB

P rime Minister Narendra Modi's visits to Namibia and Ghana, as part of a five-nation tour (including Trinidad and Tobago, Argentina and Brazil) in July 2025, focused the spotlight again on India-Africa economic relations – just as his recent visit to Ethiopia (December 16-17, 2025) did. The recent decade has witnessed a fresh momentum in India's relations with various African countries. A testament to this is the entry of the African Union as a full-time member of the G-20 during India's presidency term in 2023. India and Africa share a long history of cultural affinity and political solidarity, but their relationship has increasingly been shaped by economics in recent decades.

Uncertainties in western markets

In FY24, India's exports to the United States and the European Union constituted around 40% of its total exports. Given the rising unpredictability of these markets and the threat of a potential slowdown, it is essential that India looks to other markets, particularly African economies.

India is Africa's fourth-largest trading partner, with bilateral trade reaching nearly \$100 billion. In FY24, India exported goods worth \$38.17 billion to African countries – the key destinations included Nigeria, South Africa and Tanzania. Petroleum products, engineering goods, pharmaceuticals, rice and textiles were some of the major goods exported. In 2024, Africa's imports from India were around 6% of its total imports. To put this in perspective, in addition to being one of the largest investors, China is also Africa's largest trading partner, with bilateral trade exceeding \$200 billion. Around 21% of imports to Africa in 2024 came from China. Interestingly around 33% of imports from China fell under the HSN 84 and 85 product categories, demonstrating China's industrial prowess. These product categories comprise machinery, boilers, electrical machinery, and semiconductor devices.

Recognising the need to catch up, India has already set a target of doubling its trade with



Amal Krishnan

is Assistant Professor at Christ University, Bengaluru



Badri Narayanan

is Fellow, NITI Aayog

India's engagement with the continent must move towards developing long-term and sustainable partnerships

Africa by 2030. Here is a five-point strategy that may enable India to fulfil its target.

The first strategic pillar should focus on removing trade barriers and engaging in negotiations for preferential trade agreements and comprehensive economic partnership agreements with regional economic communities and the major African economies.

The second pillar should aim to move from low-value commodity exports to two-way value-added and cross-border joint venture manufacturing. Currently, Indian firms lag in utilising the incentives offered by multiple African governments to enable firms to set up manufacturing units. For Indian enterprises, setting up manufacturing facilities across Africa presents a strategic dual advantage. It enables them to maintain preferential access to the U.S. market through favourable tariff regimes, while simultaneously capitalising on Africa's growing consumer base and industrial demand. Moving beyond petroleum and traditional exports is critical in transitioning to a new phase of India's ties with African economies. Deepening engagement with African regional groupings such as the African Continental Free Trade Area (AfCFTA) can open greater opportunities for Indian exporters.

An opportunity for MSMEs

The third pillar must prioritise the scaling-up of the Lines of Credit and improve accessibility to trade finance. The African market offers a great opportunity for the micro, small and medium enterprises (MSME) segment, unlike the European and American markets where MSMEs find it difficult to gain a foothold. There is a considerable lack of policy attention in enabling MSMEs to gain access to the African markets.

Ensuring easy access to trade finance is critical in achieving a sustainable trade relationship with the continent. Other measures may include adopting trade in local currencies, and forming a joint insurance pool to cover political and

commercial risks for medium-term projects which may reduce the perceived risk for small and medium enterprises and banks.

The fourth strategic pillar should focus on lowering freight and logistics costs by investing in port modernisation, hinterland connectivity and in developing India-Africa maritime corridors.

The final strategic pillar involves the scaling up of services, digital trade, and people-to-people links. It is essential that India leverages its strength in Information Technology, health care, professional services and skill development to boost services exports and stimulate goods trade. Services enable high-value exports and facilitate greater two-way trade. Current policy measures fall short in enabling services trade with African economies. There needs to be a considerable improvement in this regard.

A role for the Indian public sector

Strengthening investments by Indian firms in African manufacturing, agro-processing, infrastructure, renewable energy and critical and emerging technologies may lend further strength to India's relations with African economies. Currently, India's investments in Africa are inflated by investments in Mauritius which are often done with an intent to evade taxes. Multiple factors, including bureaucratic hurdles, political instability and financing costs act as barriers for Indian firms to invest in Africa. Indian firms, particularly the public sector units must take the lead in investing in the African continent, particularly in mining and mineral exploration.

Ultimately, India's engagement with Africa must go beyond transactional trade and move towards building long-term, sustainable partnerships. As global supply chains undergo restructuring and the world shifts towards a multipolar economic order, Africa will remain central to India's aspirations of becoming a global economic power. The time is ripe for India to recalibrate, innovate, and deepen its economic footprint across the African continent.

Unlocking the potential of India-Africa economic ties भारत-अफ्रीका आर्थिक संबंधों की संभावनाओं को खोलना

India-Africa Economic Relations

भारत-अफ्रीका आर्थिक संबंध

- **Prime Minister Narendra Modi's visits to Namibia and Ghana, as part of a five-nation tour (including Trinidad and Tobago, Argentina and Brazil) in July 2025**, focused the spotlight again on **India-Africa economic relations**.
प्रधानमंत्री नरेंद्र मोदी की नामीबिया और घाना की यात्राएँ, जुलाई 2025 में हुई पाँच देशों की यात्रा (जिसमें त्रिनिदाद और टोबैगो, अर्जेंटीना और ब्राज़ील शामिल थे) के हिस्से के रूप में, एक बार फिर भारत-अफ्रीका आर्थिक संबंधों पर ध्यान केंद्रित करती हैं।
- Just as his recent visit to **Ethiopia (December 16-17, 2025)** did.
ठीक उसी तरह जैसे उनकी हालिया इथियोपिया यात्रा (16-17 दिसंबर 2025) ने किया।
- The **recent decade** has witnessed a **fresh momentum** in India's relations with various **African countries**.
हाल के एक दशक में विभिन्न अफ्रीकी देशों के साथ भारत के संबंधों में नई गति देखने को मिली है।



- A testament to this is the entry of the **African Union as a full-time member of the G-20 during India's presidency term in 2023.**
इसका प्रमाण 2023 में भारत की अध्यक्षता के दौरान अफ्रीकी संघ का G-20 का पूर्ण सदस्य बनना है।
- India and Africa share a **long history of cultural affinity and political solidarity.**
भारत और अफ्रीका के बीच सांस्कृतिक निकटता और राजनीतिक एकजुटता का एक दीर्घ इतिहास रहा है।
- But their relationship has increasingly been **shaped by economics in recent decades.**
लेकिन हाल के दशकों में उनके संबंधों को अधिकाधिक आर्थिक कारकों ने आकार दिया है।

Uncertainties in western markets पश्चिमी बाजारों में अनिश्चितताएँ

- In **FY24**, India's exports to the **United States and the European Union** constituted around **40% of its total exports.**
वित्त वर्ष 2023-24 (FY24) में संयुक्त राज्य अमेरिका और यूरोपीय संघ को भारत का निर्यात उसके कुल निर्यात का लगभग 40% था।
- Given the **rising unpredictability** of these markets and the threat of a **potential slowdown.**
इन बाजारों की बढ़ती अनिश्चितता और संभावित मंदी के खतरे को देखते हुए।
- It is essential that India looks to **other markets**, particularly **African economies.**
यह आवश्यक है कि भारत अन्य बाजारों, विशेष रूप से अफ्रीकी अर्थव्यवस्थाओं की ओर रुख करे।
- India is **Africa's fourth-largest trading partner**, with **bilateral trade reaching nearly \$100 billion.**
भारत अफ्रीका का चौथा सबसे बड़ा व्यापारिक साझेदार है, जहाँ द्विपक्षीय व्यापार लगभग 100 अरब डॉलर तक पहुँच गया है।
- In **FY24**, India exported goods worth **\$38.17 billion to African countries.**
FY24 में भारत ने अफ्रीकी देशों को 38.17 अरब डॉलर मूल्य का सामान निर्यात किया।
- The **key destinations** included **Nigeria, South Africa and Tanzania.**
प्रमुख गंतव्यों में नाइजीरिया, दक्षिण अफ्रीका और तंज़ानिया शामिल थे।
- **Petroleum products, engineering goods, pharmaceuticals, rice and textiles** were some of the **major goods exported.**
पेट्रोलियम उत्पाद, इंजीनियरिंग वस्तुएँ, औषधियाँ, चावल और वस्त्र प्रमुख निर्यातित वस्तुएँ थीं।
- In **2024**, Africa's imports from India were around **6% of its total imports.**
2024 में अफ्रीका के कुल आयात में भारत से आयात का हिस्सा लगभग 6% था।
- To put this in perspective, in addition to being one of the **largest investors**, **China is also Africa's largest trading partner**, with bilateral trade exceeding **\$200 billion.**
तुलना के लिए, चीन, जो सबसे बड़े निवेशकों में से एक है, अफ्रीका का सबसे बड़ा व्यापारिक साझेदार भी है, जहाँ द्विपक्षीय व्यापार 200 अरब डॉलर से अधिक है।
- Around **21% of imports to Africa in 2024** came from **China.**
2024 में अफ्रीका के कुल आयात का लगभग 21% चीन से आया।
- Interestingly around **33% of imports from China** fell under the **HSN 84 and 85 product categories.**
दिलचस्प रूप से, चीन से आयात का लगभग 33% HSN 84 और 85 उत्पाद श्रेणियों में आता है।
- Demonstrating **China's industrial prowess.**
जो चीन की औद्योगिक क्षमता को दर्शाता है।
- These product categories comprise **machinery, boilers, electrical machinery, and semiconductor devices.**
इन उत्पाद श्रेणियों में मशीनरी, बॉयलर, विद्युत मशीनरी और सेमीकंडक्टर उपकरण शामिल हैं।
- Recognising the need to **catch up**, India has already set a target of **doubling its trade with Africa by 2030.**
इस अंतर को पाटने की आवश्यकता को पहचानते हुए, भारत ने 2030 तक अफ्रीका के साथ अपने व्यापार को दोगुना करने का लक्ष्य निर्धारित किया है।
- Here is a **five-point strategy** that may enable India to **fulfil its target.**
यहाँ एक पाँच-बिंदु रणनीति दी गई है, जो भारत को इस लक्ष्य को पूरा करने में सक्षम बना सकती है।
- The **first strategic pillar** should **focus on removing trade barriers.**
पहला रणनीतिक स्तंभ व्यापार बाधाओं को हटाने पर केंद्रित होना चाहिए।



- And engaging in negotiations for **preferential trade agreements** and **comprehensive economic partnership agreements**.
और प्राथमिक व्यापार समझौतों तथा समग्र आर्थिक साझेदारी समझौतों के लिए वार्ताओं में संलग्न होना चाहिए।
- With **regional economic communities** and the **major African economies**.
क्षेत्रीय आर्थिक समुदायों और प्रमुख अफ्रीकी अर्थव्यवस्थाओं के साथ।
- The **second pillar** should aim to move from **low-value commodity exports** to **two-way value-added and cross-border joint venture manufacturing**.
दूसरा स्तंभ कम मूल्य वाले वस्तु निर्यात से आगे बढ़कर दो-तरफ़ा मूल्यवर्धित और सीमा-पार संयुक्त उद्यम निर्माण की ओर बढ़ने का लक्ष्य रखे।
- Currently, **Indian firms lag** in utilising the **incentives offered by multiple African governments**.
वर्तमान में, भारतीय कंपनियाँ कई अफ्रीकी सरकारों द्वारा दिए गए प्रोत्साहनों का उपयोग करने में पीछे हैं।
- To enable firms to **set up manufacturing units**.
जो कंपनियों को निर्माण इकाइयाँ स्थापित करने में सक्षम बनाते हैं।
- For **Indian enterprises**, **setting up manufacturing facilities across Africa** presents a **strategic dual advantage**.
भारतीय उद्यमों के लिए अफ्रीका में निर्माण सुविधाएँ स्थापित करना एक दोहरा रणनीतिक लाभ प्रदान करता है।
- It enables them to maintain **preferential access to the U.S. market** through **favourable tariff regimes**.
यह उन्हें अनुकूल शुल्क व्यवस्थाओं के माध्यम से अमेरिकी बाज़ार तक प्राथमिक पहुँच बनाए रखने में सक्षम बनाता है।
- While simultaneously capitalising on **Africa's growing consumer base and industrial demand**.
साथ ही अफ्रीका के बढ़ते उपभोक्ता आधार और औद्योगिक मांग का लाभ उठाने का अवसर देता है।
- Moving beyond **petroleum and traditional exports** is **critical**.
पेट्रोलियम और पारंपरिक निर्यात से आगे बढ़ना अत्यंत आवश्यक है।
- In transitioning to a **new phase of India's ties with African economies**.
भारत-अफ्रीकी अर्थव्यवस्थाओं के संबंधों के नए चरण में प्रवेश के लिए।
- Deepening engagement with **African regional groupings** such as the **African Continental Free Trade Area (AfCFTA)**.
अफ्रीकी क्षेत्रीय समूहों, जैसे अफ्रीकी महाद्वीपीय मुक्त व्यापार क्षेत्र (AfCFTA) के साथ जुड़ाव को गहरा करना।
- Can open **greater opportunities for Indian exporters**.
भारतीय निर्यातकों के लिए अधिक अवसर खोल सकता है।

An opportunity for MSMEs एमएसएमई के लिए एक अवसर

- The **third pillar** must prioritise the **scaling-up of the Lines of Credit** and **improve accessibility to trade finance**.
तीसरा स्तंभ लाइन ऑफ़ क्रेडिट के विस्तार और व्यापार वित्त तक पहुँच में सुधार को प्राथमिकता दे।
- The **African market** offers a great opportunity for the **micro, small and medium enterprises (MSME) segment**.
अफ्रीकी बाज़ार सूक्ष्म, लघु और मध्यम उद्यम (एमएसएमई) क्षेत्र के लिए एक बड़ा अवसर प्रदान करता है।
- Unlike the **European and American markets** where MSMEs find it difficult to gain a **foothold**.
यूरोपीय और अमेरिकी बाज़ारों के विपरीत, जहाँ एमएसएमई को पैर जमाना कठिन होता है।
- There is a **considerable lack of policy attention** in enabling MSMEs to **gain access to the African markets**.
एमएसएमई को अफ्रीकी बाज़ारों तक पहुँच दिलाने में नीतिगत ध्यान की काफी कमी है।
- Ensuring **easy access to trade finance** is **critical** in achieving a **sustainable trade relationship** with the continent.



महाद्वीप के साथ सतत व्यापारिक संबंध बनाने के लिए व्यापार वित्त तक आसान पहुँच सुनिश्चित करना अत्यंत आवश्यक है।

- **Other measures may include adopting trade in local currencies.**
अन्य उपायों में स्थानीय मुद्राओं में व्यापार अपनाना शामिल हो सकता है।
- **And forming a joint insurance pool to cover political and commercial risks for medium-term projects.**
और मध्यम अवधि की परियोजनाओं के लिए राजनीतिक और वाणिज्यिक जोखिमों को कवर करने हेतु संयुक्त बीमा पूल बनाना।
- Which may reduce the perceived risk for small and medium enterprises and banks.
जिससे छोटे और मध्यम उद्यमों तथा बैंकों के लिए जोखिम की धारणा कम हो सकती है।

The fourth strategic pillar चौथा रणनीतिक स्तंभ

- The **fourth strategic pillar should focus on lowering freight and logistics costs.**
चौथा रणनीतिक स्तंभ मालभाड़ा और लॉजिस्टिक्स लागत घटाने पर केंद्रित होना चाहिए।
- By investing in **port modernisation, hinterland connectivity.**
बंदरगाह आधुनिकीकरण और हिंटरलैंड कनेक्टिविटी में निवेश के माध्यम से।
- And in developing **India-Africa maritime corridors.**
तथा भारत-अफ्रीका समुद्री गलियारों के विकास के द्वारा।

The final strategic pillar अंतिम रणनीतिक स्तंभ

- The **final strategic pillar involves the scaling up of services, digital trade, and people-to-people links.**
अंतिम रणनीतिक स्तंभ में सेवाओं का विस्तार, डिजिटल व्यापार और लोगों के बीच संपर्क को बढ़ाना शामिल है।
- It is essential that India leverages its strength in Information Technology, health care, professional services and skill development.
यह आवश्यक है कि भारत सूचना प्रौद्योगिकी, स्वास्थ्य सेवा, पेशेवर सेवाओं और कौशल विकास में अपनी ताकत का लाभ उठाए।
- To **boost services exports and stimulate goods trade.**
सेवा निर्यात को बढ़ावा देने और वस्तु व्यापार को प्रोत्साहित करने के लिए।
- **Services enable high-value exports and facilitate greater two-way trade.**
सेवाएँ उच्च-मूल्य निर्यात को संभव बनाती हैं और दो-तरफ़ा व्यापार को बढ़ावा देती हैं।
- Current **policy measures fall short in enabling services trade with African economies.**
वर्तमान नीतिगत उपाय अफ्रीकी अर्थव्यवस्थाओं के साथ सेवा व्यापार को सक्षम करने में अपर्याप्त हैं।
- There needs to be a **considerable improvement** in this regard.
इस दिशा में काफी सुधार की आवश्यकता है।

A role for the Indian public sector भारतीय सार्वजनिक क्षेत्र की भूमिका

- **Strengthening investments by Indian firms in African manufacturing, agro-processing, infrastructure, renewable energy and critical and emerging technologies** may lend further strength to India's relations with African economies.
अफ्रीकी विनिर्माण, एग्रो-प्रोसेसिंग, अवसंरचना, नवीकरणीय ऊर्जा तथा महत्वपूर्ण और उभरती प्रौद्योगिकियों में भारतीय कंपनियों के निवेश को मजबूत करना, अफ्रीकी अर्थव्यवस्थाओं के साथ भारत के संबंधों को और सुदृढ़ कर सकता है।
- Currently, **India's investments in Africa are inflated by investments in Mauritius.**
वर्तमान में अफ्रीका में भारत के निवेश को मॉरीशस में किए गए निवेश बढ़ा-चढ़ाकर दिखाते हैं।
- Which are often done with an intent to **evade taxes.**
जो अक्सर करों से बचने के उद्देश्य से किए जाते हैं।



- Multiple factors, including **bureaucratic hurdles, political instability and financing costs**, act as **barriers** for Indian firms to invest in Africa.
नौकरशाही बाधाएँ, राजनीतिक अस्थिरता और वित्तपोषण लागत सहित कई कारक अफ्रीका में निवेश के लिए भारतीय कंपनियों के लिए बाधा बनते हैं।
- Indian firms, particularly the **public sector units**, must **take the lead** in investing in the **African continent**.
भारतीय कंपनियों, विशेष रूप से सार्वजनिक क्षेत्र उपक्रमों, को अफ्रीकी महाद्वीप में निवेश का नेतृत्व करना चाहिए।
- Particularly in **mining and mineral exploration**.
विशेष रूप से खनन और खनिज अन्वेषण में।
- Ultimately, India's engagement with Africa must go **beyond transactional trade**.
अंततः, अफ्रीका के साथ भारत की भागीदारी को लेन-देन आधारित व्यापार से आगे जाना होगा।
- And move towards building **long-term, sustainable partnerships**.
और दीर्घकालिक, सतत साझेदारियों के निर्माण की ओर बढ़ना होगा।
- As **global supply chains** undergo **restructuring**.
जैसे-जैसे वैश्विक आपूर्ति शृंखलाएँ पुनर्संरचना से गुजर रही हैं।
- And the world shifts towards a **multipolar economic order**.
और दुनिया एक बहुध्रुवीय आर्थिक व्यवस्था की ओर बढ़ रही है।
- **Africa** will remain **central** to India's aspirations of becoming a **global economic power**.
अफ्रीका वैश्विक आर्थिक शक्ति बनने की भारत की आकांक्षाओं के लिए केंद्र में रहेगा।
- The **time is ripe** for India to **recalibrate, innovate, and deepen its economic footprint** across the **African continent**.
समय उपयुक्त है कि भारत पुनर्संतुलन करे, नवाचार करे और अफ्रीकी महाद्वीप में अपनी आर्थिक उपस्थिति को और गहरा करे।



How South Asians became targets of racist hate on Elon Musk's X

As digital rights advocates track rising levels of **anti-Semitism, Islamophobia, and racism** on X after Elon Musk's 2022 takeover of Twitter, many have noted a distinct spike in hateful rhetoric aimed at South Asians, **targeting their race, skin colour, and religious beliefs**

CS, II, IR, Migration

Sahana Venugopal

The story so far:

"I imagine the smell," tweeted Nik Pash, responding to a photo that showed several developers at a xAI hackathon. A large number of them appeared to be of South Asian ethnicity. Mr. Pash's tweet drew outrage as the phrase was generally used to mock people perceived as being unhygienic. Plus, it came from someone who headed artificial intelligence at a coding startup. Mr. Pash was let go after many users criticised his post. The outrage grew as multiple other X users responded with shared negative comments about H-1B visas, Indians working in IT, deportations, bad smells, body odour, open defecation, and American population replacement. While many supported Mr. Pash's removal from the company, others were outraged by what they felt was a harmless joke. This incident highlighted an issue plaguing X: racism against South Asians.

What is the nature of abuse on X?

As digital rights advocates track rising levels of anti-Semitism, Islamophobia, racism, and transphobia on X after Elon Musk's 2022 takeover of Twitter, many have noted a distinct spike in hateful rhetoric aimed at South Asians this year, targeting their race, skin colour, religious beliefs, careers in America, and/or migration history.

Graphic comments referred to several prominent X users as "street shi**rs"; insulted their religious identity; mischaracterised them as dirty; or called on them to be deported and stripped of their visa privileges. The hate was also layered, with women facing misogynistic abuse in addition to the racism while Muslim users were hit with Islamophobia and Hindu users faced anti-Hindu hate. Free AI tools with poor guardrails,

including Grok's own photo-to-video generator on X, made it easy for malicious users to generate racist deepfake photos and videos of individuals. Several verified X users engage in this type of harassment.

Which South Asians were abused?

U.S. conservative politician Vivek Ramaswamy, New York City mayor-elect Zohran Mamdani, Senior White House Policy Advisor on AI Sriram Krishnan, FBI Director Kash Patel, and Former U.S. Federal Trade Commission (FTC) Chair Lina Khan might hold radically different political views, but all five were subjected to disturbing levels of racist hate on Elon Musk's X. When Mr. Ramaswamy on November 1 posted a photo with his children to greet X followers for Halloween, commenters told him to go to India, and used the racial slur "pajeet" against the family. Furthermore, one user even turned the photo into a deepfake video to show Mr. Ramaswamy dumping brown liquid over his children.

Mr. Ramaswamy and Mr. Patel were also hit with graphic images and racist comments when they posted Diwali wishes on their X accounts last month, with both individuals being told to return to India.

Their Hindu gods were referred to as "demons", and shown broken to pieces before a crucifix in an AI image.

Despite receiving U.S. President Donald Trump's endorsement, Mr. Krishnan was slammed with racist abuse in late 2024 and doxxed by right-wing influencer Laura Loomer last year. Ms. Loomer later apologised and claimed it was an accident. X users also trolled Mr. Krishnan over his appearance and his Indian background.

How have racist comments against South Asians increased recently?

The Center for the Study of Organized Hate (CSOH), a non-profit, non-partisan

think tank in the U.S., reported a "visible uptick of anti-Indian hate" on X after Mr. Krishnan's appointment to his U.S. White House role, and also after a post on X by Mr. Ramaswamy in December 2024, when H-1B visa debates were raging.

"Since then, anti-Indian racism on social media, including X, has shown no signs of abating," observed the organisation.

After studying a dataset of 680 posts on X targeting Indians and Indian-origin communities that received over 281 million views between July 1 and September 7, CSOH reported that almost 70% of the posts focused on deportation, invasion, and job theft.

"Immigration and calls for deportation are thus the central pillars and main drivers of anti-Indian racism on X," explained CSOH in the report, adding that "racist slurs and mockery, though less voluminous, also play a crucial role in normalising and reinforcing anti-Indian hate on X. The repeated use of racialised terms like "pajeet" or tropes of Indians as dirty or smelly provides the cultural scaffolding for more explicit exclusionary and hateful rhetoric."

Mr. Mamdani and Ms. Khan faced both racism and Islamophobia on X, with the New York City mayor-elect frequently being linked to terrorism because he openly embraced his Muslim identity. One example was U.S. politician Andy Ongles, who on October 29 posted, "Think of how many future Zohran Mamdani's we can stop by mass deportations. Let's deport them now before they are naturalised. Subversive immigrants must NEVER get citizenship."

Mr. Mamdani's legal status was also questioned by U.S. President Donald Trump, triggering further abuse against the politician on X.

Though former FTC Chair Ms. Khan is not vocal about her religious beliefs, the London-born American antitrust scholar was nevertheless attacked online over her

surname, her appearance, and her parents' Pakistani heritage. Ms. Khan recently became a target after she was named the co-chair of Mr. Mamdani's transition team.

X user Paul Sperry, verified with a blue check mark and with over half a million followers, posted a photo of what he claimed was Ms. Khan's "family home" on X, possibly doxxing her and her family members. He further claimed that she "hates capitalism and is pushing socialism on all New Yorkers." In another post, he referred to the former regulator as a "TROJAN HORSE", called her "Ethnic-Pakistani Muslim" and said she would be able to "place fellow Muslims throughout the government".

The normalisation of South Asian hate as well as mockery on X has also impacted everyday tech workers and social media users.

What events triggered such hate?

Apart from the souring relationship between the U.S. and India after Mr. Trump's return to the White House, the President's strong and repeated emphasis on the removal of Diversity, Equity, and Inclusion (DEI) initiatives has made more people view minority groups in a poor light.

Referring to them as "illegal and immoral discrimination programs," his rhetoric unfairly showed South Asians as outsiders taking over American jobs.

Referring to the H-1B visa programme for workers, Mr. Trump said in a September 19 proclamation that the "large-scale replacement of American workers through systemic abuse of the program has undermined both our economic and national security".

A U.S. government report published this year stated that out of the H-1B petitions approved in FY 2024, 71% were for beneficiaries whose country of birth was India.

How South Asians became targets of racist hate on Elon Musk's X एलन मस्क के X पर दक्षिण एशियाई कैसे नस्लवादी घृणा के निशाने बने

- As digital rights advocates track rising levels of **anti-Semitism, Islamophobia, and racism** on X after Elon Musk's 2022 takeover of Twitter, many have noted a distinct spike in **hateful rhetoric** aimed at **South Asians, targeting their race, skin colour, and religious beliefs**

जैसे-जैसे डिजिटल अधिकार कार्यकर्ता एलन मस्क के 2022 में ट्विटर अधिग्रहण के बाद X पर यहूदी-विरोध, इस्लामोफोबिया और नस्लवाद के बढ़ते स्तरों पर नज़र रख रहे हैं, कई लोगों ने दक्षिण एशियाईयों के खिलाफ घृणास्पद भाषा में स्पष्ट वृद्धि देखी है, जो उनकी नस्ल, त्वचा के रंग और धार्मिक विश्वासों को निशाना बनाती है

Racism against South Asians on X X पर दक्षिण एशियाईयों के खिलाफ नस्लवाद

- "I imagine the smell," tweeted **Nik Pash**, responding to a photo that showed several developers at a **xAI hackathon**. "I imagine the smell," निक पेश ने ट्वीट किया, जो **xAI हैकाथॉन** में कई डेवलपर्स को दिखाने वाली एक फोटो पर प्रतिक्रिया थी।



- A large number of them appeared to be of **South Asian ethnicity**.

उनमें से बड़ी संख्या **दक्षिण एशियाई जातीयता** की प्रतीत हो रही थी।

- Mr. Pash's tweet drew **outrage** as the phrase was generally used to **mock people perceived as being unhygienic**.

श्री पैश के ट्वीट पर **आक्रोश** हुआ क्योंकि यह वाक्यांश आमतौर पर **अस्वच्छ माने जाने वाले लोगों का मज़ाक उड़ाने** के लिए प्रयोग किया जाता है।

- Plus, it came from someone who headed **artificial intelligence** at a **coding startup**.

इसके अलावा, यह टिप्पणी एक ऐसे व्यक्ति की ओर से आई थी जो एक **कोडिंग स्टार्टअप** में **आर्टिफिशियल इंटेलिजेंस** का नेतृत्व करता था।

- Mr. Pash was **let go** after many users criticised his post.

कई उपयोगकर्ताओं द्वारा पोस्ट की आलोचना किए जाने के बाद **श्री पैश को नौकरी से हटा दिया गया**।

- The outrage grew as multiple other **X users** responded with **shared negative comments about H1-B visas, Indians working in IT, deportations, bad smells, body odour, open defecation, and American population replacement**.

आक्रोश तब और बढ़ गया जब कई अन्य **X उपयोगकर्ताओं** ने **H1-B वीज़ा, आईटी में काम करने वाले भारतीयों, निर्वासन, बदबू, शरीर की दुर्गंध, खुले में शौच, और अमेरिकी जनसंख्या प्रतिस्थापन** जैसे विषयों पर नकारात्मक टिप्पणियाँ साझा कीं।

- While many supported Mr. Pash's **removal from the company**, others were outraged by what they felt was a **harmless joke**.

जहाँ कई लोगों ने **कंपनी से श्री पैश को हटाने** का समर्थन किया, वहीं कुछ लोग इसे एक **हानिरहित मज़ाक** मानकर नाराज़ हुए।

- This incident highlighted an issue plaguing **X: racism against South Asians**.

इस घटना ने **X** पर मौजूद एक समस्या को उजागर किया: **दक्षिण एशियाइयों के खिलाफ नस्लवाद**।



What is the nature of abuse on X?

X पर दुर्व्यवहार की प्रकृति क्या है?

- As digital rights advocates track rising levels of **anti-Semitism, Islamophobia, racism, and transphobia on X after Elon Musk's 2022 takeover of Twitter**, many have noted a distinct **spike in hateful rhetoric aimed at South Asians** this year.

डिजिटल अधिकार कार्यकर्ता **एलन मस्क के 2022 में ट्विटर अधिग्रहण** के बाद **X** पर **यहूदी-विरोध, इस्लामोफोबिया, नस्लवाद, और ट्रांसफोबिया** में वृद्धि पर नज़र रख रहे हैं, और इस वर्ष **दक्षिण एशियाइयों के खिलाफ घृणास्पद भाषा** में स्पष्ट वृद्धि देखी गई है।

- The **abuse targeted their race, skin colour, religious beliefs, careers in America, and/or migration history**.

यह दुर्व्यवहार उनकी **जाति, त्वचा का रंग, धार्मिक विश्वास, अमेरिका में करियर, और/या प्रवासन इतिहास** को निशाना बनाता है।

- Graphic comments referred to several prominent X users as **"street shirs"**;

कई प्रमुख **X उपयोगकर्ताओं** को **"street shirs"** जैसे **अश्लील शब्दों** से संबोधित किया गया।

- insulted their **religious identity**;

उनकी **धार्मिक पहचान** का अपमान किया गया।

- mischaracterised them as **dirty**;

उन्हें **गंदा** बताकर गलत तरीके से प्रस्तुत किया गया।

- or called on them to be **deported** and **stripped of their visa privileges**.

या उन्हें **निर्वासित करने** और उनके **वीज़ा अधिकार छीनने** की मांग की गई।

- The hate was also **layered**, with **women** facing **misogynistic abuse** in addition to racism.

यह नफरत **बहुस्तरीय** थी, जहाँ **महिलाओं** को नस्लवाद के साथ-साथ **स्त्रीद्वेषी दुर्व्यवहार** का सामना करना पड़ा।

- Muslim users** were hit with **Islamophobia** and **Hindu users** faced **anti-Hindu hate**.

मुस्लिम उपयोगकर्ताओं को **इस्लामोफोबिया** का सामना करना पड़ा और **हिंदू उपयोगकर्ताओं** को **हिंदू-विरोधी घृणा** झेलनी पड़ी।



- Free AI tools with poor guardrails, including Grok's photo-to-video generator on X, made it easy to generate racist deepfake photos and videos.
कमज़ोर सुरक्षा वाले मुफ़्त AI टूल, जिनमें X पर Grok का फोटो-टू-वीडियो जनरेटर शामिल है, ने नस्लवादी डीपफेक तस्वीरों और वीडियो बनाना आसान कर दिया।
- Several verified X users engage in this type of harassment.
कई सत्यापित X उपयोगकर्ता भी इस प्रकार के उत्पीड़न में शामिल पाए गए।

Which South Asians were abused? किन दक्षिण एशियाइयों को निशाना बनाया गया?

- Vivek Ramaswamy, Zohran Mamdani, Sriram Krishnan, Kash Patel, and Lina Khan were all subjected to disturbing levels of racist hate on Elon Musk's X.
विवेक रामास्वामी, जोहरान ममदानी, श्रीराम कृष्णन, कश पटेल, और लीना खान — इन सभी को एलन मस्क के X पर गंभीर नस्लवादी घृणा का सामना करना पड़ा।
- When Mr. Ramaswamy posted a Halloween photo with his children on November 1, commenters told him to go to India and used the racial slur "pajeet".
जब 1 नवंबर को श्री रामास्वामी ने अपने बच्चों के साथ हैलोवीन की फोटो पोस्ट की, तो टिप्पणीकारों ने उन्हें भारत जाने को कहा और "pajeet" जैसे नस्लीय अपशब्द का इस्तेमाल किया।
- One user even turned the photo into a deepfake video showing him dumping brown liquid over his children.
एक उपयोगकर्ता ने उस फोटो को डीपफेक वीडियो में बदल दिया, जिसमें वह अपने बच्चों पर भूरा तरल डालते हुए दिखाया गया।
- Mr. Ramaswamy and Mr. Patel were also targeted with graphic images and racist comments when they posted Diwali wishes.
दीपावली की शुभकामनाएँ पोस्ट करने पर श्री रामास्वामी और श्री पटेल को भी ग्राफिक तस्वीरों और नस्लवादी टिप्पणियों का सामना करना पड़ा।
- They were told to return to India.
उन्हें भारत लौट जाने को कहा गया।
- Their Hindu gods were referred to as "demons" and shown broken before a crucifix in an AI image.
उनके हिंदू देवताओं को "राक्षस" कहा गया और एक AI इमेज में उन्हें क्रूसिफिक्स के सामने टूटे हुए दिखाया गया।
- Despite receiving Donald Trump's endorsement, Mr. Krishnan was slammed with racist abuse in late 2024 and doxxed by Laura Loomer.
डोनाल्ड ट्रंप का समर्थन मिलने के बावजूद, 2024 के अंत में श्री कृष्णन को नस्लवादी दुर्व्यवहार का सामना करना पड़ा और लौरा लूमर द्वारा डॉक्स किया गया।
- Ms. Loomer later apologised and claimed it was an accident.
बाद में लूमर ने माफ़ी माँगी और इसे दुर्घटना बताया।
- X users also trolled Mr. Krishnan over his appearance and Indian background.
X उपयोगकर्ताओं ने श्री कृष्णन को उनकी शारीरिक बनावट और भारतीय पृष्ठभूमि को लेकर भी ट्रोल किया।

How have racist comments against South Asians increased recently? हाल के समय में दक्षिण एशियाइयों के खिलाफ नस्लवादी टिप्पणियाँ कैसे बढ़ीं?

- The Center for the Study of Organized Hate (CSOH), a non-profit, non-partisan think tank in the U.S., reported a "visible uptick of anti-Indian hate" on X after Mr. Krishnan's appointment to his U.S. White House role.
सेंटर फॉर द स्टडी ऑफ ऑर्गनाइज़्ड हेट (CSOH), जो अमेरिका का एक गैर-लाभकारी, गैर-दलीय थिंक टैंक है, ने X पर "भारत-विरोधी घृणा में स्पष्ट वृद्धि" की रिपोर्ट दी, जो श्री कृष्णन की व्हाइट हाउस में नियुक्ति के बाद देखी गई।
- The rise was also noted after a post on X by Mr. Ramaswamy in December 2024, when H1-B visa debates were raging.
यह वृद्धि दिसंबर 2024 में श्री रामास्वामी द्वारा X पर की गई एक पोस्ट के बाद भी देखी गई, जब H1-B वीजा पर बहस तेज़ थी।



- “Since then, **anti-Indian racism on social media, including X, has shown no signs of abating**,” observed the organisation.
संगठन ने कहा कि इसके बाद से सोशल मीडिया, विशेष रूप से X, पर भारत-विरोधी नस्लवाद में कोई कमी नहीं आई है।
- After studying a dataset of **680 posts on X targeting Indians and Indian-origin communities**, which received over **281 million views** between **July 1 and September 7**, CSOH reported key trends.
1 जुलाई से 7 सितंबर के बीच **281 मिलियन से अधिक व्यूज़** पाने वाली **X की 680 पोस्टों** का अध्ययन करने के बाद, जो **भारतीयों और भारतीय मूल के समुदायों** को निशाना बना रही थीं, CSOH ने प्रमुख रुझान बताए।
- **Almost 70% of the posts focused on deportation, invasion, and job theft.**
लगभग **70% पोस्टें निर्वासन, आक्रमण, और नौकरी छीनने** जैसे विषयों पर केंद्रित थीं।
- **“Immigration and calls for deportation are the central pillars and main drivers of anti-Indian racism on X,”** explained CSOH.
CSOH ने स्पष्ट किया कि **आप्रवासन और निर्वासन की मांग ही X पर भारत-विरोधी नस्लवाद के मुख्य स्तंभ और प्रेरक तत्व हैं।**
- The report added that **racist slurs and mockery, though less voluminous, play a crucial role in normalising and reinforcing anti-Indian hate.**
रिपोर्ट में कहा गया कि **नस्लवादी गालियाँ और उपहास, भले ही संख्या में कम हों, लेकिन भारत-विरोधी घृणा को सामान्य बनाने और मजबूत करने में महत्वपूर्ण भूमिका निभाते हैं।**
- The repeated use of racialised terms like **“pajeet”** or portraying Indians as **dirty or smelly** provides **cultural scaffolding** for more **exclusionary and hateful rhetoric.**
“pajeet” जैसे नस्लीय शब्दों का बार-बार प्रयोग या भारतीयों को **गंदा या बदबूदार** बताना, और भी अधिक **बहिष्करणकारी और घृणास्पद भाषा** के लिए **सांस्कृतिक आधार** तैयार करता है।
- **Mr. Mamdani and Ms. Khan** faced both **racism and Islamophobia** on X.
श्री ममदानी और सुश्री खान को **X पर नस्लवाद और इस्लामोफोबिया** दोनों का सामना करना पड़ा।
- The **New York City mayor-elect** was frequently linked to **terrorism** because he openly embraced his **Muslim identity.**
न्यूयॉर्क सिटी के मेयर-इलेक्ट को उनकी **मुस्लिम पहचान** को खुले तौर पर अपनाने के कारण बार-बार **आतंकवाद से जोड़ा गया।**
- On **October 29**, U.S. politician **Andy Ongles** posted a message calling for **mass deportations** to stop future **Zohran Mamdanis.**
29 अक्टूबर को अमेरिकी राजनेता **एंडी ओन्गल्स** ने **जोहरान ममदानी** जैसे भविष्य के नेताओं को रोकने के लिए **सामूहिक निर्वासन** की मांग की।
- He wrote that **“subversive immigrants must NEVER get citizenship.”**
उन्होंने लिखा कि **“विध्वंसकारी प्रवासियों को कभी भी नागरिकता नहीं मिलनी चाहिए।”**
- **Mr. Mamdani’s legal status** was also questioned by **U.S. President Donald Trump**, triggering **further abuse** on X.
अमेरिकी राष्ट्रपति डोनाल्ड ट्रंप ने भी **श्री ममदानी की कानूनी स्थिति** पर सवाल उठाया, जिससे **X पर और अधिक दुर्व्यवहार** शुरू हुआ।
- Though former **FTC Chair Lina Khan** is not vocal about her religion, she was attacked over her **surname, appearance, and her parents’ Pakistani heritage.**
पूर्व **FTC अध्यक्ष लीना खान**, जो अपने धर्म पर मुखर नहीं हैं, उन्हें उनके **उपनाम, दिखावट, और माता-पिता की पाकिस्तानी विरासत** को लेकर निशाना बनाया गया।
- Ms. Khan became a target after being named **co-chair of Mr. Mamdani’s transition team.**
श्री ममदानी की ट्रांज़िशन टीम की सह-अध्यक्ष बनाए जाने के बाद सुश्री खान निशाने पर आ गईं।
- **Paul Sperry**, a **verified X user** with over **half a million followers**, posted a photo claiming it was Ms. Khan’s **“family home”**, possibly **doxxing** her family.
पॉल स्पेरी, जो **आधे मिलियन से अधिक फॉलोअर्स** वाला एक **सत्यापित X उपयोगकर्ता** है, ने सुश्री खान के कथित **“पारिवारिक घर”** की फोटो पोस्ट की, जिससे **डॉक्सिंग** की आशंका हुई।
- He claimed she **“hates capitalism”**, is pushing **socialism**, and called her an **“Ethnic-Pakistani Muslim”**.
उन्होंने दावा किया कि वह **पूंजीवाद से नफरत करती हैं, समाजवाद** थोप रही हैं, और उन्हें **“एथनिक-पाकिस्तानी मुस्लिम”** कहा।
- He further alleged she could **place fellow Muslims throughout the government.**
उन्होंने यह भी आरोप लगाया कि वह **सरकार में मुस्लिमों को जगह दिला सकती हैं।**



- The normalisation of South Asian hate and mockery on X has impacted everyday tech workers and ordinary social media users.
X पर दक्षिण एशियाइयों के प्रति घृणा और उपहास का सामान्यीकरण अब सामान्य टेक कर्मचारियों और आम सोशल मीडिया उपयोगकर्ताओं को भी प्रभावित कर रहा है।

What events triggered such hate?

कौन-सी घटनाओं ने इस घृणा को भड़काया?

- Apart from the souring U.S.–India relationship after Mr. Trump’s return to the White House, his repeated attacks on Diversity, Equity, and Inclusion (DEI) initiatives played a role.
श्री ट्रंप की व्हाइट हाउस में वापसी के बाद अमेरिका–भारत संबंधों में खटास के अलावा, विविधता, समानता और समावेशन (DEI) पहलों पर उनके लगातार हमलों ने भी भूमिका निभाई।
- Calling DEI “illegal and immoral discrimination programs”, his rhetoric portrayed South Asians as outsiders taking American jobs.
DEI को “अवैध और अनैतिक भेदभाव कार्यक्रम” कहकर, उनकी भाषा ने दक्षिण एशियाइयों को अमेरिकी नौकरियाँ छीनने वाले बाहरी लोगों के रूप में पेश किया।
- Referring to the H-1B visa programme, Mr. Trump said in a September 19 proclamation that large-scale replacement of American workers undermined economic and national security.
H-1B वीजा कार्यक्रम पर 19 सितंबर की एक घोषणा में श्री ट्रंप ने कहा कि अमेरिकी कामगारों का बड़े पैमाने पर प्रतिस्थापन आर्थिक और राष्ट्रीय सुरक्षा को कमजोर करता है।
- A U.S. government report published this year stated that 71% of H-1B petitions approved in FY 2024 were for beneficiaries born in India.
इस वर्ष प्रकाशित एक अमेरिकी सरकारी रिपोर्ट के अनुसार, FY 2024 में स्वीकृत H-1B याचिकाओं में 71% ऐसे लाभार्थियों के लिए थीं जिनका जन्म भारत में हुआ था।



www.patrioticias.com/updates/upon.

GS II: IR

Beyond the optics

India must push its vision for a shared global order across regions

P rime Minister Narendra Modi's three-nation tour to Jordan, Ethiopia and Oman, last week, had some common and connecting threads. The visit was primarily an attempt to draw closer bilateral ties with each country in a world that is turning increasingly transactional. Beyond that, however, all three countries belong to the Global South that India seeks leadership of and each is an important development partner in their respective regions. Mr. Modi's talks with Oman's Sultan Haitham bin Tariq saw the signing of the Cooperation Economic Partnership Agreement (CEPA). Oman-India trade has doubled to \$10 billion in recent years. CEPA is expected to smooth the path for free trade agreement talks between India and the Gulf Cooperation Council. In Jordan, Mr. Modi met with King Abdullah II ibn Al Hussein, with the two sides launching cooperation agreements on renewable energy and water management. Mr. Modi's visit to Addis Ababa saw the launch of a strategic partnership. In the meet with Ethiopian Prime Minister Abiy Ahmed Ali, the talks were on strengthening trade and knowledge and technology exchanges. The discussions were also key in terms of scheduling the much-delayed Africa-India summit, to be held in India. Ethiopia is not just the headquarters of the African Union, it is a new member of BRICS, and with India taking over the Chairmanship in 2026, it will be an important partner in setting out development and economic relations within both groupings.

In Amman, India and Jordan had less significant bilateral agreements but the talks were understood to be important in terms of the West Asian conflict and the Gaza Peace proposal. The tensions between Israel and its Arab neighbours have now imperilled the India-Middle East-Europe Economic Corridor which is meant to traverse through Jordan. The Joint Statement in Amman had no mention of the corridor. Mr. Modi's presence in Jordan and a reiteration of India's traditional support for the Palestinian cause at a time when External Affairs Minister S. Jaishankar was in Israel to meet Netanyahu government leaders was possibly meant to reassure the Arab leadership and those in the Global South strongly opposed to Israel's actions, that India's principled stand has not changed. The joint statement with Oman underlined the need for a resolution in Gaza including the establishment of a "sovereign and independent Palestinian state". However, unless that message is reiterated with India's Israeli interlocutors, especially Prime Minister Netanyahu who is expected to visit India in the new year, the import of visits such as the one by Mr. Modi would fail to build on the optics of bonhomie for a shared vision of the global order.

trade and knowledge and technology exchanges.

इथियोपिया के प्रधानमंत्री अबी अहमद अली के साथ बैठक में व्यापार को मजबूत करने तथा ज्ञान और प्रौद्योगिकी के आदान-प्रदान पर चर्चा हुई।

Beyond the optics दिखावे से आगे

- Prime Minister **Narendra Modi's three-nation tour to Jordan, Ethiopia and Oman**, last week, had some **common and connecting threads**. प्रधानमंत्री नरेंद्र मोदी की जॉर्डन, इथियोपिया और ओमान की पिछले सप्ताह की तीन देशों की यात्रा में कुछ सामान्य और आपस में जुड़े सूत्र थे।

- The visit was primarily an attempt to draw **closer bilateral ties** with each country in a world that is turning increasingly **transactional**.

यह यात्रा मुख्य रूप से एक ऐसी दुनिया में, जो तेजी से लेन-देन आधारित होती जा रही है, प्रत्येक देश के साथ घनिष्ठ द्विपक्षीय संबंध स्थापित करने का प्रयास थी।

- Beyond that, however, **all three countries belong to the Global South** that India seeks **leadership of** and each is an **important development partner** in their respective regions.

इसके अलावा, ये तीनों देश ग्लोबल साउथ से संबंधित हैं, जिसकी नेतृत्व भूमिका भारत निभाना चाहता है, और प्रत्येक अपने-अपने क्षेत्र में महत्वपूर्ण विकास साझेदार है।

- Mr. Modi's talks with **Oman's Sultan Haitham bin Tariq** saw the signing of the **Cooperation Economic Partnership Agreement (CEPA)**.

ओमान के सुल्तान हैथम बिन तारिक के साथ श्री मोदी की वार्ता में कोऑपरेशन इकोनॉमिक पार्टनरशिप एग्रीमेंट (CEPA) पर हस्ताक्षर हुए।

- **Oman-India trade has doubled to \$10 billion** in recent years.

हाल के वर्षों में ओमान-भारत व्यापार दोगुना होकर 10 अरब डॉलर तक पहुँच गया है।

- **CEPA is expected to smooth the path for free trade agreement talks** between India and the **Gulf Cooperation Council**.

CEPA से भारत और गल्फ कोऑपरेशन काउंसिल के बीच मुक्त व्यापार समझौते की वार्ता का मार्ग सुगम होने की उम्मीद है।

- In **Jordan**, Mr. Modi met with **King Abdullah II ibn Al Hussein**, with the two sides launching **cooperation agreements on renewable energy and water management**.

जॉर्डन में श्री मोदी ने किंग अब्दुल्ला द्वितीय इब्र अल हुसैन से मुलाकात की, जहाँ दोनों पक्षों ने नवीकरणीय ऊर्जा और जल प्रबंधन पर सहयोग समझौतों की शुरुआत की।

- Mr. Modi's visit to **Addis Ababa** saw the launch of a **strategic partnership**.

अदीस अबाबा की श्री मोदी की यात्रा के दौरान एक रणनीतिक साझेदारी की शुरुआत हुई।

- In the meet with **Ethiopian Prime Minister Abiy Ahmed Ali**, the **talks were on strengthening**



- The discussions were also key in terms of **scheduling the much-delayed Africa-India summit, to be held in India.**
ये चर्चाएँ काफी समय से लंबित अफ्रीका-भारत शिखर सम्मेलन, जिसे भारत में आयोजित किया जाना है, के कार्यक्रम निर्धारण के लिहाज़ से भी महत्वपूर्ण थीं।
- **Ethiopia is not just the headquarters of the African Union, it is a new member of BRICS.**
इथियोपिया न केवल अफ्रीकी संघ का मुख्यालय है, बल्कि यह ब्रिक्स का नया सदस्य भी है।
- With India taking over the **Chairmanship in 2026**, it will be an **important partner** in setting out **development and economic relations** within both groupings.
2026 में भारत के अध्यक्षता संभालने के साथ, यह दोनों समूहों के भीतर विकास और आर्थिक संबंधों को आकार देने में एक महत्वपूर्ण साझेदार होगा।
- In **Amman**, India and Jordan had **less significant bilateral agreements.**
अम्मान में भारत और जॉर्डन के बीच कम महत्वपूर्ण द्विपक्षीय समझौते हुए।
- But the talks were understood to be important in terms of the **West Asian conflict** and the **Gaza Peace proposal.**
लेकिन इन वार्ताओं को पश्चिम एशियाई संघर्ष और गाज़ा शांति प्रस्ताव के संदर्भ में महत्वपूर्ण माना गया।
- The **tensions between Israel and its Arab neighbours** have now **imperilled the India-Middle East-Europe Economic Corridor.**
इज़राइल और उसके अरब पड़ोसियों के बीच तनाव ने अब भारत-मध्य पूर्व-यूरोप आर्थिक गलियारे को खतरे में डाल दिया है।
- **Which is meant to traverse through Jordan.**
जिसका मार्ग जॉर्डन से होकर गुजरना था।
- The **Joint Statement in Amman** had **no mention of the corridor.**
अम्मान के संयुक्त बयान में इस गलियारे का कोई उल्लेख नहीं था।
- **Mr. Modi's presence in Jordan** and a reiteration of India's **traditional support for the Palestinian cause.**
जॉर्डन में श्री मोदी की उपस्थिति और फिलिस्तीनी मुद्दे के लिए भारत के पारंपरिक समर्थन की पुनः पुष्टि।
- **At a time when External Affairs Minister S. Jaishankar** was in **Israel** to meet **Netanyahu government leaders.**
ऐसे समय में जब विदेश मंत्री एस. जयशंकर इज़राइल में नेतन्याहू सरकार के नेताओं से मिलने गए थे।
- Was possibly meant to **reassure the Arab leadership** and those in the **Global South** **strongly opposed to Israel's actions.**
यह संभवतः अरब नेतृत्व और इज़राइल की कार्रवाइयों का कड़ा विरोध करने वाले ग्लोबल साउथ के देशों को आश्वस्त करने के लिए था।
- That India's **principled stand** has not changed.
कि भारत का सैद्धांतिक रुख बदला नहीं है।
- The **joint statement with Oman** underlined the need for a **resolution in Gaza** including the **establishment of a "sovereign and independent Palestinian state".**
ओमान के साथ संयुक्त बयान में गाज़ा में समाधान की आवश्यकता पर ज़ोर दिया गया, जिसमें "संप्रभु और स्वतंत्र फिलिस्तीनी राज्य" की स्थापना शामिल है।
- However, unless that message is **reiterated with India's Israeli interlocutors.**
हालाँकि, जब तक यह संदेश भारत के इज़राइली संवाददाताओं के साथ दोहराया नहीं जाता।
- Especially **Prime Minister Netanyahu** who is expected to **visit India in the new year.**
विशेष रूप से प्रधानमंत्री नेतन्याहू, जिनके नए वर्ष में भारत आने की उम्मीद है।
- The import of visits such as the one by **Mr. Modi** would fail to **build on the optics of bonhomie.**
श्री मोदी जैसी यात्राओं का महत्व आपसी सद्भाव के दृश्य प्रभाव को आगे बढ़ाने में विफल रहेगा।
- For a **shared vision of the global order.**
एक वैश्विक व्यवस्था की साझा दृष्टि के लिए।



GS Paper III: Economy,

TOPICS COVERED

22_12_2025

1. **Railways to hike its fares from Dec. 26; Cong. slams decision**
रेलवे 26 दिसंबर से किराया बढ़ाएगा; कांग्रेस ने फैसले की आलोचना की
2. **'Nuclear energy Bill rushed in Parliament for Trump and Adani'**
'ट्रंप और अडानी के लिए संसद में परमाणु ऊर्जा विधेयक जल्दबाज़ी में पारित'
3. **The increase in India's exports to the U.S. in November**
नवंबर में अमेरिका को भारत के निर्यात में वृद्धि
4. **When 'misvestment' has more facets than is known**
जब 'मिसवेस्टमेंट' के ज्ञात से अधिक पहलू होते हैं
5. **How to exit the liquidity loop?**
लिक्विडिटी लूप से बाहर कैसे निकलें?
6. **The big 2026 worry globally will be youth unemployment**
वैश्विक स्तर पर 2026 की सबसे बड़ी चिंता युवाओं में बेरोज़गारी होगी



Railways to hike its fares from Dec. 26; Cong. slams decision

GS III: Economy

The Hindu Bureau
NEW DELHI

With the aim of mobilising ₹600 crore, the Railways has increased train ticket fare by one paisa per km for journeys in ordinary class beyond 215 km, and two paise per km for non-air conditioned classes of mail or express trains and AC classes of all trains. The new rates will be effective from December 26.

The Congress criticised the hike, and alleged that instead of announcing it in the Budget, the government had used an unauthorised manner to implement the move.

“There is no increase in the monthly season tickets of suburban trains and up to 215 km travel in ordinary

Ticket check

Railways has revised train fares for tickets booked on or after December 25*

What's changing

- Ordinary class (non-suburban) journeys > 215 km: **+ ₹0.01 per km**
- AC classes (all trains): **+ ₹0.02 per km**
- Non-AC classes of mail/express trains: **+ ₹0.02 per km** (for instance, for a 500-km journey in non-AC coaches, ₹10 extra)



What's not changing

- No increase in suburban fares
- No increase in monthly season tickets
- No increase for ordinary class up to **215 km** (those who have already booked tickets for journeys after December 25 will not have to pay any additional amount)

class of other trains,” a note circulated to presspersons said. “Railways will earn about ₹600 crore this year as a result of this rationalisation. For a 500-km journey in non-AC coaches, passengers will

have to pay only ₹10 extra,” it added. Those who have already booked tickets for journeys after December 26 will not have to pay any additional amount, a Railway Ministry official said.

Railways to hike its fares from Dec. 26; Cong. slams decision रेलवे 26 दिसंबर से किराया बढ़ाएगा; कांग्रेस ने फैसले की आलोचना की

- With the aim of mobilising **₹600 crore**, the **Railways** has increased train ticket fare by **one paisa per km** for journeys in **ordinary class** beyond **215 km**, and **two paise per km** for **nonair conditioned classes** of mail or express trains and **AC classes** of all trains.
₹600 करोड़ जुटाने के उद्देश्य से, **रेलवे** ने **215 किमी** से अधिक की **साधारण श्रेणी** की यात्राओं के लिए ट्रेन टिकट किराया **प्रति किमी एक पैसा** बढ़ाया है, और **मेल या एक्सप्रेस ट्रेनों** की **गैर-एयर कंडीशन्ड श्रेणियों** तथा सभी ट्रेनों की **एसी श्रेणियों** के लिए **प्रति किमी दो पैसे** बढ़ाए हैं।
- The new rates will be **effective from December 26**.
नई दरें **26 दिसंबर से लागू (effective)** होंगी।
- The **Congress** criticised the hike, and alleged that instead of announcing it in the **Budget**, the **government** had used an **unauthorised manner** to implement the move.
कांग्रेस ने इस बढ़ोतरी की आलोचना की और आरोप लगाया कि इसे **बजट** में घोषित करने के बजाय **सरकार** ने इसे लागू करने के लिए **अनधिकृत तरीका** अपनाया।
- “There is no increase in the **monthly season tickets** of **suburban trains** and up to **215 km travel** in **ordinary class** of other trains,” a note circulated to **presspersons** said.
“**उपनगरीय ट्रेनों** के **मासिक सीजन टिकटों** में और अन्य ट्रेनों की **साधारण श्रेणी** में **215 किमी तक** की यात्रा में कोई बढ़ोतरी नहीं है,” **पत्रकारों** को वितरित एक नोट में कहा गया।



- “Railways will earn about ₹600 crore this year as a result of this rationalisation. For a 500-km journey in non-AC coaches, passengers will have to pay only ₹10 extra,” it added. “इस युक्तिकरण (rationalisation) के परिणामस्वरूप रेलवे इस वर्ष लगभग ₹600 करोड़ कमाएगा। गैर-एसी कोचों में 500 किमी की यात्रा के लिए यात्रियों को केवल ₹10 अतिरिक्त देने होंगे,” इसमें जोड़ा गया।
- Those who have already booked tickets for journeys after December 26 will not have to pay any additional amount, a Railway Ministry official said. जिन लोगों ने 26 दिसंबर के बाद की यात्राओं के लिए पहले ही टिकट बुक कर लिए हैं, उन्हें कोई अतिरिक्त राशि नहीं देनी होगी, एक रेल मंत्रालय के अधिकारी ने कहा।

‘Nuclear energy Bill rushed in Parliament for Trump and Adani’

GS III: Economy

The Hindu Bureau
NEW DELHI

The Congress on Sunday accused the Narendra Modi government of “bulldozing” the SHANTI Bill, which allows private participation in India’s nuclear sector and eases liability norms for operators, through Parliament, alleging it was done “not only for TRUMP but also for ADANI.”

Congress general secretary (communications) Jairam Ramesh cited a media report on social media platform X claiming that the Adani Group plans to enter the nuclear energy sector after private firms are allowed into the field.

On Thursday, Parliament cleared the Sustainable Harnessing and Advancement of Nuclear Energy for Transforming India (SHANTI) Bill, with the Rajya Sabha giving its nod to legislation that opens the tightly controlled civil nuclear sector to private participation.

Replying to a discussion on the Bill, Minister of State for Atomic Energy Jitendra Singh said it aims to make India self-reliant in nuclear energy and reduce dependence on other sources of energy.

The Congress used political wordplay to attack the Centre for favouring U.S. interests and large corporations. “SHANTI was bulldozed through in Parliament not only for TRUMP (The Reactor Use Management Programme)

SHANTI Bill gets approval from President Murmu

President Droupadi Murmu has granted assent to the SHANTI Bill, passed by Parliament during the Winter Session. A government notification said that the President granted assent on Saturday. The Bill opens up civil nuclear sector for participation by private players. It repealed the Atomic Energy Act of 1962 and the Civil Liability for Nuclear Damage Act, 2010. पत्र

but also for ADANI (Accelerated Damaging Adhinyam for Nuclear India),” Mr. Ramesh said.

‘Dilutes key provisions’
On Saturday, Mr. Ramesh had accused the government of pushing the Bill to help Prime Minister Modi restore “SHANTI” with his “once good friend”.

The senior Congress leader had further claimed that the legislation dilutes key provisions of the Civil Liability for Nuclear Damage Act – an issue flagged in the U.S. National Defence Authorisation Act for 2026.

Referring to the Act signed by U.S. President Donald Trump, Mr. Ramesh said in a post on X: “The Act is 3,100 pages long. Page 1,912 has a reference to the joint assessment between the United States and India on nuclear liability rules.”

‘Nuclear energy Bill rushed in Parliament for Trump and Adani’

‘ट्रंप और अडानी के लिए संसद में परमाणु ऊर्जा विधेयक जल्दबाज़ी में पारित’

- The Congress on Sunday accused the Narendra Modi government of “bulldozing” the SHANTI Bill, which allows private participation in India’s nuclear sector and eases liability norms for operators, through Parliament, alleging it was done “not only for TRUMP but also for ADANI.”

कांग्रेस ने रविवार को नरेंद्र मोदी सरकार पर SHANTI विधेयक को “जबरन आगे बढ़ाने (bulldozing)” का आरोप लगाया, जो भारत के परमाणु क्षेत्र में निजी भागीदारी की अनुमति देता है और संचालकों के लिए दायित्व मानदंडों को आसान बनाता है, यह आरोप लगाते हुए कि यह “सिर्फ TRUMP के लिए ही नहीं बल्कि ADANI के लिए भी” किया गया।

- Congress general secretary (communications) Jairam Ramesh cited a media report on social media platform X claiming that the Adani Group plans to enter the nuclear energy sector after private firms are allowed into the field.

कांग्रेस महासचिव (संचार) जयराम रमेश ने सोशल मीडिया प्लेटफॉर्म X पर एक मीडिया रिपोर्ट का हवाला दिया, जिसमें दावा किया गया कि निजी firms को इस क्षेत्र में अनुमति मिलने के बाद अडानी समूह परमाणु ऊर्जा क्षेत्र में प्रवेश करने की योजना बना रहा है।

- On Thursday, Parliament cleared the Sustainable Harnessing and Advancement of Nuclear Energy for Transforming India (SHANTI) Bill, with the Rajya Sabha giving its nod to legislation that opens the tightly controlled civil nuclear sector to private participation.

गुरुवार को संसद ने Sustainable Harnessing and Advancement of Nuclear Energy for Transforming India (SHANTI) विधेयक को पारित कर दिया, जिसमें राज्यसभा ने उस कानून को मंजूरी दी जो सख्ती से नियंत्रित नागरिक परमाणु क्षेत्र को निजी भागीदारी के लिए खोलता है।

- Replying to a discussion on the Bill, Minister of State for Atomic Energy Jitendra Singh said it aims to make India self-reliant in nuclear energy and reduce dependence on other sources of energy.

विधेयक पर चर्चा का जवाब देते हुए परमाणु ऊर्जा राज्य मंत्री जितेंद्र सिंह ने कहा कि इसका उद्देश्य भारत को परमाणु ऊर्जा में आत्मनिर्भर बनाना और अन्य ऊर्जा स्रोतों पर निर्भरता कम करना है।



- The **Congress** used **political wordplay** to attack the **Centre** for favouring **U.S. interests** and **large corporations**.
कांग्रेस ने राजनीतिक शब्द-खेल का इस्तेमाल करते हुए केंद्र पर अमेरिकी हितों और बड़ी कंपनियों को तरजीह देने का आरोप लगाया।
- “**SHANTI** was bulldozed through in Parliament not only for **TRUMP (The Reactor Use Management Programme)** but also for **ADANI (Accelerated Damaging Adhinyam for Nuclear India)**,” Mr. Ramesh said.
“SHANTI को संसद में न केवल **TRUMP (The Reactor Use Management Programme)** बल्कि **ADANI (Accelerated Damaging Adhinyam for Nuclear India)** के लिए भी जबरन पारित किया गया,” श्री रमेश ने कहा।

‘Dilutes key provisions’

‘मुख्य प्रावधानों को कमजोर करता है’

- On **Saturday**, Mr. Ramesh had accused the government of pushing the **Bill** to help **Prime Minister Modi** restore “**SHANTI**” with his “**once good friend**”.
शनिवार को श्री रमेश ने सरकार पर विधेयक को आगे बढ़ाने का आरोप लगाया, ताकि प्रधानमंत्री मोदी अपने “कभी अच्छे मित्र” के साथ “SHANTI” बहाल कर सकें।
- The senior **Congress leader** had further claimed that the legislation **dilutes key provisions** of the **Civil Liability for Nuclear Damage Act** — an issue agged in the **U.S. National Defence Authorisation Act for 2026**.
वरिष्ठ कांग्रेस नेता ने आगे दावा किया कि यह कानून **Civil Liability for Nuclear Damage Act** के **मुख्य प्रावधानों को कमजोर** करता है — यह मुद्दा **2026 के लिए U.S. National Defence Authorisation Act** में tagged किया गया है।
- Referring to the **Act** signed by **U.S. President Donald Trump**, Mr. Ramesh said in a post on **X**: “The Act is **3,100 pages** long. **Page 1,912** has a reference to the **joint assessment** between the **United States** and **India** on **nuclear liability rules**.”
अमेरिकी राष्ट्रपति **डोनाल्ड ट्रंप** द्वारा हस्ताक्षरित अधिनियम का उल्लेख करते हुए श्री रमेश ने **X** पर एक पोस्ट में कहा: “यह अधिनियम **3,100 पृष्ठों** का है। **पृष्ठ 1,912** पर **परमाणु दायित्व नियमों** पर **संयुक्त राज्य अमेरिका और भारत** के बीच **संयुक्त आकलन** का संदर्भ है।”

GS Paper III: S&T,

TOPICS COVERED

22_12_2025

1. **ISRO set to launch mobile broadband satellite**
इसरो मोबाइल ब्रॉडबैंड उपग्रह लॉन्च करने के लिए तैयार
2. **Superkilonova: double whammy**
सुपरकिलोनोवा: दोहरा प्रहार



ISRO set to launch mobile broadband satellite

GS III: S&T

Press Trust of India
CHENNAI

The Indian Space Research Organisation's upcoming LVM3 M6 mission will place the BlueBird Block-2 satellite into orbit on December 24 under a commercial agreement with the U.S.-based AST SpaceMobile. The mission will deploy a next-generation communication satellite aimed at providing high-speed cellular broadband directly to smartphones across the globe.

AST SpaceMobile is building a space-based cellular broadband network intended for both commercial and government use. The company says its objective is to bridge connectivity gaps faced by billions of mobile users worldwide.

AST SpaceMobile has launched five satellites - BlueBird 1-5 in September 2024, which enable continuous Internet coverage across the U.S. and other select countries. The company has planned to launch similar satellites to augment its network support and has partnered with over 50 mobile operators across the globe. The BlueBird Block-2 satellite will be the largest commercial communication satellite to be deployed into low earth orbit.

ISRO set to launch mobile broadband satellite इसरो मोबाइल ब्रॉडबैंड उपग्रह लॉन्च करने के लिए तैयार

- The Indian Space Research Organisation's upcoming LVM3 M6 mission will place the BlueBird Block-2 satellite into orbit on December 24 under a commercial agreement with the U.S.-based AST SpaceMobile.
- The mission will deploy a next-generation communication satellite aimed at providing high-speed cellular broadband directly to smartphones across the globe.
- AST SpaceMobile is building a space-based cellular broadband network intended for both commercial and government use.
- The company says its objective is to bridge connectivity gaps faced by billions of mobile users worldwide.
- AST SpaceMobile has launched five satellites - BlueBird 1-5 in September 2024, which enable continuous Internet coverage across the U.S. and other select countries.
- The company has planned to launch similar satellites to augment its network support and has partnered with over 50 mobile operators across the globe.
- The BlueBird Block-2 satellite will be the largest commercial communication satellite to be deployed into low earth orbit.



Superkilonova: double whammy



This artist's concept shows a hypothetical superkilonova, from a supernova (left), to two neutron stars circling each other (centre), to finally merging in a kilonova (right). CALTECH/K. MILLER AND R. HURT (IPAC)

GS III: S&T

Vasudevan Mukunth

A superkilonova is a rare kind of cosmic explosion. When two neutron stars smash into each other, the material tossed into space includes heavy, radioactive elements like gold, platinum, and neodymium. Over time the elements decay and the emissions in the optical and infrared parts of the spectrum are called a kilonova.

A superkilonova has an additional energy source. In one version, after the merger, some ejected matter may fall back towards the merged object and become hotter. This heat can heat up the surrounding ejecta, making it brighter and bluer than a kilonova alone, and perhaps for longer too.

In a study published on December 15, an international research team -- including from IIT-Bombay and the Indian Institute of Astrophysics, Bengaluru -- reported a possible second version. They zeroed in on a source of

bright light 1.3 billion lightyears away. The team found its brightness and light 'fingerprint' could be explained by a superkilonova where a supernova blows up a massive star into two neutron stars, which then merge to produce a kilonova.

"At first, for about three days, the eruption looked" like a kilonova, director of Caltech's Palomar Observatory Mansi Kasliwal, said in a statement.

"Everybody was intensely trying to observe and analyse it, but then it started to look more like a supernova, and some astronomers lost interest. Not us." The team has said astronomers will need more data about such events before being sure, "but the event nevertheless is eye opening".

For feedback and suggestions

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

Superkilonova: double whammy सुपरकिलोनोवा: दोहरा प्रहार

- A **superkilonova** is a **rare kind of cosmic explosion**.
- When **two neutron stars smash into each other**, the material tossed into space includes **heavy, radioactive elements like gold, platinum, and neodymium**.
- Over time the elements **decay** and the emissions in the **optical and infrared** parts of the spectrum are called a **kilonova**.





- A **superkilonova** has an **additional energy source**.
- In one version, after the **merger**, some **ejected matter** may fall back towards the **merged object** and become **hotter**.
- This heat can **heat up the surrounding ejecta**, making it **brighter and bluer** than a kilonova alone, and perhaps for **longer** too.
- They zeroed in on a **source of bright light 1.3 billion lightyears away**.
- The team found its **brightness** and light '**fingerprint**' could be explained by a **superkilonova** where a **supernova** blows up a **massive star** into **two neutron stars**, which then **merge to produce a kilonova**.

GS Paper III: Environment,	
TOPICS COVERED	
	22_12_2025
1.	Environment Minister reviews measures to address human-wildlife conflict पर्यावरण मंत्री ने मानव-वन्यजीव संकट से निपटने के उपायों की समीक्षा की
2.	Southern Ocean carbon 'anomaly' दक्षिणी महासागर का कार्बन 'विसंगति'
3.	Lessons from China on tackling pollution प्रदूषण से निपटने पर चीन से सबक



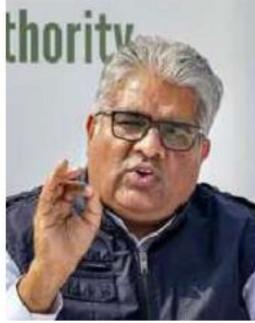
Environment Minister reviews measures to address human-wildlife conflict

GS III: Environment
Press Trust of India
NEW DELHI/KOLKATA

The National Tiger Conservation Authority (NTCA) on Sunday appraised the expansion of Project Cheetah and reviewed measures to address human-wildlife conflict at high-level meetings chaired by Union Environment Minister Bhopender Yadav at the Sundarbans Tiger Reserve.

The 28th meeting of the NTCA and the 22nd Steering Committee meeting of Project Elephant brought together officials, scientists and field experts from tiger-and elephant-range States to review progress and future strategies, the Environment Ministry said in a statement.

Chairing the NTCA meeting, Mr. Yadav under-



Bhopender Yadav

scored the importance of science-based management, landscape-level planning, community participation and inter-State coordination in India's globally recognised tiger conservation model.

The meeting focused on challenges faced by tiger reserves. Measures to address human-tiger conflict, including a three-pronged

strategy, and the project 'Management of Tigers Outside Tiger Reserves', were highlighted, the statement said. Issues such as staff shortages, financial constraints, habitat degradation and invasive species management were also reviewed.

The NTCA ratified decisions of its technical committee, including approval of tiger conservation plans, extension and expansion of Project Cheetah, tiger translocation, prey augmentation, landscape management planning, and carnivore health management training programmes.

The Project Elephant Steering Committee reviewed regional action plans for elephant conservation in southern and northeastern India.

Environment Minister reviews measures to address human-wildlife conflict

पर्यावरण मंत्री ने मानव-वन्यजीव संकट से निपटने के उपायों की समीक्षा की

• The **National Tiger Conservation Authority (NTCA)** on **Sunday** appraised the expansion of **Project Cheetah** and reviewed measures to address **human/wildlife conflict** at high-level meetings chaired by **Union Environment Minister Bhopender Yadav** at the **Sundarbans Tiger Reserve**.

• The **28th meeting** of the **NTCA** and the **22nd Steering Committee meeting** of **Project Elephant** brought together **socials, scientists and led experts** from **tiger-and elephant-range States** to review progress and future strategies.

NTCA की 28वीं बैठक और प्रोजेक्ट एलीफेंट की 22वीं स्टीयरिंग कमेटी बैठक में बाघ और हाथी क्षेत्र वाले राज्यों के officials, वैज्ञानिकों और field विशेषज्ञों ने प्रगति और भविष्य की रणनीतियों की समीक्षा की, ऐसा पर्यावरण मंत्रालय ने एक बयान में कहा।

- **Chairing the NTCA meeting, Mr. Yadav** underscored the **importance of science-based management, landscape-level planning, community participation and inter-State coordination** in India's globally recognised **tiger conservation model**.
- Measures to address **human-tiger conflict**, including a **three-pronged strategy**, and the project '**Management of Tigers Outside Tiger Reserves**', were highlighted, the statement said.
बयान में कहा गया कि **मानव-बाघ संकट** से निपटने के उपायों, जिनमें **तीन-स्तरीय रणनीति** और परियोजना '**टाइगर रिज़र्व के बाहर बाघों का प्रबंधन**' शामिल है, को रेखांकित किया गया।
- Issues such as **star shortages, financial constraints, habitat degradation and invasive species management** were also reviewed.
sta की कमी, वित्तीय बाधाएँ, आवास क्षरण और आक्रामक प्रजातियों के प्रबंधन जैसे मुद्दों की भी समीक्षा की गई।
- The **NTCA** rated decisions of its **technical committee**, including approval of **tiger conservation plans, extension and expansion of Project Cheetah, tiger translocation, prey augmentation, landscape management planning, and carnivore health management training programmes**.



Southern Ocean carbon 'anomaly' reveals what models can still miss

For nearly two decades, computer models said stronger westerly winds and more greenhouse gases in the atmosphere would pump more carbon-rich deep water up towards the Southern Ocean's surface, which would release carbon dioxide into the air; yet new research has found the exact opposite has happened

ES III Environment
Ashmita Gupta

The Southern Ocean plays an outsized role in regulating the earth's climate with its moody currents and its tremendous ability to absorb heat and carbon dioxide from the atmosphere.

It covers roughly 25-30% of the global ocean area and absorbs about 40% of all the human-emitted carbon dioxide the oceans absorb.

This ability comes in large part from its cold and relatively fresh surface layers, which sit like a lid on top of the warmer, saltier, carbon-rich reservoirs. This arrangement allows the ocean to trap a lot more carbon dioxide than it emits. Even a small shift in this layering can, however, change whether the ocean continues to act as a buffer or if it becomes a new source of atmospheric carbon dioxide.

For nearly two decades, scientists have used computer models to understand the ocean's role in climate change, and the models have been saying the Southern Ocean could become less of a sink as the world warms. Specifically, the models said stronger westerly winds and more greenhouse gases in the atmosphere would pump more carbon-rich deep water up towards the surface, which would release carbon dioxide into the air.

Yet new data has found the exact opposite has happened.

Since the early 2000s, scientists have found the Southern Ocean to be soaking up more carbon, not less. A new long-term analysis of ocean chemistry by researchers – from the Helmholtz Centre for Polar and Marine Research and the Ludwig Maximilian University of Munich, both in Germany – has offered a new explanation for this unexpected resilience. While climate models did get important parts of the physics right, the researchers said the models missed a surface process that temporarily masked the weakening they predicted. The team's findings were published in *Nature Climate Change* in October.

The carbon sink

The models' reasoning was physically sound. As the concentration of greenhouse gases rose, westerly winds in the southern hemisphere were to strengthen and shift poleward. This shift would mean stronger upwelling in the Southern Ocean, i.e. more deep, carbon-dioxide-laden waters rising towards the surface.

"The key assumption in earlier climate models is an intensification of the meridional overturning circulation of the Southern Ocean," Léa Olivier, the new study's coauthor and an oceanographer at the aforementioned institutions, said. "That would lead to more waters from the deep of the ocean ... being in contact with



A demarcation of the Southern Ocean. APCBG (CC BY-SA)

the atmosphere, and therefore weakening the Southern Ocean carbon sink."

So models predicted that as the winds got stronger, the Southern Ocean would start emitting more carbon.

Using decades of measurements across the Southern Ocean, the new analysis has reported that the deep waters are indeed rising. The circumpolar deep waters, which are naturally rich in dissolved inorganic carbon and warmer than the layers above, have moved up by around 40 metres since the 1990s.

This in turn has increased carbon dioxide pressure in the subsurface by about 10 microatmospheres, a shift consistent with model projections.

What the models missed

Even then the ocean wasn't emitting more carbon dioxide, and the team found why in a thin layer of freshwater at the surface.

Over the last few decades, the Southern Ocean has been becoming fresher (less salty) thanks to more rainfall and more meltwater from Antarctica's glaciers. Fresher water is lighter. When it accumulates at the surface, it strengthens stratification, i.e. the amount of layering that separates the cooler and more buoyant surface from the warmer and saltier waters below. This stratification prevented the carbon-rich water from the deep from being exposed to the atmosphere. Instead it seems to be trapped 100-200 m below the surface. According to Dr. Olivier, this is what



The key assumption in earlier models is an intensification of the meridional overturning circulation of the Southern Ocean

LÉA OLIVIER
HELMHOLTZ CENTRE FOR POLAR AND MARINE RESEARCH AND THE LUDWIG MAXIMILIAN UNIVERSITY

models struggled to capture: "We have two competing mechanisms: the upwelling that brings the deep water up and the stratification that blocks the vertical exchanges."

Indeed capturing the presence of this layer is quite challenging. Stratification is governed by many processes that are happening at wildly different scales. Dr. Olivier said this is mainly due to the complex physics of eddies and ice-shelf cavities. Eddies are only a few kilometres wide while ice cavities are much larger. "The lack of data also plays a role," she added.

Fleeting reprieve

The new study emphasised that the current situation may not last. Roughly in the first half of the 2010s, the stratified layer began to grow thinner. Recent observations have shown surface salinity rising again in parts of the Southern Ocean, suggesting the lid may be fading.

"We see a strong stratification, but it is getting more shallow," Dr. Olivier

explained. "Strong winds could more easily reach below the stratified layer and into the deep waters that are warm, saline and rich in carbon dioxide. Once these waters mix, it will be harder to re-stratify the upper layer."

In other words, the predicted weakening of the carbon sink could re-emerge, and perhaps sooner than (now) expected. The deep carbon dioxide reservoir is already closer to the surface than it used to be. So if the stratification erodes further, the carbon that models expected to see at the surface decades ago could suddenly appear.

But rather than discredit models, the researchers said their findings reinforce how essential they are. Their projections helped direct policy attention to the processes that scientists needed to observe, and which helped explain why the Southern Ocean behaved unexpectedly.

The lesson is simple: models reveal vulnerabilities; observations reveal exceptions. And the earth's climate system lies somewhere in between.

To know what comes next, scientists also need continuous, year-round observations. Whether it absorbs or releases carbon in the coming decades could profoundly alter the planet's future and tell us just how well our models can keep up with the evolution of a deceptively small ocean.

(Ashmita Gupta is a science writer. ashmitagupta321@gmail.com)

THE GIST

The Southern Ocean absorbs 40% of all carbon dioxide emissions. This derives from its cold and relatively fresh surface layers, which sit like a lid on top of the warmer, saltier, carbon-rich reservoirs. This allows the ocean to trap a lot more carbon dioxide than it emits

The Southern Ocean has been becoming fresher, this water is lighter and accumulates at the surface; it strengthens stratification. This prevented carbon-rich water from being exposed to the atmosphere. Instead, it seems to be trapped 100-200 m below the surface

The study emphasised that the situation may not last. The stratified layer is growing thinner. Observations have shown surface salinity rising again, suggesting the lid may be fading. The predicted weakening of the carbon sink could re-emerge, and sooner than expected

Southern Ocean carbon 'anomaly' दक्षिणी महासागर का कार्बन 'विसंगति'

- Southern Ocean carbon 'anomaly' reveals what models can still miss दक्षिणी महासागर की कार्बन 'विसंगति' यह दिखाती है कि मॉडल अभी भी क्या चूक सकते हैं
- For nearly two decades, computer models said stronger westerly winds and more greenhouse gases in the atmosphere would pump more carbon-rich deep water up towards the Southern Ocean's surface, which would release carbon dioxide into the air; yet new research has found the exact opposite has happened
- The Southern Ocean plays an outsized role in regulating the earth's climate with its moody currents and its tremendous ability to absorb heat and carbon dioxide from the atmosphere.



दक्षिणी महासागर पृथ्वी की जलवायु को नियंत्रित करने में अत्यधिक महत्वपूर्ण भूमिका निभाता है, अपनी अनिश्चित धाराओं और वायुमंडल से ऊष्मा तथा कार्बन डाइऑक्साइड को अवशोषित करने की असाधारण क्षमता के कारण।

- It covers roughly **25–30%** of the **global ocean area** and absorbs about **40%** of all the **human-emitted carbon dioxide** the oceans absorb.
यह वैश्विक महासागरीय क्षेत्र के लगभग **25–30%** हिस्से को कवर करता है और महासागरों द्वारा अवशोषित कुल मानव-उत्सर्जित कार्बन डाइऑक्साइड का लगभग **40%** अवशोषित करता है।
- This ability comes in large part from its **cold and relatively fresh surface layers**, which sit like a **lid** on top of the **warmer, saltier, carbon-rich reservoirs**.
यह क्षमता मुख्य रूप से इसकी ठंडी और अपेक्षाकृत ताज़ी सतही परतों से आती है, जो गर्म, अधिक लवणीय और कार्बन-समृद्ध भंडारों के ऊपर एक ढक्कन की तरह स्थित रहती हैं।
- This arrangement allows the ocean to **trap a lot more carbon dioxide** than it emits.
The carbon sink
कार्बन सिंक
- The models' reasoning was **physically sound**.
मॉडलों की तर्कश्रृंखला **भौतिक रूप से सही** थी।
- As the concentration of **greenhouse gases** rose, **westerly winds** in the **southern hemisphere** were to strengthen and shift **poleward**.
जैसे-जैसे **ग्रीनहाउस गैसों** की सांद्रता बढ़ी, **दक्षिणी गोलार्ध** में **पश्चिमी हवाएँ** मजबूत हुईं और **ध्रुवों की ओर** खिसकने लगीं।
- This shift would mean **stronger upwelling** in the **Southern Ocean**, i.e. more **deep, carbon-dioxide-laden waters** rising towards the surface.
इस बदलाव का अर्थ **दक्षिणी महासागर** में **अधिक शक्तिशाली अपवेलिंग** था, यानी अधिक गहरे, कार्बन डाइऑक्साइड से भरे जल का सतह की ओर उठना।
- "The **key assumption** in earlier **climate models** is an **intensification of the meridional overturning circulation** of the **Southern Ocean**," Léa Olivier, the new study's coauthor and an **oceanographer**, said.
नई अध्ययन की सह-लेखिका और **महासागर विज्ञानी** लिआ ओलिवियर के अनुसार, पहले के **जलवायु मॉडलों** की मुख्य धारणा **दक्षिणी महासागर के मेरिडियनल ओवरटर्निंग सर्कुलेशन के तीव्रीकरण** की थी।
- "That would lead to **more waters** from the **deep of the ocean** ... being in contact with the **atmosphere**, and therefore **weakening the Southern Ocean carbon sink**."
"इससे **महासागर की गहराई** का अधिक जल **वायुमंडल** के संपर्क में आता, और इस प्रकार **दक्षिणी महासागर के कार्बन सिंक** को कमजोर करता।"
- So models predicted that as the **winds got stronger**, the **Southern Ocean** would start **emitting more carbon**.
इसलिए मॉडलों ने भविष्यवाणी की कि जैसे-जैसे **हवाएँ तेज़** होंगी, **दक्षिणी महासागर** **अधिक कार्बन उत्सर्जित** करने लगेगा।
- Using **decades of measurements** across the **Southern Ocean**, the new analysis has reported that the **deep waters are indeed rising**.
दक्षिणी महासागर में दशकों के मापनों के आधार पर नए विश्लेषण ने बताया कि **गहरे जल वास्तव में ऊपर उठ रहे हैं**।
- The **circumpolar deep waters**, which are naturally rich in **dissolved inorganic carbon** and warmer than the layers above, have moved up by around **40 metres** since the **1990s**.
सर्क्युलर डीप वाटर्स, जो स्वाभाविक रूप से **घुले अकार्बनिक कार्बन** से समृद्ध और ऊपर की परतों से अधिक गर्म हैं, **1990 के दशक से लगभग 40 मीटर** ऊपर आ चुके हैं।
- This in turn has increased **carbon dioxide pressure** in the **subsurface** by about **10 microatmospheres**, a shift **consistent with model projections**.
इसके परिणामस्वरूप **उप-सतही परत में कार्बन डाइऑक्साइड का दबाव** लगभग **10 माइक्रोएटमॉस्फियर** बढ़ा है, जो **मॉडल अनुमानों के अनुरूप** है।

What the models missed
मॉडल क्या नहीं पकड़ पाए



- Even then the ocean wasn't emitting more carbon dioxide, and the team found why in a **thin layer of freshwater at the surface**.
फिर भी महासागर अधिक कार्बन डाइऑक्साइड उत्सर्जित नहीं कर रहा था, और टीम ने इसका कारण सतह पर मौजूद **मीठे पानी की एक पतली परत** में पाया।
- Over the last **few decades**, the Southern Ocean has been becoming **fresher (less salty) thanks to more rainfall and more meltwater from Antarctica's glaciers**.
पिछले **कुछ दशकों** में, अधिक वर्षा और अंटार्कटिका के ग्लेशियरों से पिघले पानी के कारण दक्षिणी महासागर **अधिक मीठा (कम खारा)** होता गया है।

Fresher water is lighter. मीठा पानी हल्का होता है।

- When it accumulates at the surface, it **strengthens stratification**, i.e. the amount of **layering** that separates the cooler and more **buoyant surface** from the **warmer and saltier waters below**.
जब यह सतह पर जमा होता है, तो यह **स्तरीकरण** को मजबूत करता है, यानी ठंडी और अधिक **उत्प्लावक सतह** तथा नीचे के **गर्म और खारे जल** के बीच की **परतों** को।
- This stratification **prevented the carbon-rich water from the deep** from being exposed to the **atmosphere**.
इस स्तरीकरण ने **कार्बन-समृद्ध गहरे जल** को **वायुमंडल** के संपर्क में आने से रोका।
- **Instead it seems to be trapped 100–200 m below the surface**.
इसके बजाय यह **सतह से 100–200 मीटर नीचे** फँसा हुआ प्रतीत होता है।
- According to **Dr. Olivier**, this is what models struggled to capture.
डॉ. ओलिवियर के अनुसार, यही वह पहलू है जिसे मॉडल सही तरह से पकड़ नहीं पाए।
- “We have **two competing mechanisms**: the **upwelling that brings the deep water up and the stratification that blocks the vertical exchanges**.”
“हमारे पास **दो प्रतिस्पर्धी तंत्र** हैं: **अपवेलिंग**, जो गहरे जल को ऊपर लाती है, और **स्तरीकरण**, जो **ऊर्ध्वाधर आदान-प्रदान** को रोकता है।”
- Indeed capturing the presence of this **layer** is quite **challenging**.
वास्तव में इस **परत** की उपस्थिति को दर्ज करना काफी **कठिन** है।
- Stratification is governed by many processes that are happening at **wildly different scales**.
स्तरीकरण कई प्रक्रियाओं से नियंत्रित होता है, जो **बहुत भिन्न पैमानों** पर घटित होती हैं।
- Dr. Olivier said this is mainly due to the **complex physics of eddies and ice-shelf cavities**.
डॉ. ओलिवियर के अनुसार, इसका मुख्य कारण **एडीज़ और आइस-शेल्फ़ कैविटीज़ की जटिल भौतिकी** है।
- **Eddies are only a few kilometres wide while ice cavities are much larger**.
एडीज़ केवल **कुछ किलोमीटर चौड़ी** होती हैं, जबकि **आइस कैविटीज़** कहीं अधिक **बड़ी** होती हैं।
- “The **lack of data** also plays a role,” she added.
उन्होंने यह भी जोड़ा कि **डेटा की कमी** भी इसमें भूमिका निभाती है।

Fleeting reprieve अस्थायी राहत

- The new study emphasised that the **current situation may not last**.
नए अध्ययन ने ज़ोर दिया कि **वर्तमान स्थिति स्थायी नहीं हो सकती**।
- Roughly in the **first half of the 2010s**, the **stratified layer** began to grow **thinner**.
लगभग **2010 के दशक के पहले आधे हिस्से** में **स्तरीकृत परत** पतली होने लगी।
- Recent **observations** have shown **surface salinity rising again** in parts of the Southern Ocean, suggesting the **lid may be fading**.
हालिया **अवलोकनों** से पता चला है कि दक्षिणी महासागर के कुछ हिस्सों में **सतही लवणता फिर बढ़ रही है**, जिससे संकेत मिलता है कि **ढक्कन कमजोर पड़ रहा है**।
- “We see a **strong stratification**, but it is getting **more shallow**,” Dr. Olivier explained.
डॉ. ओलिवियर ने बताया, “हम **मजबूत स्तरीकरण** देख रहे हैं, लेकिन यह **और उथला** होता जा रहा है।”
- “**Strong winds** could more easily reach below the stratified layer and into the **deep waters** that are **warm, saline and rich in carbon dioxide**.”



“तेज़ हवाएँ अब अधिक आसानी से स्तरीकृत परत के नीचे पहुँच सकती हैं, उन गहरे जलों तक जो गर्म, खारे और कार्बन डाइऑक्साइड से समृद्ध हैं।”

- “Once these waters mix, it will be **harder to re-stratify** the upper layer.”
“एक बार जब ये जल मिल जाते हैं, तो ऊपरी परत को फिर से स्तरीकृत करना कठिन होगा।”
- In other words, the **predicted weakening of the carbon sink could re-emerge, and perhaps sooner than expected.**
दूसरे शब्दों में, कार्बन सिंक के अनुमानित कमजोर होने की प्रक्रिया फिर से उभर सकती है, और शायद अपेक्षा से पहले।
- The **deep carbon dioxide reservoir is already closer to the surface** than it used to be.
गहरा कार्बन डाइऑक्साइड भंडार पहले की तुलना में पहले से ही सतह के अधिक पास है।
- **So if the stratification erodes further, the carbon that models expected to see at the surface decades ago could suddenly appear.**
इसलिए यदि स्तरीकरण और क्षीण होता है, तो वह कार्बन जो मॉडल दशकों पहले सतह पर आने की उम्मीद कर रहे थे, अचानक प्रकट हो सकता है।
- But rather than **discredit models**, the researchers said their findings **reinforce how essential they are.**
लेकिन मॉडलों को खारिज करने के बजाय, शोधकर्ताओं ने कहा कि उनके निष्कर्ष यह दिखाते हैं कि वे कितने आवश्यक हैं।
- Their **projections** helped direct **policy attention** to the processes that scientists needed to observe.
उनकी भविष्यवाणियों ने उन प्रक्रियाओं पर नीतिगत ध्यान केंद्रित करने में मदद की, जिन्हें वैज्ञानिकों को देखना आवश्यक था।
- These observations helped explain why the Southern Ocean behaved **unexpectedly.**
इन अवलोकनों ने यह समझाने में मदद की कि दक्षिणी महासागर ने अप्रत्याशित व्यवहार क्यों किया।
- The lesson is simple: **models reveal vulnerabilities; observations reveal exceptions.**
सबक सरल है: मॉडल कमजोरियाँ उजागर करते हैं; अवलोकन अपवाद दिखाते हैं।
- And the **earth's climate system lies somewhere in between.**
और पृथ्वी की जलवायु प्रणाली इन दोनों के बीच कहीं स्थित है।
- To know what comes next, scientists also need **continuous, year-round observations.**
आगे क्या होगा यह जानने के लिए वैज्ञानिकों को लगातार, साल भर के अवलोकन भी चाहिए।
- Whether it **absorbs or releases carbon** in the coming decades could **profoundly alter the planet's future.**
आने वाले दशकों में यह कार्बन अवशोषित करेगा या छोड़ेगा, यह ग्रह के भविष्य को गहराई से बदल सकता है।
- And it will tell us just how well our **models can keep up** with the evolution of a **deceptively small ocean.**
यह हमें यह भी बताएगा कि हमारे मॉडल एक दिखने में छोटे लेकिन महत्वपूर्ण महासागर के विकास के साथ कितनी अच्छी तरह तालमेल बिठा पाते हैं।



Lessons from China on tackling pollution

GS III: Environment

China and India have long grappled with severe air pollution. Yet their trajectories over the past decade have diverged sharply. Once a global symbol of smog, Beijing managed to cut its annual PM2.5 levels by more than 50% between 2013 and 2021, while Delhi continues to rank among the world's most polluted cities. How is Beijing breathing easier?

Clean-air transformation

Beijing's transformation was neither accidental nor incremental. It stemmed from a multifaceted approach enabled by two major policy drives: the Air Pollution Prevention and Control Action Plan and the Blue Sky Protection Campaign. These measures focussed on sweeping, top-down interventions across energy, transport, and industry. Beijing's strategy was anchored in three features: coherent policy, strict enforcement, and regional coordination. The government expanded electric mobility, shut down or relocated hundreds of polluting industries, replaced thousands of coal-fired boilers with natural gas, imposed stringent China VI vehicular emission standards, built one of the world's densest PM2.5 real-time air quality monitoring systems, and imposed substantial penalties for non-compliance. Most importantly, Beijing didn't act alone. Its coordination with the neighbouring Tianjin-Hebei provinces through a unified 'airshed' strategy ensured regulation of transboundary air pollution. The turnaround was remarkable – PM2.5 levels dropped from the average 102 µg/m³ in 2013 to 31 µg/m³ in 2024.

India does not lack environmental laws, but from the shortage of coherence in implementing them. A strong statutory framework – the Air (Prevention and Control of Pollution) Act of 1981, the Environment Protection Act, 1986, and rules governing waste, construction, and emissions –



Amrita Nambiar

PhD Candidate,
Macquarie Law
School, Macquarie
University, Australia

India need not emulate China's political system to achieve a turnaround, but it can draw on the principles that made China's progress possible

exists alongside courts, tribunals, and pollution-control boards. Indirectly, various laws such as the Factories Act, 1948 and the Motor Vehicles Act, 1988 also shape air-quality outcomes. Yet regulatory fragmentation undermines their impact. Over the years, India has rolled out many initiatives: the National Clean Air Programme, the Graded Response Action Plan, odd-even rationing, construction bans, dust-control rules, crop-residue measures, work-from-home advisories, and Delhi's Air Pollution Mitigation Plan 2025. The Centre has also established the Commission for Air Quality Management (CAQM). These interventions, however, are largely reactive and activated during pollution peaks rather than embedded in long-term planning; and agencies function in silos.

The core difference between the two approaches lies in governance, enforcement, and coordination. China's Environmental Vertical Reform created a clear hierarchy for realising local governments' environmental protection responsibilities. This top-down structure ensured uniform actions, strict enforcement, and rapid implementation. Delhi, however, operates within a fragmented governance system involving the Union government, the Delhi government, pollution control boards, and multiple municipal bodies. As a result, decision-making becomes slower, enforcement weaker, and accountability more diffused. Beijing's regulatory agencies also possess sweeping authority and substantial resources. On the other hand, India's pollution control boards remain chronically understaffed and underfunded. Also, Beijing modelled inter-provincial alignment through the airshed strategy whereas the CAQM's directives to address stubble burning from adjoining States remain unauthoritative.

China has made large sustained investments in clean energy, electric mobility, and industrial

relocation. Delhi's own industrial relocation attempts, such as the Bawana project, have faltered due to inadequate infrastructure and poor service delivery. Even 'sustainable' alternatives such as waste-to-energy plants have failed to meet air-quality norms. Delhi's pollution load is further intensified by industrial and vehicular emissions, corrupted Pollution Under Control (PUC) checks, construction dust, open waste burning, and meteorological inversions that trap winter pollutants. Public transport expansion has lagged behind the city's growth. Odd-even rationing has shown negligible long-term impact. Behavioural change too, has been slower in India.

What India can borrow

India need not emulate China's political system to achieve a turnaround, but it can draw on the principles that made China's progress possible. First, governance must shift from episodic responses to a long-term sustained, mission-oriented strategy and treat air pollution as a national public health emergency. Second, India must accelerate its transition to clean energy. Beijing's move away from coal drove major PM2.5 reductions; Delhi similarly needs to expand and adopt energy-efficient standards suitable for all sectors. Third, transport reforms must be enforced, not merely announced. BS-VI norms require credible PUC systems, modern testing centres, a robust vehicle-scrappage policy, and congestion management. Expanding EV charging infrastructure, incentivising electric mobility, and dramatically strengthening public transport are essential. Fourth, industrial policy must shift from relocation on paper to functional industrial zones with full utilities, transport access, and real-time emissions monitoring. Finally, air pollution must be governed as a regional problem. A Beijing-Tianjin-Hebei style airshed model should guide Delhi-NCR.

Lessons from China on tackling pollution

प्रदूषण से निपटने पर चीन से सबक

China and India: Diverging air pollution trajectories

चीन और भारत: वायु प्रदूषण के अलग-अलग मार्ग

- China and India have long grappled with **severe air pollution**. चीन और भारत लंबे समय से **गंभीर वायु प्रदूषण** से जूझते रहे हैं।



- Yet their **trajectories over the past decade** have **diverged sharply**.
फिर भी पिछले एक दशक में उनके रुझान स्पष्ट रूप से अलग हो गए हैं।
- Once a **global symbol of smog**, **Beijing** managed to cut its **annual PM2.5 levels by more than 50% between 2013 and 2021**.
कभी स्मॉग का वैश्विक प्रतीक रहा बीजिंग, 2013 से 2021 के बीच अपने वार्षिक PM2.5 स्तर को 50% से अधिक घटाने में सफल रहा।
- While **Delhi** continues to rank among the **world's most polluted cities**.
जबकि दिल्ली अब भी दुनिया के सबसे प्रदूषित शहरों में गिनी जाती है।

How is Beijing breathing easier? बीजिंग की हवा कैसे साफ़ हुई?

- Beijing's transformation was **neither accidental nor incremental**.
बीजिंग का यह परिवर्तन न तो आकस्मिक था और न ही क्रमिक।
- It stemmed from a **multifaceted approach** enabled by **two major policy drives**.
यह बहुआयामी दृष्टिकोण से उत्पन्न हुआ, जिसे दो प्रमुख नीतिगत पहलों ने सक्षम बनाया।
- The **Air Pollution Prevention and Control Action Plan** and the **Blue Sky Protection Campaign**.
वायु प्रदूषण रोकथाम और नियंत्रण कार्ययोजना तथा ब्लू स्काई संरक्षण अभियान।
- These measures focussed on **sweeping, top-down interventions** across **energy, transport, and industry**.
इन उपायों ने ऊर्जा, परिवहन और उद्योग क्षेत्रों में व्यापक, शीर्ष-स्तरीय हस्तक्षेपों पर ध्यान दिया।
- Beijing's strategy was anchored in **three features**.
बीजिंग की रणनीति तीन विशेषताओं पर आधारित थी।
- **Coherent policy, strict enforcement, and regional coordination**.
सुसंगत नीति, कड़ा प्रवर्तन, और क्षेत्रीय समन्वय।
- The **government expanded electric mobility**.
सरकार ने इलेक्ट्रिक मोबिलिटी का विस्तार किया।
- **Shut down or relocated hundreds of polluting industries**.
सैकड़ों प्रदूषणकारी उद्योगों को बंद या स्थानांतरित किया गया।
- **Replaced thousands of coal-fired boilers with natural gas**.
हज़ारों कोयला-आधारित बॉयलरों को प्राकृतिक गैस से बदला गया।
- **Imposed stringent China VI vehicular emission standards**.
कठोर चीन-VI वाहन उत्सर्जन मानक लागू किए गए।
- **Built one of the world's densest PM2.5 real-time air quality monitoring systems**.
दुनिया की सबसे सघन PM2.5 रियल-टाइम वायु गुणवत्ता निगरानी प्रणालियों में से एक विकसित की गई।
- **And imposed substantial penalties for non-compliance**.
और अनुपालन न करने पर भारी दंड लगाए गए।
- Most importantly, **Beijing didn't act alone**.
सबसे महत्वपूर्ण बात यह कि बीजिंग ने अकेले कार्रवाई नहीं की।
- **Its coordination with the neighbouring Tianjin-Hebei provinces through a unified 'airshed' strategy** ensured regulation of **transboundary air pollution**.
तियानजिन-हेबेई प्रांतों के साथ एकीकृत 'एयरशेड' रणनीति के ज़रिये समन्वय ने सीमापार वायु प्रदूषण के नियमन को सुनिश्चित किया।
- The turnaround was **remarkable**.
यह बदलाव उल्लेखनीय था।
- **PM2.5 levels dropped from an average 102 µg/m³ in 2013 to 31 µg/m³ in 2024**.
PM2.5 स्तर 2013 में औसतन 102 µg/m³ से घटकर 2024 में 31 µg/m³ रह गए।
- India does not lack **environmental laws**.
भारत में पर्यावरणीय कानूनों की कमी नहीं है।
- But from the **shortage of coherence in implementing them**.
लेकिन उनकी क्रियान्वयन में सुसंगतता की कमी है।
- A strong **statutory framework** exists.
एक मज़बूत वैधानिक ढाँचा मौजूद है।



- The **Air (Prevention and Control of Pollution) Act, 1981**.
वायु (प्रदूषण निवारण और नियंत्रण) अधिनियम, 1981।
- The **Environment Protection Act, 1986**.
पर्यावरण संरक्षण अधिनियम, 1986।
- And rules governing **waste, construction, and emissions**.
तथा कचरा, निर्माण और उत्सर्जन से जुड़े नियम।
- Alongside **courts, tribunals, and pollution-control boards**.
साथ ही न्यायालय, अधिकरण और प्रदूषण नियंत्रण बोर्ड।
- Indirectly, various laws such as the **Factories Act, 1948** and the **Motor Vehicles Act, 1988** also shape **air-quality outcomes**.
परोक्ष रूप से कारखाना अधिनियम, 1948 और मोटर वाहन अधिनियम, 1988 जैसे कानून भी वायु गुणवत्ता के परिणामों को प्रभावित करते हैं।
- **Yet regulatory fragmentation undermines their impact**.
फिर भी नियामकीय विखंडन उनके प्रभाव को कमजोर करता है।
- Over the years, India has rolled out **many initiatives**.
वर्षों में भारत ने कई पहलें शुरू की हैं।
- The **National Clean Air Programme**.
राष्ट्रीय स्वच्छ वायु कार्यक्रम।
- The **Graded Response Action Plan**.
ग्रेडेड रिस्पॉन्स एक्शन प्लान।
- **Odd-even rationing, construction bans, and dust-control rules**.
ऑड-ईवन योजना, निर्माण प्रतिबंध, और धूल नियंत्रण नियम।
- **Crop-residue measures and work-from-home advisories**.
फसल अवशेष प्रबंधन उपाय और वर्क-फ्रॉम-होम परामर्श।
- And **Delhi's Air Pollution Mitigation Plan 2025**.
तथा दिल्ली का वायु प्रदूषण न्यूनीकरण योजना 2025।
- The Centre has also established the **Commission for Air Quality Management (CAQM)**.
केंद्र ने वायु गुणवत्ता प्रबंधन आयोग (CAQM) भी स्थापित किया है।
- These interventions, however, are **largely reactive**.
हालाँकि ये हस्तक्षेप मुख्यतः प्रतिक्रियात्मक हैं।
- And activated during **pollution peaks** rather than embedded in **long-term planning**.
और दीर्घकालिक योजना में समाहित होने के बजाय प्रदूषण के चरम समय पर सक्रिय होते हैं।
- And **agencies function in silos**.
और एजेंसियाँ अलग-अलग खाँचों में काम करती हैं।

Core difference between China and India's approaches चीन और भारत के दृष्टिकोणों के बीच मूल अंतर

- The **core difference** between the two approaches lies in **governance, enforcement, and coordination**.
दोनों दृष्टिकोणों के बीच मूल अंतर शासन, प्रवर्तन और समन्वय में निहित है।
- China's **Environmental Vertical Reform** created a **clear hierarchy** for realising **local governments' environmental protection responsibilities**.
चीन के पर्यावरणीय वर्टिकल सुधार ने स्थानीय सरकारों की पर्यावरण संरक्षण जिम्मेदारियों को लागू करने के लिए एक स्पष्ट पदानुक्रम बनाया।
- This **top-down structure** ensured **uniform actions, strict enforcement, and rapid implementation**.
इस टॉप-डाउन संरचना ने समान कार्रवाई, कठोर प्रवर्तन और त्वरित क्रियान्वयन सुनिश्चित किया।
- **Delhi**, however, operates within a **fragmented governance system**.
दिल्ली, हालाँकि, एक खंडित शासन प्रणाली के भीतर काम करती है।
- Involving the **Union government, the Delhi government, pollution control boards, and multiple municipal bodies**.
जिसमें केंद्र सरकार, दिल्ली सरकार, प्रदूषण नियंत्रण बोर्ड, और कई नगर निकाय शामिल हैं।



- As a result, **decision-making becomes slower, enforcement weaker, and accountability more diffused.**
परिणामस्वरूप, निर्णय-प्रक्रिया धीमी, प्रवर्तन कमजोर, और जवाबदेही अधिक बिखरी हुई हो जाती है।
- Beijing's **regulatory agencies** also possess **sweeping authority** and **substantial resources.**
बीजिंग की नियामक एजेंसियों के पास व्यापक अधिकार और पर्याप्त संसाधन भी हैं।
- On the other hand, India's **pollution control boards** remain **chronically understaffed and underfunded.**
दूसरी ओर, भारत के प्रदूषण नियंत्रण बोर्ड लगातार कर्मचारियों की कमी और वित्तीय अभाव से ग्रस्त रहते हैं।
- Also, Beijing modelled **inter-provincial alignment** through the **airshed strategy.**
इसके अलावा, बीजिंग ने एयरशेड रणनीति के माध्यम से अंतर-प्रांतीय समन्वय को मॉडल किया।
- Whereas the **CAQM's directives** to address **stubble burning from adjoining States** remain **unauthoritative.**
जबकि आस-पास के राज्यों में पराली जलाने से निपटने के लिए CAQM के निर्देश अधिकारहीन बने रहते हैं।
- China has made **large sustained investments** in **clean energy, electric mobility, and industrial relocation.**
चीन ने स्वच्छ ऊर्जा, इलेक्ट्रिक मोबिलिटी, और औद्योगिक स्थानांतरण में बड़े और सतत निवेश किए हैं।
- Delhi's own **industrial relocation attempts**, such as the **Bawana project**, have **faltered.**
दिल्ली के अपने औद्योगिक स्थानांतरण प्रयास, जैसे बवाना परियोजना, असफल रहे हैं।
- Due to **inadequate infrastructure** and **poor service delivery.**
जिसका कारण अपर्याप्त अवसंरचना और खराब सेवा आपूर्ति है।
- Even '**sustainable**' alternatives such as **waste-to-energy plants** have failed to meet **air-quality norms.**
यहाँ तक कि 'सतत' विकल्प, जैसे कचरे से ऊर्जा संयंत्र, भी वायु गुणवत्ता मानकों को पूरा करने में विफल रहे हैं।
- Delhi's **pollution load** is further **intensified** by multiple factors.
दिल्ली का प्रदूषण भार कई कारकों से और तीव्र हो जाता है।
- Including **industrial and vehicular emissions, corrupted Pollution Under Control (PUC) checks.**
जिसमें औद्योगिक और वाहन उत्सर्जन, भ्रष्ट प्रदूषण नियंत्रण (PUC) जाँच शामिल हैं।
- Construction dust, open waste burning, and meteorological inversions** that trap winter pollutants.
निर्माण धूल, खुले में कचरा जलाना, और मौसमीय उलटाव, जो सर्दियों के प्रदूषकों को फँसा लेते हैं।
- Public transport expansion** has **lagged behind** the city's growth.
सार्वजनिक परिवहन का विस्तार शहर की वृद्धि से पीछे रह गया है।
- Odd-even rationing** has shown **negligible long-term impact.**
ऑड-ईवन योजना का दीर्घकालिक प्रभाव नगण्य रहा है।
- Behavioural change**, too, has been **slower in India.**
व्यवहारिक परिवर्तन भी भारत में धीमी गति से हुआ है।

What India can borrow भारत क्या सीख सकता है

- India need not **emulate China's political system** to achieve a **turnaround.**
भारत को परिवर्तन लाने के लिए चीन की राजनीतिक व्यवस्था की नकल करने की आवश्यकता नहीं है।
- But it can draw on the **principles** that made **China's progress possible.**
लेकिन वह उन सिद्धांतों से सीख ले सकता है जिनसे चीन की प्रगति संभव हुई।
- First**, governance must shift from **episodic responses to a long-term sustained, mission-oriented strategy.**
पहला, शासन को आकस्मिक प्रतिक्रियाओं से हटकर दीर्घकालिक, सतत, मिशन-उन्मुख रणनीति की ओर बढ़ना होगा।
- And treat air pollution as a national public health emergency.**
और वायु प्रदूषण को राष्ट्रीय सार्वजनिक स्वास्थ्य आपातकाल के रूप में देखना होगा।
- Second**, India must **accelerate its transition to clean energy.**
दूसरा, भारत को स्वच्छ ऊर्जा की ओर अपने संक्रमण को तेज़ करना होगा।



- Beijing's move away from coal drove major **PM2.5 reductions**.
बीजिंग का कोयले से दूर जाना **PM2.5** में बड़ी कमी का कारण बना।
- Delhi similarly needs to **expand and adopt energy-efficient standards** suitable for all **sectors**.
दिल्ली को भी **सभी क्षेत्रों** के लिए उपयुक्त **ऊर्जा-कुशल मानकों** का **विस्तार और अंगीकरण** करना होगा।
- **Third, transport reforms** must be **enforced**, not merely **announced**.
तीसरा, परिवहन सुधारों को केवल **घोषित** नहीं बल्कि **कड़ाई से लागू** किया जाना चाहिए।
- **BS-VI norms require credible PUC systems, modern testing centres**.
BS-VI मानकों के लिए **विश्वसनीय PUC प्रणालियाँ** और **आधुनिक परीक्षण केंद्र** आवश्यक हैं।
- **A robust vehicle-scrappage policy, and congestion management**.
एक मज़बूत वाहन **स्क्रेपेज नीति**, और **यातायात जाम प्रबंधन**।
- **Expanding EV charging infrastructure, incentivising electric mobility, and dramatically strengthening public transport are essential**.
EV चार्जिंग अवसंरचना का विस्तार, इलेक्ट्रिक मोबिलिटी को प्रोत्साहन, और सार्वजनिक परिवहन को सशक्त बनाना अत्यंत आवश्यक हैं।
- **Fourth, industrial policy** must shift from **relocation on paper to functional industrial zones**.
चौथा, औद्योगिक नीति को कागज़ी स्थानांतरण से हटकर क्रियाशील औद्योगिक क्षेत्रों की ओर बढ़ना चाहिए।
- With **full utilities, transport access, and real-time emissions monitoring**.
जहाँ पूर्ण सुविधाएँ, परिवहन पहुँच, और रीयल-टाइम उत्सर्जन निगरानी हो।

PATRIOTIC IAS