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# PATRIOTIC IAS

## DAILY CURRENT AFFAIRS

## THE HINDU NEWSPAPER

## 21 NOVEMBER 2025

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PATRIOTIC

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<b>PCS Special:</b>	<b>21 November 2025</b>
<b>1. UPPSC</b>	
	<b>In a first, Indian-born cheetah Mukhi gives birth to five cubs</b> <b>पहली बार, भारत में जन्मी चीता 'मुखी' ने पाँच शावकों को जन्म दिया</b>
<b>2.</b>	
	<b>Indian pugilists punch their way to 20 medals, nine of them gold</b> <b>भारतीय मुक्केबाज़ों ने 20 पदक जीते, जिनमें नौ स्वर्ण शामिल</b>

<b>UPPSC</b>	<b>21/11/2025</b>
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## In a first, Indian-born cheetah Mukhi gives birth to five cubs

**PCS**  
**Mehul Malpani**  
BHOPAL

In a first since the Cheetah Reintroduction Project in the country, an Indian-born cheetah has given birth to five cubs at the Kuno National Park in Madhya Pradesh.

Announcing the development on social media, Chief Minister Mohan Yadav on Thursday said, "This is an unprecedented breakthrough for India's cheetah reintroduction initiative. Mukhi, the first Indian-born female cheetah at 33 months of age, has now become the first India-born cheetah to reproduce, making it a landmark achievement for Project Cheetah."

The new litter has taken the country's cheetah population to 32, including 21 Indian-born ones now. Of the 32, 29 are at Kuno, while three have been relocated to the Gandhi Sagar Wildlife Sanctuary.



The new litter has taken India's cheetah population to 32, including 21 Indian-born cats. PTI

Union Environment Minister Bhupender Yadav described it as a "delightful breakthrough" for the cheetah reintroduction initiative.

"This reinforces optimism about establishing a self-sustaining and genetically diverse cheetah population in India, further advancing the nation's conservation goals," the Union Minister said on X.

Uttam Kumar Sharma, Field Director, Kuno National Park, said the cubs seemed healthy and were

with the mother in the wild. Mukhi was born on March 29, 2023, to Namibian cheetah Jwala, but soon after birth, the cub was abandoned by the mother.

"When reunification with her mother, Jwala, was attempted, she was not accepted. From that moment on, she was raised by the Kuno National Park management team with utmost care, always ensuring that she did not develop human imprinting," Mr. Sharma said.



## In a first, Indian-born cheetah Mukhi gives birth to five cubs पहली बार, भारत में जन्मी चीता 'मुखी' ने पाँच शावकों को जन्म दिया

- In a first, **Indian-born cheetah Mukhi gives birth** to five cubs पहली बार, भारत में जन्मी चीता मुखी ने पाँच शावकों को जन्म दिया
- In a first since the **Cheetah Reintroduction Project** in the country, an Indian-born cheetah has given birth to five cubs at the **Kuno National Park** in Madhya Pradesh. देश में **चीता पुनर्स्थापन परियोजना** के बाद पहली बार, भारत में जन्मी एक चीता ने मध्यप्रदेश के **कूनो राष्ट्रीय उद्यान** में पाँच शावकों को जन्म दिया है।
- Announcing the development on social media, Chief Minister **Mohan Yadav** on Thursday said, "This is an unprecedented breakthrough for India's cheetah reintroduction initiative. Mukhi, the first Indian-born female cheetah at 33 months of age, has now become the first India-born cheetah to reproduce, making it a landmark achievement for **Project Cheetah**." सोशल मीडिया पर इस विकास की घोषणा करते हुए मुख्यमंत्री **मोहन यादव** ने गुरुवार को कहा, "यह भारत की चीता पुनर्स्थापन पहल के लिए अभूतपूर्व उपलब्धि है। मुखी, जो 33 महीने की आयु में पहली भारत-जन्मी मादा चीता है, अब पहली भारत-जन्मी चीता बन गई है जिसने प्रजनन किया है, जिससे **प्रोजेक्ट चीता** के लिए यह एक ऐतिहासिक उपलब्धि है।"
- The new litter has taken the country's cheetah population to **32**, including **21 Indian-born** ones now. नए शावकों के आने से देश में चीतों की कुल संख्या **32** हो गई है, जिनमें से **21 भारत-जन्मी** हैं।
- Of the 32, **29 are at Kuno**, while **three** have been relocated to the **Gandhi Sagar Wildlife Sanctuary**. **32** में से **29 कूनो** में हैं, जबकि **तीन** को **गांधी सागर वन्यजीव अभयारण्य** में स्थानांतरित किया गया है।
- Union Environment Minister **Bhupender Yadav** described it as a "delightful breakthrough" for the cheetah reintroduction initiative. केंद्रीय पर्यावरण मंत्री **भूपेंद्र यादव** ने इसे चीता पुनर्स्थापन पहल के लिए "मनोरम सफलता" बताया।
- "This reinforces optimism about establishing a **self-sustaining and genetically diverse cheetah population** in India, further advancing the nation's conservation goals," the Union Minister said on X. "यह भारत में **स्व-टिकाऊ और आनुवंशिक रूप से विविध चीता आबादी** स्थापित करने की आशा को मजबूत करता है, जिससे राष्ट्र के संरक्षण लक्ष्यों को और आगे बढ़ाया जाएगा," केंद्रीय मंत्री ने एक्स पर कहा।
- Uttam Kumar Sharma, Field Director, Kuno National Park, said the cubs seemed healthy and were with the mother in the wild. कूनो राष्ट्रीय उद्यान के फील्ड डायरेक्टर उत्तम कुमार शर्मा ने कहा कि शावक स्वस्थ प्रतीत हो रहे हैं और जंगल में अपनी माँ के साथ हैं।
- Mukhi was born on **March 29, 2023**, to Namibian cheetah **Jwala**, but soon after birth, the cub was abandoned by the mother. मुखी का जन्म **29 मार्च 2023** को नामीबियाई चीता **ज्वाला** से हुआ था, लेकिन जन्म के तुरंत बाद माँ ने उसे छोड़ दिया था।
- "When reunification with her mother, Jwala, was attempted, she was not accepted. "जब उसकी माँ ज्वाला के साथ पुनर्मिलन का प्रयास किया गया, तो उसे स्वीकार नहीं किया गया।
- From that moment on, she was raised by the Kuno National Park management team with utmost care, always ensuring that she did not develop **human imprinting**," Mr. Sharma said. उस क्षण से, कूनो राष्ट्रीय उद्यान प्रबंधन टीम ने उसे अत्यधिक देखभाल के साथ पाला, यह सुनिश्चित करते हुए कि उसमें **मानवीय छाप (ह्यूमन इम्प्रिंटिंग)** न विकसित हो," श्री शर्मा ने कहा।



## Indian pugilists punch their way to 20 medals, nine of them gold

**WBCF**  
**Y. B. Sarangi**  
GREATER NOIDA

The country's women boxers, including World champions Minakshi Hooda and Jaismine Lamborini and former World champion Nikhat Zareen, led the way in an unprecedented gold feast as India finished its World Boxing Cup Finals campaign on a high at the Shaheed Vijay Singh Pathik Indoor Stadium here on Thursday.

The Indians won medals in all 20 categories, including nine gold, six silver and five bronze. Seven women and two men from the host cornered golden glory.

**Commanding show**  
Minakshi (48kg) gave another commanding performance to tame three-time Asian under-22 champion Farzona Fozilova 5-0 and set the tone.

Relying on her beautiful ring coverage, she consistently landed combinations to win convincingly.

In a duel between two counter-punchers, Nikhat



**Champions:** Top: Minakshi (48kg), Preeti (54), Jaismine (57), Parveen (60), Nikhat (51); Bottom: Arundhati (70), Nupur (80+), Sachin (60) and Hitesh (70). SUSHIL KUMAR VERMA & PTI

(51kg) posted a commanding 5-0 win over Worlds quarterfinalist Guo Yi Xuan. The Indian boxed from a long range to keep her opponent under control.

"I am delighted to win in front of the home crowd after two years," said Nikhat after bagging her first gold medal since the Elorda Cup in May last year.

Jaismine (57kg) man-

aged a 4-1 victory over Paris Olympics bronze medalist Wu Shih Yi.

The Taiwanese boxer connected cleaner shots than Jaismine, but the Indian scraped through to the title.

Young Olympian Preeti Pawar's gutsy show helped her record a 5-0 shock win over Worlds medalist Sirine Charaabi in the 54kg final. The southpaw's re-

lentless body and head shots kept the taller Italian on the back foot. Sirine clapped to compliment Preeti, who caused two upset wins in a row.

Arundhati Choudhary (70kg) recorded a hard-fought 5-0 win over Worlds bronze medalist Aziza Zokirova.

In a battle between two southpaws, Arundhati claimed the first round

with her movement and clean blows. The Uzbek fought back, but was disappointed to see her accurate punching and domination in the last two rounds go unrewarded.

Nupur's 3-2 win over Oltinoy Sotimboeva in a messy 80+kg final bout seemed rather contrived.

The Indian erupted in joy while the Uzbek left the ring teary-eyed after the

announcement of the result.

Former World youth champion Sachin Siwach (60kg) claimed a significant title as he stunned Worlds and Olympic medalist Munarbek Seitbek Uulu 5-0.

The southpaw threw clean punches and banked on his footwork and attacking game to get the better of a strong opponent.

Hitesh (70kg) managed a tough 3-2 win over Nur bek Mursal to take another gold.

**The results: Finals: Men: 50kg:** Asilbek Jalilov bt. Jadumani Singov 4-1; **55kg:** Samandar Olimov (Uzb) bt Pawan Bartwal 5-0; **60kg:** Sachin Siwach bt Munarbek Seitbek Uulu 5-0; **65kg:** Nishimaya Shion (Jpn) bt Abhinash Jamwal 4-1; **70kg:** Hitesh Gulia bt Nur bek Mursal (Kaz) 3-2.

**75kg:** Javokhir Abdurakhimov (Uzb) bt Michal Jarlinski (Pol) 4-1; **80kg:** Shitu Olatimeji (Eng) bt Ankush Panghal 5-0; **85kg:** Sultanbek Abaruly (Kaz) bt Jasurbek Yuldotshev (Uzb) 4-1; **90kg:** Isac Okoh (Eng) bt Nurarbek Tokhirov (Uzb) 3-0; **90+kg:** Khalimjon Mamsoliev (Uzb) bt Narendar Bemal 5-0.

**Women: 48kg:** Minakshi Hooda bt Farzona Fozilova (Uzb) 5-0; **51kg:** Nikhat Zareen bt Guo Yi Xuan 5-0; **54kg:** Preeti Pawar bt Sirine Charaabi (Ita) 5-0; **57kg:** Jaismine Lamborini bt Wu Shih Yi (Tpe) 4-1.

**60kg:** Parveen Hooda bt Ayaka Taguchi (Jpn) 3-2; **65kg:** Chen Nien Chin (Tpe) bt Dione Burman (Eng) 4-1; **70kg:** Arundhati Choudhary bt Aziza Zokirova (Uzb) 5-0.

**75kg:** Emma Sue Greentree (Aus) bt Melissa Gemini (Ita) 5-0; **80kg:** Agata Kaczmarek (Pol) bt Pooja Rani 3-0; **80+kg:** Nupur Sheoran bt Oltinoy Sotimboeva (Uzb) 3-2.

## Indian pugilists punch their way to 20 medals, nine of them gold भारतीय मुक्केबाजों ने 20 पदक जीते, जिनमें नौ स्वर्ण शामिल

- The country's women boxers, including **World champions Minakshi Hooda and Jasmine Lamborini and former World champion Nikhat Zareen**, led the way in an unprecedented gold feast as India finished its **World Boxing Cup Finals campaign** on a high at the **Shaheed Vijay Singh Pathik Indoor Stadium** here on Thursday.  
देश की महिला मुक्केबाज — **मीनाक्षी हूडा, जैस्मिन लाबोरिया** और पूर्व विश्व चैंपियन **निखत ज़रीन** — ने अभूतपूर्व स्वर्ण सफलता में नेतृत्व किया, क्योंकि भारत ने गुरुवार को **शहीद विजय सिंह पथिक इंडोर स्टेडियम** में वर्ल्ड बॉक्सिंग कप फाइनल्स का अभियान शानदार तरीके से समाप्त किया।
- The **Indians won medals in all 20 categories**, including **nine gold, six silver and five bronze**. Seven women and two men from the host cornered golden glory.  
भारतीय खिलाड़ियों ने सभी 20 वर्गों में पदक जीते — **नौ स्वर्ण**, छह रजत और पाँच कांस्य। मेज़बान दल की सात महिलाओं और दो पुरुषों ने स्वर्ण पदक जीते।

### Commanding show शानदार प्रदर्शन

- Minakshi (48kg)** gave another commanding performance to tame three-time Asian under-22 champion Farzona Fozilova 5-0 and set the tone.  
मीनाक्षी (48 किग्रा) ने तीन बार की एशियन अंडर-22 चैंपियन **फ़र्ज़ोना फ़ोज़िलोवा** को 5-0 से हराकर प्रभावशाली प्रदर्शन किया और शुरुआत शानदार की।
- Relying on her beautiful ring coverage, she consistently landed combinations to win convincingly.  
उन्होंने अपनी उत्कृष्ट **रिंग कवरेज** के दम पर लगातार बेहतरीन कॉम्बिनेशन लगाकर सहज जीत दर्ज की।
- In a duel between two counter-punchers, Nikhat (51kg) posted a commanding 5-0 win over Worlds quarterfinalist Guo Yi Xuan.  
दो **काउंटर-पंचर्स** की भिड़ंत में निखत (51 किग्रा) ने विश्व कार्टरफाइनलिस्ट **गुओ यी शुआन** को 5-0 से हराया।
- The Indian boxed from a long range to keep her opponent under control.  
भारतीय खिलाड़ी ने **लॉन्ग-रेंज बॉक्सिंग** करते हुए प्रतिद्वंद्वी को नियंत्रित रखा।



- "I am delighted to win in front of the home crowd after two years," said Nikhat after bagging her first gold medal since the Elorda Cup in May last year.  
"दो साल बाद घरेलू दर्शकों के सामने जीतकर मैं बहुत खुश हूँ," निखत ने पिछले वर्ष मई में एलोर्दा कप के बाद अपनी पहली स्वर्ण जीत पर कहा।
- Jaismine (57kg) managed a 4-1 victory over **Paris Olympics bronze medallist Wu Shih Yi**.  
जैस्मिन (57 किग्रा) ने **पेरिस ओलंपिक कांस्य पदक विजेता वू शिह यी** को 4-1 से हराया।
- The Taiwanese boxer connected cleaner shots than Jaismine, but the Indian scraped through to the title.  
ताइवानी मुक्केबाज़ ने ज्यादा साफ़ शॉट लगाए, लेकिन भारतीय खिलाड़ी ने **कड़ी टक्कर** देते हुए खिताब जीता।
- **Young Olympian Preeti Pawar's** gutsy show helped her record a 5-0 shock win over Worlds medallist Sirine Charaabi in the 54kg final.  
युवा ओलंपियन **प्रीति पवार** के साहसी प्रदर्शन ने उन्हें 54 किग्रा फाइनल में विश्व पदक विजेता **सीरीन चराबी** पर 5-0 की चौकाने वाली जीत दिलाई।
- The southpaw's relentless body and head shots kept the taller Italian on the back foot.  
**साउथपॉ** प्रीति के लगातार बॉडी और फेस शॉट्स ने लंबी इटैलियन खिलाड़ी को बैकफुट पर रखा।
- Sirine clapped to compliment Preeti, who caused two upset wins in a row.  
सीरीन ने प्रीति की लगातार दो अपसेट जीतों की सराहना करते हुए ताली बजाई।
- Arundhati Choudhary (70kg) recorded a hard-fought 5-0 win over Worlds bronze medallist Aziza Zokirova.  
**अरुंधति चौधरी (70 किग्रा)** ने विश्व कांस्य विजेता **अज़ीज़ा जोकिरोवा** पर कठिन 5-0 जीत दर्ज की।
- In a battle between two southpaws, Arundhati claimed the first round with her movement and clean blows.  
दो **साउथपॉ** खिलाड़ियों की लड़ाई में अरुंधति ने अपनी मूवमेंट और साफ़ पंचों से पहला राउंड जीता।
- The Uzbek fought back, but was disappointed to see her accurate punching and domination in the last two rounds go unrewarded.  
उज़्बेक खिलाड़ी वापसी करती दिखीं, लेकिन अंतिम दो राउंड में दबदबा बनाने के बावजूद विजेता नहीं बन सकीं।
- Nupur's 3-2 win over Oltinoy Sotimboeva in a messy 80+kg final bout seemed rather contrived.  
**नूपुर** की 80+ किग्रा फाइनल में **ओल्तिनोय सोतिम्बोएवा** पर 3-2 की जीत कुछ हद तक विवादित लगी।
- The Indian erupted in joy while the Uzbek left the ring teary-eyed after the announcement of the result.  
भारतीय खिलाड़ी खुश थीं, जबकि उज़्बेक खिलाड़ी परिणाम सुनकर रोती हुई रिंग से बाहर गईं।
- Former World youth champion Sachin Siwach (60kg) claimed a significant title as he stunned Worlds and Olympic medallist Munarbek Seitbek Uulu 5-0.  
पूर्व विश्व युवा चैंपियन **सचिन सिवाच (60 किग्रा)** ने विश्व और ओलंपिक पदक विजेता **मुनारबेक सेइतबेक उउलु** को 5-0 से हराकर बड़ा खिताब जीता।
- The southpaw threw clean punches and banked on his footwork and attacking game to get the better of a strong opponent.  
साउथपॉ सचिन ने **साफ़ पंच**, बेहतरीन **फुटवर्क** और अटैकिंग गेम से मजबूत प्रतिद्वंद्वी को पछाड़ा।
- Hitesh (70kg) managed a tough 3-2 win over Nurbek Mursal to take another gold.  
**हितेश (70 किग्रा)** ने **नुर्बेक मुर्सल** को 3-2 से हराकर एक और स्वर्ण जीता।

### The results:

#### परिणाम:

- 50kg: Asiibek Jalilov bt Jadumani Singh 4-1;  
50 किग्रा: असीबेक जलीलोव ने जदुमणि सिंह को 4-1 से हराया;
- 55kg: Samandar Olimov (Uzb) bt Pawan Bartwal 5-0;  
55 किग्रा: समंदर ओलिमोव (उज़्ब) ने पवन बर्तवाल को 5-0 से हराया;
- 60kg: Sachin Siwach bt Munarbek Seiiitbek Uulu 5-0;  
60 किग्रा: सचिन सिवाच ने मुनारबेक सेइतबेक उउलु को 5-0 से हराया;
- 65kg: Nishimaya Shion (Jpn) bt Abhinash Jamwal 4-1;  
65 किग्रा: निषिमाया शियन (जपान) ने अभिनाश जमवाल को 4-1 से हराया;



- 70kg: Hitesh Gulia bt Nurbek Mursal (Kaz) 3-2.  
70 किग्रा: हितेश गुलिया ने नुर्बेक मुर्सल (कजाख) को 3-2 से हराया।
- 75kg: Javokhir Abdurakhimov (Uzb) bt Michal Jarlinski (Pol) 4-1;  
75 किग्रा: जावोखिम अब्दुरखिमोव (उज़्ब) ने मिखाल जारलिन्स्की (पोल) को 4-1 से हराया;
- 80kg: Shitu Oladimeji (Eng) bt Ankush Panghal 5-0;  
80 किग्रा: शीतू ओलाडिमेजी (इंग्लैंड) ने अंकुश पंघाल को 5-0 से हराया;
- 85kg: Sultanbek Aibaruly (Kaz) bt Jasurbek Yuldashev (Uzb) 4-1.  
85 किग्रा: सुल्तानबेक ऐबारुली (कजाख) ने जसुरबेक यूएलदोशेव (उज़्ब) को 4-1 से हराया।
- 90kg: Isaac Okoh (Eng) bt Nusratbek Tokhirov (Uzb) 3-0;  
90 किग्रा: इसहाक ओकोह (इंग्लैंड) ने नुसरतबेक तोखिरोव (उज़्ब) को 3-0 से हराया;
- 90+kg: Khalimjon Mamsoliev (Uzb) bt Narender Berwal 5-0.  
90+ किग्रा: खलीमजोन मामसोलिएव (उज़्ब) ने नरेंद्र बेरवाल को 5-0 से हराया।

## Women:

### महिला:

- 48kg: Minakshi Hooda bt Farzona Fozilova (Uzb) 5-0;  
48 किग्रा: मीनाक्षी हूडा ने फ़र्ज़ोना फ़ोज़िलोवा (उज़्ब) को 5-0 से हराया;
- 51kg: Nikhat Zareen bt Guo Yi Xuan 5-0;  
51 किग्रा: निखत ज़रीन ने गुओ यी शुआन को 5-0 से हराया;
- 54kg: Preeti Pawar bt Sirine Charrabi (Ita) 5-0;  
54 किग्रा: प्रीति पवार ने सीरीन चराबी (इटली) को 5-0 से हराया;
- 57kg: Jaismine Lamboria bt Wu Shih Yi (Type) 4-1.  
57 किग्रा: जैस्मिन लांबोरिया ने वू शिह यी (ताइवान) को 4-1 से हराया।
- 60kg: Parveen Hooda bt Ayaka Taguchi (Jpn) 3-2;  
60 किग्रा: पर्वीन हूडा ने अयाका तगुची (जपान) को 3-2 से हराया;
- 65kg: Chen Nien Chin (Tpe) bt Dione Burman (Eng) 4-1;  
65 किग्रा: चैन निएन चिन (ताइवान) ने डिओन बर्मन (इंग्लैंड) को 4-1 से हराया;
- 70kg: Arundhati Choudhury bt Aziza Zokirova (Uzb) 5-0.  
70 किग्रा: अरुंधति चौधरी ने अज़ीज़ा जोकिरोवा (उज़्ब) को 5-0 से हराया।
- 75kg: Emma Sue Greentree (Aus) bt Melissa Gemini (Ita) 5-0;  
75 किग्रा: एमा सू ग्रीनट्री (ऑस्ट्रेलिया) ने मेलिसा जेमिनी (इटली) को 5-0 से हराया;
- 80kg: Agata Kaczmariska (Pol) bt Pooja Rani 3-0;  
80 किग्रा: अगाटा काज़मास्का (पोलैंड) ने पूजा रानी को 3-0 से हराया;
- 80+kg: Nupur Sheoran bt Oltinoy Sotimboeva (Uzb) 3-2.  
80+ किग्रा: नूपुर श्योराण ने ओल्टिनोय सोतिम्बोएवा (उज़्ब) को 3-2 से हराया।

## GS Paper 1: History, Society and Geography

### TOPICS COVERED

21 November 2025

### Geography

1.

**Bangladeshi boat seized for illegal fishing in Indian waters**  
**भारतीय जलक्षेत्र में अवैध मछली पकड़ने के लिए बांग्लादेशी नाव जब्त**



**GS I: Geography**

## Bangladeshi boat seized for illegal fishing in Indian waters

The Indian Coast Guard (ICG) on Thursday apprehended a Bangladeshi fishing vessel, along with 28 crew members, for illegally operating inside India's Exclusive Economic Zone in the northern Bay of Bengal. According to the Coast Guard, during International Maritime Boundary Line surveillance, an ICG ship detected a suspicious vessel carrying out evasive manoeuvres within Indian waters. The boat was intercepted and identified as a Bangladeshi fishing vessel violating the Maritime Zones of India (Regulation of Fishing by Foreign Vessels) Act, 1981. The crew and boat were handed over to the Marine Police for legal action.

### **Act, 1981.**

उस नाव को रोका गया और पहचाना गया कि वह भारतीय समुद्री क्षेत्र (विदेशी जहाजों द्वारा मछली पकड़ने का विनियमन) अधिनियम, 1981 का उल्लंघन कर रही बांग्लादेशी मछली पकड़ने की नाव है।

- The crew and boat were handed over to the **Marine Police** for legal action. चालक दल और नाव को कानूनी कार्रवाई के लिए **मरीन पुलिस** को सौंप दिया गया।

### **Bangladeshi boat seized for illegal fishing in Indian waters**

**भारतीय जलक्षेत्र में अवैध मछली पकड़ने के लिए बांग्लादेशी नाव जब्त**

- Bangladeshi boat seized for illegal fishing in Indian waters  
भारतीय जलक्षेत्र में अवैध मछली पकड़ने के लिए बांग्लादेशी नाव जब्त
- The **Indian Coast Guard (ICG)** on Thursday apprehended a **Bangladeshi fishing vessel**, along with **28 crew members**, for illegally operating inside India's **Exclusive Economic Zone** in the northern Bay of Bengal.  
भारतीय तटरक्षक बल (ICG) ने गुरुवार को भारत के **विशेष आर्थिक क्षेत्र (EEZ)** में उत्तरी बंगाल की खाड़ी में अवैध रूप से संचालित होने पर एक **बांग्लादेशी मछली पकड़ने के जहाज़ को 28 चालक दल के सदस्यों** सहित पकड़ लिया।
- According to the Coast Guard, during **International Maritime Boundary Line surveillance**, an ICG ship detected a suspicious vessel carrying out **evasive manoeuvres** within Indian waters.  
तटरक्षक बल के अनुसार, **अंतरराष्ट्रीय समुद्री सीमा रेखा** की निगरानी के दौरान, ICG के एक जहाज़ ने भारतीय जलक्षेत्र में **संदिग्ध और बचावपूर्ण गतिविधियाँ** कर रहे एक जहाज़ का पता लगाया।
- The boat was intercepted and identified as a Bangladeshi fishing vessel violating the **Maritime Zones of India (Regulation of Fishing by Foreign Vessels)**



## GS Paper II: Polity, Governance, And International Relations

### TOPICS COVERED

21 November 2025

### Polity

1. **Courts cannot fetter President, Governor: SC**  
अदालतें राष्ट्रपति, राज्यपाल को बाध्य नहीं कर सकतीं: सुप्रीम कोर्ट
2. **SC counters 'appeal in disguise' argument of non-BJP-ruled States**  
सुप्रीम कोर्ट ने गैर-BJP शासित राज्यों के 'छिपी हुई अपील' वाले तर्क का खंडन किया
3. **Fourteen questions and court's responses**  
चौदह प्रश्न और अदालत की प्रतिक्रियाएँ
4. **'Over 50% cases pending in Juvenile Justice Boards amid staff shortage'**  
'स्टाफ की कमी के बीच जुवेनाइल जस्टिस बोर्डों में 50% से अधिक मामले लंबित'
5. **Is federalism in retreat under single-party hegemony?**  
क्या एक-दल वर्चस्व के दौर में संघवाद पीछे हट रहा है?

### International Relations

6. **27-member new Nitish Cabinet takes charge; BJP gets 14 berths, JD(U) eight**  
27-सदस्यीय नई नीतीश कैबिनेट ने कार्यभार संभाला; BJP को 14 स्थान, JD(U) को आठ
7. **Search on for five declared foreigners by Assam tribunal**  
असम ट्रिब्यूनल द्वारा घोषित पाँच विदेशियों की तलाश जारी
8. **As trade row eases, U.S. clears missile sale to India**  
व्यापार विवाद कम होने पर, अमेरिका ने भारत को मिसाइल बिक्री को मंजूरी दी
9. **Ajit Doval hosts seventh meeting of Colombo Security Conclave in Delhi**  
अजीत डोभाल ने दिल्ली में कोलंबो सिक्योरिटी कॉन्क्लेव की सातवीं बैठक की मेजबानी की



10.	<b>India, Israel ink terms of reference for trade talks</b> भारत, इज़राइल ने व्यापार वार्ताओं के लिए टर्म्स ऑफ़ रेफरेंस पर हस्ताक्षर किए
11.	<b>Mizoram govt. completes biometric enrolment of 58% of Myanmar refugees</b> मिज़ोरम सरकार ने म्यांमार शरणार्थियों के 58% का बायोमेट्रिक पंजीकरण पूरा किया
12	<b>Loan approved by the ADB to upgrade Pakistan's power grid</b> पाकिस्तान की पावर ग्रिड को उन्नत करने के लिए एडीबी द्वारा स्वीकृत ऋण

**Polity**

21/11/2025

# Courts cannot fetter President, Governor: SC

'Deemed consent' will usurp the function of the gubernatorial functionaries, court says

Court states that it is against sitting on Bills through 'prolonged and evasive inaction'

Delaying bills would thwart the people's will expressed through legislatures, the court says

**GS II: Polity; Executive**  
**Krishnadas Rajagopal**  
NEW DELHI

A five-judge Bench of the Supreme Court on Thursday answered the 16th Presidential Reference the country has witnessed by opining that the judiciary cannot fetter Governors and the President to "one-size-fits-all" time-tables to dispose of State Bills or usurp their functions by assuming "deemed consent" of the proposed laws at the expiry of a court-ordered time frame.

"Such a usurpation of the gubernatorial function of the Governor, and similarly of the President's functions, is antithetical not only to the spirit of the Constitution, but also specifically, the doctrine of separation of powers – which is a part of the basic structure of the Constitution," a Bench of Chief Justice of India B.R. Gawai, Chief Jus-

## Supreme Court's advisory opinion

Breaking down the court's response to 14 questions raised by the President asking if a constitutional court can impose timelines for Governors and the President to give assent to Bills passed by legislatures

### Governor's discretion under Article 200

- May assent to the Bill
- May withhold assent, but must communicate reasons to the State legislature
- May refer the Bill to the President for consideration under Article 201

### Judicial limits

- SC cannot impose timelines for assent or create a concept of "deemed assent" under Article 142

### President's role under Article 201

- When a Bill is referred, the President need not seek SC's advisory opinion under Article 143 every time

### Governor's accountability

- Governors cannot indefinitely sit on a Bill; if they do, limited judicial review applies

- Courts can direct Governors to decide within a reasonable time frame, but not dictate the outcome



Justice-designate Surya Kant, and Justices Vikram Nath, P.S. Narasimha and A.S. Chandurkar underscored in their answer.

### 'Evasive inaction'

However, the court clarified that the President and Governors cannot resort to "prolonged and evasive in-

action" by sitting endlessly on State Bills awaiting their approval. The Reference under Article 143 of the Constitution came merely a month after a two-judge Bench of the Supreme Court, in a judgment in the Tamil Nadu Governor case on April 8, plugged a constitutional silence by fixing

a three-month time limit for Governors and the President to dispose of State Bills pending with them.

Addressing a preliminary objection raised by Tamil Nadu and Kerala that the Presidential Reference was only an "appeal in disguise" against the binding April judgment of the

## SC counters States' 'disguised plea' argument

NEW DELHI

The Supreme Court on Thursday countered the objection of States ruled by non-BJP parties that the Presidential Reference was an "appeal in disguise". It said an advisory opinion "can overrule, if necessary", it was a thinly veiled "appeal" against the judgment that fixed timelines for Governors and the President to decide on Bills, Tamil Nadu argued. » PAGE 5

court, the Bench said nothing stopped it from clarifying "general questions of law referred to it by the President".

The Bench termed the set of 14 questions posed by the President on May 13 as a unique "functional reference" touching upon the day-to-day functioning

of constitutional functionaries and the interplay among State legislatures, Governors, and the President.

"It is an institutional responsibility to tender its opinion on this functional reference sought by the highest constitutional functionary of the country. The court cannot shirk away from its responsibility to iron out constitutional creases," the Bench said. It clarified that a Governor has actually three options before him under Article 200 – to grant assent to the Bill, reserve it for the consideration of the President, or withhold assent and return the Bill to the State legislature with comments if it is not a Money Bill. A Governor cannot stall a Bill without returning it to the State Assembly along with his reasons for doing so.

"It would be against the principle of federalism and a derogation of the powers of the State legislatures to permit the Governor to withhold a Bill without following the dialogic process..." the Reference Bench advised. The Bench pronounced that the Supreme Court cannot judicially review the merits of the decision taken by the Governor under Article 200. "However, in glaring circumstances of inaction that is prolonged, unexplained, and indefinite, the court can issue a limited mandamus for the Governor to discharge his function within a reasonable time period," it said. But the restricted review of the Governor's inaction would not entail subjecting him personally to judicial proceedings. The Governor enjoyed absolute immunity from court proceedings under Article 361. The Bench clarified that the courts had no power to review the merits of Bills.

## Courts cannot fetter President, Governor: SC

अदालतें राष्ट्रपति, राज्यपाल को बाध्य नहीं कर सकतीं: सुप्रीम कोर्ट

- 'Deemed consent' will usurp the function of the gubernatorial functionaries, court says  
'डिम्ड कंसेंट' राज्यपाल के कार्यों का अधिग्रहण करेगा, अदालत ने कहा
- Court states that it is against sitting on Bills through 'prolonged and evasive inaction'  
अदालत कहती है कि 'लंबे और टालमटोल वाले निष्क्रियता' के माध्यम से विधेयकों पर बैठे रहना असंवैधानिक है



- **Delaying bills would thwart the people's will expressed through legislatures,** the court says  
विधेयकों में देरी करना विधानसभाओं के माध्यम से व्यक्त **जन-इच्छा** को बाधित करेगा, अदालत कहती है
- A five-judge Bench of the Supreme Court on Thursday answered the **16th Presidential Reference** the country has witnessed by opining that **the judiciary cannot fetter Governors and the President to "one-size-fits-all" time-tables to dispose of State Bills or usurp their functions by assuming "deemed consent"** of the proposed laws at the expiry of a court-ordered time frame.  
सुप्रीम कोर्ट की पांच-न्यायाधीशों की पीठ ने गुरुवार को देश द्वारा देखे गए 16वें **राष्ट्रपति संदर्भ** का उत्तर देते हुए कहा कि न्यायपालिका राज्यपालों और राष्ट्रपति को राज्य विधेयकों के निपटान के लिए "वन-साइज़-फिट्स-ऑल" समय-सीमा में बाध्य नहीं कर सकती और न ही अदालत द्वारा निर्धारित समय सीमा समाप्त होने पर "डिम्ड कंसेंट" मानकर उनके कार्यों का अधिग्रहण कर सकती है।
- "Such a usurpation of the gubernatorial function of the Governor, and similarly of the President's functions, is antithetical not only to the spirit of the Constitution, but also specifically, the doctrine of **separation of powers — which is a part of the basic structure of the Constitution,**" a Bench of Chief Justice of India B.R. Gavai, Chief Justice-designate Surya Kant, and Justices Vikram Nath, P.S Narasimha and A.S. Chandurkar underscored in their answer.  
"राज्यपाल के कार्यों का ऐसा **अधिग्रहण**, और इसी प्रकार राष्ट्रपति के कार्यों का भी, न केवल संविधान की भावना के विपरीत है, बल्कि विशेष रूप से **शक्तियों के पृथक्करण** के सिद्धांत के भी विरुद्ध है — जो संविधान की **मूल संरचना** का हिस्सा है," भारत के मुख्य न्यायाधीश बी.आर. गवाई, नामित मुख्य न्यायाधीश सूर्यकांत, और न्यायमूर्ति विक्रम नाथ, पी.एस. नरसिम्हा तथा ए.एस. चंदुरकर की पीठ ने कहा।
- **'Evasive inaction'**  
**'टालमटोल वाली निष्क्रियता'**
- However, the court clarified that the President and Governors cannot resort to "prolonged and evasive inaction" by sitting endlessly on State Bills awaiting their approval.  
हालांकि, अदालत ने स्पष्ट किया कि राष्ट्रपति और राज्यपाल राज्य विधेयकों पर अनंत समय तक बैठे रहकर "लंबी और टालमटोल वाली निष्क्रियता" नहीं अपना सकते।
- The Reference under **Article 143** of the Constitution came merely a month after a two-judge Bench of the Supreme Court, in a judgment in the Tamil Nadu Governor case on April 8, plugged a constitutional silence by fixing **a three-month time limit for Governors and the President to dispose of State Bills pending with them.**  
संविधान के अनुच्छेद 143 के तहत यह संदर्भ उस समय आया जब सुप्रीम कोर्ट की दो-न्यायाधीशों की पीठ ने 8 अप्रैल को तमिलनाडु राज्यपाल मामले में निर्णय देते हुए संविधान की चुप्पी को दूर करते हुए राज्यपालों और राष्ट्रपति के लिए लंबित विधेयकों के निपटान हेतु **तीन माह की समय-सीमा** निर्धारित की थी।
- Addressing a preliminary objection raised by Tamil Nadu and Kerala that the Presidential Reference was only an "appeal in disguise" against the binding April judgment of the court, the Bench said nothing stopped it from clarifying "general questions of law referred to it by the President".  
तमिलनाडु और केरल द्वारा उठाई गई प्रारंभिक आपत्ति कि राष्ट्रपति संदर्भ अदालत के बाध्यकारी अप्रैल निर्णय के खिलाफ केवल "छिपी हुई अपील" है, को संबोधित करते हुए पीठ ने कहा कि राष्ट्रपति द्वारा संदर्भित "सामान्य विधिक प्रश्नों" को स्पष्ट करने से उसे कोई नहीं रोक सकता।
- The **Bench termed the set of 14 questions posed by the President on May 13 as a unique "functional reference" touching upon the day-to-day functioning of constitutional functionalities and the interplay among State legislatures,** Governors, and the President.  
पीठ ने 13 मई को राष्ट्रपति द्वारा पूछे गए 14 प्रश्नों के सेट को एक अद्वितीय "कार्यात्मक संदर्भ" कहा, जो संवैधानिक कर्मियों के दैनिक कार्यों तथा राज्य विधानसभाओं, राज्यपालों और राष्ट्रपति के बीच अंतःक्रिया से संबंधित है।
- **"It is an institutional responsibility to tender its opinion on this functional reference sought by the highest constitutional functionary of the country. The court cannot shirk away from its responsibility to iron out constitutional**



creases,” the Bench said.

“यह देश के सर्वोच्च संवैधानिक पदाधिकारी द्वारा मांगे गए इस कार्यात्मक संदर्भ पर अपनी राय देना संस्थागत जिम्मेदारी है। अदालत संविधान की जटिलताओं को स्पष्ट करने की अपनी जिम्मेदारी से मुंह नहीं मोड़ सकती,” पीठ ने कहा।

- It clarified that a Governor has actually three options before him under **Article 200 — to grant assent to the Bill, reserve it for the consideration of the President, or withhold assent and return the Bill to the State legislature** with comments if it is **not a Money Bill**.

इसने स्पष्ट किया कि अनुच्छेद 200 के तहत राज्यपाल के सामने वास्तव में तीन विकल्प होते हैं — विधेयक को **स्वीकृति** देना, उसे राष्ट्रपति के विचारार्थ सुरक्षित रखना, या यदि वह धन विधेयक नहीं है, तो उसकी स्वीकृति रोककर टिप्पणियों सहित उसे राज्य विधानसभा को वापस भेज देना।

- **A Governor cannot stall a Bill without returning it to the State Assembly along with his reasons for doing so.**

राज्यपाल किसी विधेयक को बिना कारण सहित राज्य विधानसभा को लौटाए **अटका** नहीं सकते।

- **“It would be against the principle of federalism and a derogation of the powers of the State legislatures to permit the Governor to withhold a Bill without following the dialogic process...,”** the Reference Bench advised.

“राज्यपाल को बिना संवाद प्रक्रिया अपनाए किसी विधेयक को रोकने की अनुमति देना **सहकारी संघवाद** के सिद्धांत और राज्य विधानसभाओं की शक्तियों का हनन होगा...,” संदर्भ पीठ ने कहा।

- The Bench propounded that the Supreme Court cannot judicially review the merits of the decision taken by the Governor under Article 200.

पीठ ने कहा कि सुप्रीम कोर्ट अनुच्छेद 200 के तहत राज्यपाल द्वारा लिए गए निर्णय के गुण-दोषों की न्यायिक समीक्षा नहीं कर सकता।

- **“However, in glaring circumstances of inaction that is prolonged, unexplained, and indefinite, the court can issue a limited mandamus for the Governor to discharge his function within a reasonable time period,”** it said.

“हालांकि, जब निष्क्रियता स्पष्ट रूप से लंबी, अकारण और अनिश्चित हो, तो अदालत राज्यपाल को उचित अवधि में अपना कर्तव्य निभाने हेतु सीमित **मैंडेमस** जारी कर सकती है,” उसने कहा।

- But the restricted review of the Governor’s inaction would not entail subjecting him personally to judicial proceedings.

लेकिन राज्यपाल की निष्क्रियता की सीमित समीक्षा में उन्हें व्यक्तिगत रूप से न्यायिक कार्रवाई का सामना नहीं करना पड़ेगा।

- The Governor enjoyed **absolute immunity** from court proceedings under Article 361. राज्यपाल को अनुच्छेद 361 के तहत न्यायिक कार्यवाही से **पूर्ण प्रतिरक्षा** प्राप्त है।

- The Bench clarified that the courts had no power to review the merits of Bills  
पीठ ने स्पष्ट किया कि अदालतों को विधेयकों के गुण-दोष की समीक्षा करने की कोई शक्ति नहीं है।



# SC counters 'appeal in disguise' argument of non-BJP-ruled States

It says that an advisory opinion could even go so far as to 'overrule, if necessary' a judgment; this divergence may open path to take Presidential Reference route against uncomfortable verdict rather than taking effort to file review or curative pleas

**GS II: Polity: Article 143**

**Krishnadas Rajagopal**  
NEW DELHI

**T**he Supreme Court on Thursday countered objections raised by States ruled by non-BJP parties that the 2025 Presidential Reference was an "appeal in disguise" against the court's own binding verdict in the Tamil Nadu Governor case. The court observed that an advisory opinion could even go so far as to "overrule, if necessary" a judgment.

This divergence may open the path for the government to take the Presidential Reference route against an uncomfortable apex court judgment in future, rather than opting to file review or curative petitions.

## Court's rebuttal

The Supreme Court on Thursday countered objections raised by non-BJP-ruled States that the 2025 Presidential Reference was an "appeal in disguise" against the court's binding verdict

■ Tamil Nadu had argued that the May 13 Presidential Reference was only a thinly-veiled "appeal" against the April 8 judgment in the Governor case

■ The Reference Bench, however, pointed to a majority opinion delivered by Justice Y.V. Chandrachud (retired) in a 1978 PR in which he said that "our opinion may even go so far as to overrule, if necessary"



tions. Tamil Nadu had argued before a five-judge Bench headed by Chief Justice of India B.R. Gawai that the May 13 Presidential Reference posing 14 queries on the role and power of the President and Governors was only a thinly veiled "appeal" against the April 8 judgment in the Ta-

mil Nadu Governor case.

Tamil Nadu had contended it was impermissible to overrule an earlier precedent [April 8 judgment] of the Supreme Court while exercising advisory jurisdiction under Article 143.

Countering this objection, the Reference Bench

pointed to a majority opinion delivered by Justice Y.V. Chandrachud (retired) for a seven-judge Bench in a 1978 Presidential Reference in which he observed that "our opinion may even go so far as to overrule, if necessary".

The Reference Bench said a subsequent opinion in a Reference in 'Natural Resources Allocation' (2G case) had reiterated Justice Chandrachud's view.

However, the Constitution is itself silent about whether an opinion given by the Supreme Court under Article 143 would overrule a binding judgment.

Article 141 of the Constitution mandates that "the law declared by the Supreme Court shall be binding on all courts within the

territory of India".

Further, Article 144 of the Constitution adds that "all authorities, civil and judicial, in the territory of India shall act in aid of the Supreme Court. These two Articles make it clear that the law declared by the Supreme Court, through its judgments, is binding and "all" authorities are bound to comply with it.

The Union government could have sought a review of the April 8 judgment if it was unhappy with it, but chose, through the President, to issue a Presidential Reference.

Now, the Centre may use this "authoritative opinion" of the court as a prize weapon to seek a review of the April 8 judgment of the court itself.

## SC counters 'appeal in disguise' argument of non-BJP-ruled States

### सुप्रीम कोर्ट ने गैर-BJP शासित राज्यों के 'छिपी हुई अपील' वाले तर्क का खंडन किया

- **SC counters 'appeal in disguise' argument of non-BJP-ruled States**  
सुप्रीम कोर्ट ने गैर-BJP शासित राज्यों के 'छिपी हुई अपील' वाले तर्क का खंडन किया
- It says that **an advisory opinion could even go so far as to 'overrule, if necessary'** a judgment; this divergence may open path to take Presidential Reference route against uncomfortable verdict rather than taking effort to file review or curative pleas  
यह कहता है कि एक सलाहकारी राय आवश्यक होने पर किसी निर्णय को 'ओवररूल भी कर सकती है'; यह विचलन सरकार को असहज करने वाले फैसले के खिलाफ समीक्षा या क्यूरेटिव याचिका दायर करने की बजाय **राष्ट्रपति संदर्भ मार्ग** अपनाने का रास्ता खोल सकता है
- The Supreme Court on Thursday countered objections raised by States ruled by non-BJP parties that the 2025 Presidential Reference was an "appeal in disguise" against the court's own binding verdict in the Tamil Nadu Governor case.  
सुप्रीम कोर्ट ने गुरुवार को गैर-BJP शासित राज्यों द्वारा उठाई गई इस आपत्ति का खंडन किया कि 2025 राष्ट्रपति संदर्भ तमिलनाडु राज्यपाल केस में अदालत के बाध्यकारी निर्णय के खिलाफ एक "छिपी हुई अपील" था।
- The court observed that an advisory opinion could even go so far as to "overrule, if necessary" a judgment.  
अदालत ने कहा कि आवश्यक होने पर एक सलाहकारी राय किसी निर्णय को "ओवररूल भी कर सकती है।"
- This divergence may open the path for the government to take the Presidential Reference route against an uncomfortable apex court judgment in future, rather than opting to file review or curative petitions.  
यह विचलन भविष्य में सरकार को असहज करने वाले शीर्ष अदालत के फैसले के खिलाफ समीक्षा या क्यूरेटिव याचिका दाखिल करने के बजाय **राष्ट्रपति संदर्भ** का रास्ता अपनाने का अवसर दे सकता है।



- Tamil Nadu had argued before a five-judge Bench headed by Chief Justice of India B.R. Gavai that the May 13 Presidential Reference posing 14 queries on the role and power of the President and Governors was only a thinly veiled “appeal” against the April 8 judgment in the Tamil Nadu Governor case.

तमिलनाडु ने भारत के मुख्य न्यायाधीश बी.आर. गवई की अध्यक्षता वाली पाँच-न्यायाधीशों की पीठ के सामने दलील दी थी कि 13 मई के राष्ट्रपति संदर्भ में राष्ट्रपति और राज्यपालों की भूमिका एवं शक्तियों पर पूछे गए 14 प्रश्न केवल 8 अप्रैल के तमिलनाडु राज्यपाल केस के निर्णय के खिलाफ एक छिपी हुई “अपील” थे।
- Tamil Nadu had contended it was impermissible to overrule an earlier precedent [April 8 judgment] of the Supreme Court while exercising advisory jurisdiction under Article 143.

तमिलनाडु ने कहा था कि अनुच्छेद 143 के तहत सलाहकारी क्षेत्राधिकार का प्रयोग करते हुए सुप्रीम कोर्ट के पूर्ववर्ती दृष्टांत [8 अप्रैल का निर्णय] को ओवररूल करना अस्वीकार्य है।
- Countering this objection, the Reference Bench pointed to a majority opinion delivered by Justice **Y.V. Chandrachud** (retired) for a seven-judge Bench in a **1978 Presidential Reference** in which he observed that “our opinion may even go so far as to overrule, if necessary”.

इस आपत्ति का खंडन करते हुए संदर्भ पीठ ने **न्यायमूर्ति वाई.वी. चंद्रचूड़** (सेवानिवृत्त) द्वारा **1978 के राष्ट्रपति संदर्भ** में सात-न्यायाधीशों की पीठ के लिए दी गई बहुमत राय का उल्लेख किया, जिसमें उन्होंने कहा था कि “हमारी राय आवश्यक होने पर ओवररूल तक भी जा सकती है।”
- The Reference Bench said a subsequent opinion in a Reference in **‘Natural Resources Allocation’ (2G case)** had reiterated Justice Chandrachud’s view.

संदर्भ पीठ ने कहा कि बाद में **‘नेचुरल रिसोर्सेज एलोकेशन’ (2G केस)** पर दिए गए एक संदर्भ में न्यायमूर्ति चंद्रचूड़ के विचार को दोहराया गया था।

However, the Constitution is itself silent about whether an opinion given by the Supreme Court under Article 143 would overrule a binding judgment.

हालांकि, संविधान स्वयं इस पर मौन है कि क्या अनुच्छेद 143 के तहत सुप्रीम कोर्ट की सलाहकारी राय किसी बाध्यकारी निर्णय को ओवररूल कर सकती है।
- Article **141** of the Constitution mandates that “the law declared by the Supreme Court shall be binding on all courts within the territory of India”.

संविधान का अनुच्छेद **141** कहता है कि “सुप्रीम कोर्ट द्वारा घोषित कानून भारत की सभी अदालतों पर बाध्यकारी होगा।”
- Further, Article **144** of the Constitution adds that “all authorities, civil and judicial, in the territory of India shall act in aid of the Supreme Court.”

आगे, संविधान का अनुच्छेद **144** जोड़ता है कि “भारत के क्षेत्र में सभी सिविल और न्यायिक प्राधिकरण सुप्रीम कोर्ट की सहायता में कार्य करेंगे।”
- These two Articles make it clear that the law declared by the Supreme Court, through its judgments, is binding and “all” authorities are bound to comply with it.

ये दोनों अनुच्छेद स्पष्ट करते हैं कि सुप्रीम कोर्ट द्वारा अपने निर्णयों के माध्यम से घोषित कानून बाध्यकारी होता है और “सभी” प्राधिकरणों को इसका पालन करना अनिवार्य है।
- The Union government could have sought a **review** of the April 8 judgment if it was unhappy with it, but chose, through the President, to issue a Presidential Reference.

यदि केंद्र सरकार 8 अप्रैल के निर्णय से असहमत थी, तो वह इसका **रीव्यू** मांग सकती थी, लेकिन उसने राष्ट्रपति के माध्यम से राष्ट्रपति संदर्भ जारी करना चुना।



- Now, the Centre may use this “authoritative opinion” of the court as a prize weapon to seek a review of the April 8 judgment of the court itself.  
अब केंद्र सरकार अदालत की इस “अधिकारिक राय” को एक हथियार के रूप में इस्तेमाल कर 8 अप्रैल के निर्णय के **रीव्यू** की कोशिश कर सकती है।

## Fourteen questions and court's responses

**ISSUE: Polity, Judiciary**

The Presidential Reference came after the April 8 judgment of the Supreme Court that granted 'deemed assent' to 10 Tamil Nadu Bills

**Krishnadas Rajagopal**  
NEW DELHI

**W**hile it is not appropriate for the judiciary to impose timelines on the President and Governors, in glaring circumstances of indefinite inaction, the court can intervene, the Supreme Court said in its advisory to the Presidential Reference. Here are the 14 questions posed by the President and the court's responses:

**What are the constitutional options before a Governor when a Bill is presented to him under Article 200 of the Constitution?**

To assent, reserve the Bill for the consideration of the President, or withhold assent and return the Bill to the legislature with comments if the Bill is not a Money Bill.

**Is the Governor bound by the aid and advice tendered by the Council of Ministers under Article 200?**

The Governor enjoys discretion and is not bound by the aid and advice of the Council of Ministers.

**Is the exercise of constitutional discretion by the Governor under Article 200 justiciable?**

The discharge of the Governor's function under Article 200, is not justiciable.

However, in glaring circumstances of indefinite inaction, the court has a limited power to issue a mandamus to the Governor to decide within a reasonable time period.

**Is Article 361 an absolute bar to judicial review in relation to the actions of a Governor under Article 200?**

Article 361 is an absolute bar on judicial review in relation to personally subjecting the Governor to judicial proceedings.

**Can timelines be imposed under Article 200?**

It is not appropriate as the Constitution is silent.

**Is exercise of constitutional discretion by the President under Article 201 justiciable?**

For the same reasoning as held with respect to the Governor, the President's assent too is not justiciable.

**Can the President be bound to timelines while exercising power under Article 201?**

For the same reasons as indicated in the context of the Governor, the President, too, cannot be bound by judicially prescribed timelines.

**Is the President required to seek advice of the Supreme Court whenever a Governor reserves a Bill for assent?**

The President is not required to seek SC's advice. Subjective satisfaction of the President is sufficient.

**Are decisions of the Governor and President under Article 200 and Article 201 justiciable at a stage anterior into the law coming into force?**

The decisions of the Governor and President under Articles 200 and 201 are not justiciable at a stage anterior into the law coming into force.

It is impermissible for courts to undertake judicial adjudication over the contents of a Bill before it becomes law.

**Can the exercise of constitutional powers and the orders of/by the President/Governor be substituted in any manner under Article 142?**

The exercise of constitutional powers and the orders of the President/Governor cannot be substituted in any manner under Article 142 nor does it allow for the concept of 'deemed assent' of Bills.

**Is a law made by the State legislature a law in force without the assent of the Governor granted under Article 200 of the Constitution?**

There is no question of a law made by a State legislature coming into force without assent of the Governor under Article 200.

**In view of the proviso to Article 145(3), is it not mandatory for any Bench of the court to first decide whether a case involves substantial questions of law and has to be referred to a Bench of minimum five judges?**

Returns unanswered. Irrelevant to this reference.

**Do the powers of the Supreme Court under Article 142 of the Constitution limited to matters of procedural law?**

Not possible to answer in a definitive manner. Scope of Article 142 answered as a part of earlier question.

**Does the Constitution bar the Supreme Court from resolving Centre-States disputes except by way of a suit under Article 131?**

Irrelevant to the functional nature of the reference. Hence, returned unanswered.

## Fourteen questions and court's responses चौदह प्रश्न और अदालत की प्रतिक्रियाएँ

- Fourteen questions and court's responses  
चौदह प्रश्न और अदालत की प्रतिक्रियाएँ

- The Presidential Reference came after the April 8 judgment of the Supreme Court that granted 'deemed assent' to 10 Tamil Nadu Bills

राष्ट्रपति संदर्भ सुप्रीम कोर्ट के 8 अप्रैल के उस निर्णय के बाद आया, जिसने तमिलनाडु के 10 विधेयकों को 'डिम्ड असेंट' प्रदान किया था

- While it is not appropriate for the judiciary to impose timelines on the President and Governors, in glaring circumstances of indefinite inaction, the court can intervene, the Supreme Court said in its advisory to the Presidential Reference.

राष्ट्रपति संदर्भ पर अपनी सलाह में सुप्रीम कोर्ट ने कहा कि राष्ट्रपति और राज्यपालों पर समयसीमा थोपना न्यायपालिका के लिए उपयुक्त नहीं है, लेकिन अनिश्चित निष्क्रियता की स्पष्ट परिस्थितियों में अदालत हस्तक्षेप कर सकती है

- Here are the 14 questions posed by the President and the court's responses:

यहाँ राष्ट्रपति द्वारा पूछे गए 14 प्रश्न और अदालत की प्रतिक्रियाएँ हैं:

- What are the constitutional options before a Governor when a Bill is presented to him under Article 200 of the Constitution?**

संविधान के अनुच्छेद 200 के तहत जब कोई विधेयक राज्यपाल को प्रस्तुत किया जाता है, तो उनके सामने कौन से संवैधानिक विकल्प होते हैं?

- To assent, reserve the Bill for the consideration of the President, or withhold assent and return the Bill to the legislature with comments if the Bill is not a Money Bill.

स्वीकृति देना, विधेयक को राष्ट्रपति के विचारार्थ सुरक्षित रखना, या यदि वह मनी बिल नहीं है तो स्वीकृति रोककर टिप्पणियों सहित विधेयक को विधानमंडल को लौटाना

- Is the Governor bound by the aid and advice tendered by the Council of Ministers under Article 200?**

क्या अनुच्छेद 200 के तहत मंत्री परिषद की सहायता और सलाह राज्यपाल पर बाध्यकारी है?

- The Governor enjoys discretion and is not bound by

the aid and advice of the Council of Ministers.

राज्यपाल विवेक का आनंद उठाते हैं और मंत्री परिषद की सहायता और सलाह से बाध्य नहीं हैं

- Is the exercise of constitutional discretion by the Governor under Article 200 justiciable?**

क्या अनुच्छेद 200 के तहत राज्यपाल द्वारा संवैधानिक विवेक का उपयोग न्यायिक समीक्षा योग्य है?

- The discharge of the Governor's function under Article 200, is not justiciable.  
अनुच्छेद 200 के तहत राज्यपाल के कार्य का निर्वहन न्यायिक समीक्षा योग्य नहीं है



- However, in glaring circumstances of indefinite inaction, the court has a limited power to issue a mandamus to the Governor to decide within a reasonable time period.  
हालांकि, अनिश्चित निष्क्रियता की स्पष्ट परिस्थितियों में, अदालत के पास एक सीमित शक्ति है कि वह राज्यपाल को एक उचित समय सीमा के भीतर निर्णय लेने के लिए **मैडेमस** जारी कर सकती है
- **Is Article 361 an absolute bar to judicial review in relation to the actions of a Governor under Article 200?**  
**क्या अनुच्छेद 361, अनुच्छेद 200 के तहत राज्यपाल की कार्यवाहियों के संबंध में न्यायिक समीक्षा पर पूर्ण प्रतिबंध है?**
  - Article 361 is an absolute bar on judicial review in relation to personally subjecting the Governor to judicial proceedings.  
अनुच्छेद 361 राज्यपाल को व्यक्तिगत रूप से न्यायिक कार्यवाही के अधीन करने के संबंध में न्यायिक समीक्षा पर पूर्ण प्रतिबंध लगाता है
- **Can timelines be imposed under Article 200?**  
**क्या अनुच्छेद 200 के तहत समयसीमा लगाई जा सकती है?**
  - It is not appropriate as the Constitution is silent.  
यह उपयुक्त नहीं है क्योंकि संविधान इस पर मौन है
- **Is exercise of constitutional discretion by the President under Article 201 justiciable?**  
**क्या अनुच्छेद 201 के तहत राष्ट्रपति द्वारा संवैधानिक विवेक का प्रयोग न्यायिक समीक्षा योग्य है?**
  - For the same reasoning as held with respect to the Governor, the President's assent too is not justiciable.  
राज्यपाल के संदर्भ में दिए गए समान आधार पर, राष्ट्रपति की स्वीकृति भी न्यायिक समीक्षा योग्य नहीं है
- **Can the President be bound to timelines while exercising power under Article 201?**  
**क्या अनुच्छेद 201 के तहत शक्ति के प्रयोग में राष्ट्रपति को समयसीमा से बाध्य किया जा सकता है?**
  - For the same reasons as indicated in the context of the Governor, the President, too, cannot be bound by judicially prescribed timelines.  
राज्यपाल के संदर्भ में बताए गए कारणों की तरह, राष्ट्रपति भी न्यायिक रूप से निर्धारित समयसीमाओं से बाध्य नहीं हो सकते
- **Is the President required to seek advice of the Supreme Court whenever a Governor reserves a Bill for assent?**  
**क्या जब भी कोई राज्यपाल किसी विधेयक को स्वीकृति हेतु सुरक्षित रखता है, राष्ट्रपति को सुप्रीम कोर्ट की सलाह लेना आवश्यक है?**
  - The President is not required to seek SC's advice.  
राष्ट्रपति को सुप्रीम कोर्ट की सलाह लेने की आवश्यकता नहीं है
  - Subjective satisfaction of the President is sufficient.  
राष्ट्रपति की **व्यक्तिपरक संतुष्टि** पर्याप्त है
- **Are decisions of the Governor and President under Article 200 and Article 201 justiciable at a stage anterior into the law coming into force?**  
**क्या अनुच्छेद 200 और 201 के तहत राज्यपाल और राष्ट्रपति के निर्णय कानून लागू होने से पहले के चरण में न्यायिक समीक्षा योग्य हैं?**
  - The decisions of the Governor and President under Articles 200 and 201 are not justiciable at a stage anterior into the law coming into force.  
अनुच्छेद 200 और 201 के तहत राज्यपाल और राष्ट्रपति के निर्णय कानून लागू होने से पहले के चरण में न्यायिक समीक्षा योग्य नहीं हैं
  - It is impermissible for courts to undertake judicial adjudication over the contents of a Bill before it becomes law.  
विधेयक के कानून बनने से पहले उसकी सामग्रियों पर न्यायिक निर्णय करना अदालतों के लिए अस्वीकार्य है
- **Can the exercise of constitutional powers and the orders of/by the President/Governor be substituted in any manner under Article 142?**  
**क्या अनुच्छेद 142 के तहत राष्ट्रपति/राज्यपाल की संवैधानिक शक्तियों और आदेशों को किसी भी प्रकार प्रतिस्थापित किया जा सकता है?**
  - The exercise of constitutional powers and the orders of the President/Governor cannot be substituted in any manner under Article 142 nor does it allow for the



concept of 'deemed assent' of Bills.

राष्ट्रपति/राज्यपाल की संवैधानिक शक्तियों और आदेशों को अनुच्छेद 142 के तहत किसी भी प्रकार प्रतिस्थापित नहीं किया जा सकता, न ही यह विधेयकों के 'डिम्ड असेंट' की अवधारणा की अनुमति देता है

- Is a law made by the State legislature a law in force without the assent of the Governor granted under **Article 200 of the Constitution**?

क्या राज्य विधानमंडल द्वारा बनाया गया कानून अनुच्छेद 200 के तहत राज्यपाल की स्वीकृति के बिना लागू कानून माना जाएगा?

- There is no question of a law made by a State legislature coming into force without assent of the Governor under Article 200.

अनुच्छेद 200 के तहत राज्यपाल की स्वीकृति के बिना राज्य विधानमंडल द्वारा बनाए गए कानून के लागू होने का कोई प्रश्न नहीं उठता

- In view of the **provision to Article 145(3)**, is it not mandatory for any Bench of the court to first decide whether a case involves substantial questions of law and has to be referred to a Bench of minimum five judges?

अनुच्छेद 145(3) के प्रावधान के अनुसार, क्या किसी पीठ के लिए यह निर्धारित करना अनिवार्य नहीं है कि मामला महत्वपूर्ण विधिक प्रश्न शामिल करता है और उसे कम से कम पाँच न्यायाधीशों की पीठ को भेजना चाहिए?

- Returns unanswered. Irrelevant to this reference.  
बिना उत्तर लौटाया जाता है। इस संदर्भ से अप्रासंगिक है

- Are the powers of the **Supreme Court under Article 142 of the Constitution limited to matters of procedural law**?

क्या संविधान के अनुच्छेद 142 के तहत सुप्रीम कोर्ट की शक्तियाँ केवल प्रक्रिया संबंधी कानूनों तक सीमित हैं?

- Not possible to answer in a definitive manner. Scope of Article 142 answered as a part of earlier question.

निश्चित रूप से उत्तर देना संभव नहीं। अनुच्छेद 142 का दायरा पिछले प्रश्न में आंशिक रूप से उत्तरित है

- Does the Constitution bar the Supreme Court from resolving Centre-States disputes except by way of a suit under Article 131?

क्या संविधान, अनुच्छेद 131 के तहत दायर किए गए वाद के अलावा, केंद्र-राज्य विवादों के समाधान से सुप्रीम कोर्ट को रोकता है?

- Irrelevant to the functional nature of the reference. Hence, returned unanswered.  
संदर्भ की कार्यात्मक प्रकृति से अप्रासंगिक। अतः बिना उत्तर लौटाया जाता है



# 'Over 50% cases pending in Juvenile Justice Boards amid staff shortage'

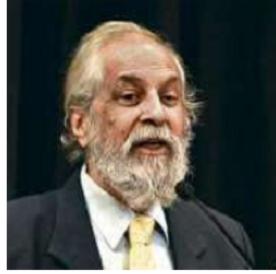
**GS II: Polity; Judiciary**

**Bindu Shajan Perappadan**  
NEW DELHI

More than half (55%) of the cases before 362 Juvenile Justice Boards (JJBs) across the country remained pending as of October 31, 2023, says a first-of-its-kind study by the India Justice Report (IJR) which was released on Thursday.

While 92% of 765 districts in India have constituted JJBs, the authority dealing with children in conflict with law, the pendency rate varies widely, from 83% in Odisha to 35% in Karnataka,

Unlike the National Judicial Data Grid, there is no Central and public repository of information on the JJBs. For the study titled "Juvenile justice and children in conflict with the law: a study of capacity at the frontlines", the IJR filed more than 250 RTI requests and responses from 21 States, revealing that as



It is worrying to find that a quarter of JJBs did not have a full Bench and evidence of a substantial number of staff vacancies in child care institutions.

**MADAN B. LOKUR**  
Former Supreme Court judge

of October 31, 2023, JJBs had only disposed of fewer than half the 1,00,904 cases.

Additionally, vacancies in the juvenile justice system (24% of the JJBs were not fully constituted), and inadequate legal aid (30% JJBs do not have an attached legal services clinic) have led to high workload in crucial functions.

On an average, 154 cases remained pending with each JJB annually. Additionally, inadequate data monitoring and funds have created severe constraints

in the implementation of juvenile justice. According to the 2023 Crime in India data, 40,036 juveniles were apprehended in 31,365 cases under the Indian Penal Code and Special and Local Laws in India.

In a decade since the passing of the Juvenile Justice (Care and Protection) Act, 2015, the study finds that the decentralised architecture meant to deliver child-centric services suffers from systemic gaps, including a lack of inter-agency coordination and

data-sharing. Over 500 responses were received from 28 States and two Union Territories, covering 530 districts. Of these responses, 11% were rejected outright, 24% received no reply, 29% were transferred to districts, and 36% were provided by State nodal authorities, indicating a weak culture of public data transfer and transparency.

Former Supreme Court judge Madan B. Lokur said the report exposed the gaps in our juvenile justice system. "Despite the passage of 10 years since the implementation of the JJ Act, 2015, it is worrying to find that a quarter of JJBs did not have a full Bench and evidence of a substantial number of staff vacancies in child care institutions. This has a detrimental effect on children who fall under its purview," he said, adding that the inadequate data from the RTIs was concerning.

## 'Over 50% cases pending in Juvenile Justice Boards amid staff shortage' 'स्टाफ की कमी के बीच जुवेनाइल जस्टिस बोर्डों में 50% से अधिक मामले लंबित'

- 'Over 50% cases pending in **Juvenile Justice Boards** amid staff shortage'  
'स्टाफ की कमी के बीच जुवेनाइल जस्टिस बोर्डों में 50% से अधिक मामले लंबित'
- **More than half (55%) of the cases before 362 Juvenile Justice Boards (JJBs) across the country remained pending** as of October 31, 2023, says a first-of-its-kind study by the **India Justice Report (IJR)** which was released on Thursday.  
देशभर के **362 जुवेनाइल जस्टिस बोर्डों (JJBs)** में से 55% मामले 31 अक्टूबर 2023 तक लंबित थे, यह जानकारी **इंडिया जस्टिस रिपोर्ट (IJR)** के एक प्रथम-of-its-kind अध्ययन में दी गई, जिसे गुरुवार को जारी किया गया।
- **While 92% of 765 districts in India have constituted JJBs, the authority dealing with children in conflict with law, the pendency rate varies widely, from 83% in Odisha to 35% in Karnataka.**  
भारत के 765 जिलों में से 92% ने JJBs का गठन किया है, जो कानून से टकराव में बच्चों के मामलों को देखते हैं, लेकिन लंबित मामलों की दर में काफी अंतर है — **ओडिशा में 83% से लेकर कर्नाटक में 35%** तक।
- **Unlike the National Judicial Data Grid, there is no central and public repository of information on the JJBs.**  
नेशनल जूडिशियल डेटा ग्रीड के विपरीत, JJBs से संबंधित जानकारी का कोई केंद्रीय और सार्वजनिक भंडार नहीं है।



- For the study titled “**Juvenile justice and children in conflict with the law: a study of capacity at the frontlines**”, the IJR filed more than **250 RTI requests** and responses from 21 States, revealing that as of October 31, 2023, JJBs had only disposed of fewer than half the **1,00,904 cases**.  
“**जुवेनाइल जस्टिस और कानून से टकराव में बच्चे: फ्रंटलाइन क्षमता का अध्ययन**” शीर्षक वाले अध्ययन के लिए IJR ने **250 से अधिक RTI** आवेदन दाखिल किए और 21 राज्यों से मिले जवाबों से पता चला कि 31 अक्टूबर 2023 तक JJBs ने **1,00,904 मामलों** में से आधे से भी कम का निपटारा किया था।
- Additionally, vacancies in the juvenile justice system (**24% JJBs not fully constituted**), and inadequate legal aid (**30% JJBs without attached legal services clinic**) have led to high workload in crucial functions.  
इसके अलावा, जुवेनाइल जस्टिस सिस्टम में रिक्तियों (**24% JJBs पूर्ण रूप से गठित नहीं**) और अपर्याप्त कानूनी सहायता (**30% JJBs के पास कानूनी सेवा क्लिनिक नहीं**) ने महत्वपूर्ण कार्यों में अत्यधिक कार्यभार बढ़ा दिया है।
- On an average, **154 cases** remained pending with each JJB annually.  
औसतन, प्रत्येक JJB में सालाना **154 मामले** लंबित रहते हैं।
- Additionally, inadequate data monitoring and funds have created severe constraints in the implementation of juvenile justice.  
इसके अतिरिक्त, अपर्याप्त डेटा मॉनिटरिंग और धनराशि ने जुवेनाइल जस्टिस के क्रियान्वयन में गंभीर बाधाएँ पैदा कर दी हैं।
- According to the **2023 Crime in India data**, **40,036 juveniles** were apprehended in **31,365 cases** under IPC and Special and Local Laws.  
**क्राइम इन इंडिया 2023** के अनुसार, IPC तथा विशेष और स्थानीय कानूनों के तहत **40,036 किशोरों** को **31,365 मामलों** में पकड़ा गया।
- In a decade since the passing of the **Juvenile Justice (Care and Protection) Act, 2015**, the study finds that the decentralised architecture meant to deliver child-centric services suffers from systemic gaps, including lack of inter-agency coordination and data-sharing.  
**जुवेनाइल जस्टिस (केयर एंड प्रोटेक्शन) एक्ट, 2015** के बाद एक दशक में अध्ययन पाता है कि बच्चों-केंद्रित सेवाएँ प्रदान करने की विकेंद्रीकृत संरचना में कई प्रणालीगत कमियाँ हैं, जैसे कि एजेंसियों के बीच समन्वय और डेटा साझा करने का अभाव।
- Over **500 responses** were received from 28 States and two Union Territories, covering **530 districts**.  
28 राज्यों और दो केंद्र शासित प्रदेशों से **500 से अधिक जवाब** मिले, जो **530 जिलों** को कवर करते हैं।
- Of these responses, **11%** were rejected outright, **24%** received no reply, **29%** were transferred to districts, and **36%** were provided by State nodal authorities, indicating weak public data transfer and transparency.  
इन जवाबों में से **11%** सीधे खारिज कर दिए गए, **24%** को कोई उत्तर नहीं मिला, **29%** को जिलों में स्थानांतरित किया गया और **36%** राज्य नोडल अधिकारियों द्वारा प्रदान किए गए, जिससे सार्वजनिक डेटा हस्तांतरण और पारदर्शिता की कमी उजागर होती है।
- Former Supreme Court judge **Madan B. Lokur** said the report exposed the gaps in our juvenile justice system.  
सुप्रीम कोर्ट के पूर्व न्यायाधीश **मदन बी. लोकर** ने कहा कि रिपोर्ट ने हमारे जुवेनाइल जस्टिस सिस्टम की कमियाँ उजागर की हैं।
- “Despite the passage of 10 years since the implementation of the JJ Act, 2015, it is worrying to find that a quarter of JJBs did not have a full Bench and evidence of a substantial number of staff vacancies in child care institutions.  
“JJ एक्ट, 2015 के लागू होने के 10 साल बाद भी यह चिंताजनक है कि एक-चौथाई JJBs में पूर्ण पीठ नहीं है और बाल देखभाल संस्थानों में स्टाफ की भारी रिक्तियाँ मौजूद हैं।
- This has a detrimental effect on children who fall under its purview,” he said, adding that the inadequate data from the RTIs was concerning.  
यह उन बच्चों पर प्रतिकूल प्रभाव डालता है जो इसके दायरे में आते हैं,” उन्होंने कहा, यह जोड़ते हुए कि RTI से मिला अपर्याप्त डेटा भी चिंता का कारण है।



## Is federalism in retreat under single-party hegemony?



**Yamini Aiyar**  
Senior  
resident and  
Chief Executive,  
entre for  
policy  
research, and  
Senior Visiting  
Fellow,  
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**A. Kalyarasan**  
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**ES II: Polity**  
**PARLEY**

**T**he rationalisation of GST brought cheer to consumers, but triggered another row between the Centre and some States which fear a decline in revenue collection. Opposition-ruled States have been at loggerheads with the Centre over centrally sponsored schemes, release of disaster relief funds, and the Finance Commission's recommended share. Some of these issues have reached the Supreme Court. Is federalism in retreat under single-party hegemony? Yamini Aiyar and A. Kalyarasan discuss the question in a conversation moderated by Sharrath S. Srivatsa. Edited excerpts:

**Is the strain between the Opposition-ruled States and the Centre a matter of development needs or is it politics at play?**

**A. Kalyarasan:** The federal coalition of regional parties that emerged in the 1990s offers lessons for understanding single-party dominance now and its implications for federalism. During that time, economic and institutional reforms were more of a federal nature. There was a greater interaction between Centre and states on a range of issues. The abolition of the Planning Commission, and the changes in resource allocation before and after 2014, shows a shift.

**Yamini Aiyar:** In the 1990s, regional parties began to assert their presence on the national stage. With the emergence of the BJP, we are back to single-party dominance. Crucially, the BJP's Hindutva politics is the antithesis of the politics of accommodation. Effectively, as 'one nation' politics started dominating, regional parties that represent regional anxieties and political identities are increasingly becoming the voices for deeper federal accommodation.

**Post-liberalisation, the role of institutions, such as the Finance Commission, has changed. The GST Council has not done any better in strengthening the federal spirit.**

**AK:** The question is whether the recent change respects the federal spirit envisioned in the design of the GST. The States surrendered their sovereignty as much as the Centre to build this grand bargain of GST. Ideally, this should have been discussed within the GST Council before being declared. Now, it looks like the Centre takes the call. Historically, at least till the 1990s, the Planning Commission had an effective role, particularly in guiding public investments. Post 2014, it is out of the picture. Now, the only instrument available for resource allocation between the Centre and the States is the Finance



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**Commission.** The concern is not only regarding the total share of the States in the divisible pool; more increasingly, certain States are concerned about horizontal devolution or horizontal imbalance. The poorer States depend largely on fiscal transfers. This is making the southern States question whether they are being penalised via the allocation of the Finance Commission because it is inherently supportive of the northern States given the inverse-income formula built into the Commission's design. We need to focus on the broader issue of inequality, not merely the fiscal transfer challenges under single-party hegemony. This is not simply a political problem; it is a structural one.

**YI:** At the heart of the fiscal federal architecture that India adopted was a commitment to the principle of redistribution. When southern States raise this issue, they are not necessarily arguing against the principle of redistribution; they are responding to a structural reality of spatial inequality. There is a lot of lack of good faith by the Centre as it has used and misused its constitutional powers and institutional hold to centralise decision-making. Fiscal centralisation has always been a challenge in India's federalism. You are seeing a lot more tension in the formula that the Finance Commission has used. The States have rightly challenged the fact that the Indian government is extremely centralised vis-a-vis the GST.

**Cess and surcharges, which are not devolved to the States, have been on the rise in the recent years. How are the economies of States affected?**

**AK:** The fiscal structure shows that the Centre, more than the State, is weak. The Centre of the 1990s could invest in a productive way. If you look at borrowings, 80% of every rupee has borrowed is actually utilised for revenues

**At the heart of the fiscal federal architecture that India adopted was a commitment to the principle of redistribution. When southern States raise this issue, they are not necessarily arguing against the principle of redistribution; they are responding to a structural reality of spatial inequality.**

**YAMINI AIYAR**

(expenditure). The only entity now building infrastructure is the State. Even the wealthiest States have not been able to generate employment. Overall growth has not been inclusive in terms of job creation, leading to increased regional inequality. There is also a perverse flow of resources. Southern States cannot deny that the resources are coming from the northern region and poorer migrant labour, which helps maintain a low-wage equilibrium. Jobless growth is also being partly a product of the way in which our federal economy is integrated. In India, the relatively smaller regions are compensating or subsidising relatively larger regions. Without strong growth, good jobs and good wages, during every election, political parties try to compensate and engage in competitive populism. They give different sets of guarantees that come at the expense of productive investment.

**YI:** The Indian government's use of cesses and surcharges over the past decade reflects a lack of good faith. The move towards greater centralisation of social spending, driven by electoral incentives, is a matter of concern. The Centre is squeezing States and encroaching on their responsibilities through mechanisms such as centrally sponsored schemes. This kind of political impasse is because the Centre has not lived up to its bargain. One of the tensions that we have in the economy is structural spatial inequality in growth patterns. Some of the structural challenges is around wage growth and capital flows. So, how do we address this question of coordination within our federal structure? What are the institutional systems and political mechanisms needed to enable this coordination? Without the Planning Commission, the Finance Ministry determines how centrally sponsored schemes should be allocated to the States. Is this appropriate or do we need a different mechanism for determining development financing?

**Have regional parties allied with the BJP failed to balance their politics and the need to protect their regional interests? How different is the current single-party dominance different from what the country**

**saw under Congress rule in the 60s and 70s?**

**AK:** Any capital generated from below has the support of regional parties. It serves as an electoral resource for the party to assert its position. The aspect of capital has been somewhat weakened over the last decade. This has implications for the electoral strategies of regional parties. The centralisation has not only weakened regional capital and local entrepreneurship but also reshaped electoral financing with the coming of electoral bonds.

**YI:** The difference between coalitions in the 1990s and 2000s and the coalition today is that there was a much broader dependency on regional parties for the Congress and even briefly during the A.B. Vajpayee era. The culture of governance was about cooperation and negotiation. There are two key parties that are holding the NDA together today at the Centre. The style of governance, which is more a culture of centralisation and not of deliberation, also shapes the bargaining hand. The two critical regional parties (TDP and JDU) that are part of the coalition are going through their own churn. So, their impulse is to hold on to power in their regions rather than engage in a battle for federalism at the national level. Perhaps, they see an alliance with the BJP as an instrument that serves their purpose of being able to consolidate power in their regions.

**How will the southern States cope with the delimitation exercise post the Census and the 'one nation, one election' proposal?**

**AK:** With delimitation, we are going to have a situation where the larger populated States have more political power and the relatively less populated regions have more economic power in terms of per capita income. So, how can regions without economic growth wield political influence? The delimitation question should not be seen in isolation but from the context of our larger political economy.

**YI:** The 'one nation, one election' proposal seems to be another carefully crafted tool that uses the logic of efficiency and a broader public disenchantment with the role of money and muscle in politics. It is unlikely to solve the challenges that the public has. The argument that India needs to have is about the structural challenges of its democracy.



### Is federalism in retreat under single-party hegemony?

#### क्या एक-दल वर्चस्व के दौर में संघवाद पीछे हट रहा है?

- Is federalism in retreat under single-party hegemony? क्या एक-दल वर्चस्व के दौर में संघवाद पीछे हट रहा है?
- The rationalisation of GST brought cheer to consumers, but triggered another row between the Centre and some States which fear a decline in revenue collection.

GST के तर्कसंगठन ने उपभोक्ताओं को राहत दी, लेकिन केंद्र और कुछ राज्यों के बीच एक और विवाद खड़ा कर दिया जो राजस्व संग्रह में गिरावट से डरते हैं।

- Opposition-ruled States have been at loggerheads with the Centre over centrally sponsored schemes, release of disaster relief funds, and the Finance Commission's recommended share. विपक्ष-शासित राज्य केंद्र प्रायोजित योजनाओं, आपदा राहत निधियों की रिहाई और वित्त आयोग द्वारा सुझाई गई हिस्सेदारी को लेकर केंद्र से टकराव में रहे हैं।
- Some of these issues have reached the Supreme Court. इनमें से कुछ मुद्दे सुप्रीम कोर्ट तक पहुंच गए हैं।

### Is the strain between Opposition-ruled States and Centre due to development needs or politics?

#### क्या विपक्ष-शासित राज्यों और केंद्र के बीच तनाव विकास संबंधी आवश्यकताओं के कारण है या राजनीति के?



- A. Kalaiyaran: The **federal coalition of regional parties that emerged in the 1990s offers lessons for understanding single-party dominance now and its implications for federalism.**  
ए. कलैयारासन: 1990 के दशक में उभरने वाला क्षेत्रीय दलों का संघीय गठबंधन आज के एक-दल वर्चस्व और उसके संघवाद पर प्रभावों को समझने में सबक देता है।
- **During that time, economic and institutional reforms were more of a federal nature.**  
उस समय आर्थिक और संस्थागत सुधार अधिक संघीय प्रकृति के थे।
- There was a greater interaction between Centre and States on a range of issues.  
केंद्र और राज्यों के बीच अनेक मुद्दों पर अधिक संवाद था।
- The abolition of the Planning Commission, and the changes in resource allocation before and after 2014, shows a shift.  
योजना आयोग का उन्मूलन और 2014 से पहले व बाद में संसाधन आवंटन में हुए बदलाव एक बड़े परिवर्तन को दर्शाते हैं।
- Yamini Aiyar: In the 1990s, regional parties began to assert their presence on the national stage.  
यामिनी अय्यर: 1990 के दशक में क्षेत्रीय पार्टियों ने राष्ट्रीय स्तर पर अपनी उपस्थिति दर्ज करानी शुरू की।
- With the emergence of the BJP, we are back to single-party dominance.  
बीजेपी के उदय के साथ, हम फिर एक-दल वर्चस्व वाली राजनीति में लौट आए हैं।
- The BJP's **Hindutva politics** is the antithesis of the politics of accommodation.  
बीजेपी की **हिंदुत्व राजनीति** समायोजन की राजनीति के विपरीत है।
- **As 'one nation' politics started dominating, regional parties that represent regional anxieties are increasingly becoming voices for deeper federal accommodation.**  
जैसे-जैसे 'वन नेशन' राजनीति हावी हुई, क्षेत्रीय पहचान का प्रतिनिधित्व करने वाले दल गहरे संघीय समायोजन की आवाज़ बनते गए।

### Post-liberalisation institutions and GST Council उदारीकरण के बाद की संस्थाएँ और GST परिषद

- AK: States surrendered their sovereignty as much as the Centre to build the grand bargain of GST.  
AK: राज्यों ने जीएसटी के इस बड़े समझौते को बनाने के लिए केंद्र जितनी ही अपनी संप्रभुता छोड़ी।
- Ideally, this should have been discussed within the GST Council before being declared.  
आदर्श रूप से, इसे घोषित करने से पहले GST परिषद में चर्चा होनी चाहिए थी।
- Now, it looks like the Centre takes the call.  
अब ऐसा लगता है कि अंतिम निर्णय केंद्र लेता है।
- Historically, the Planning Commission guided public investments till the 1990s.  
ऐतिहासिक रूप से, 1990 के दशक तक योजना आयोग सार्वजनिक निवेश का मार्गदर्शन करता था।
- Post 2014, it is out of the picture.  
2014 के बाद, यह व्यवस्था से बाहर हो गया।
- **Now, the Finance Commission is the only instrument for Centre-State resource allocation.**  
अब केंद्र-राज्य संसाधन आवंटन का एकमात्र साधन वित्त आयोग है।
- **Horizontal devolution concerns are rising; poorer States depend on fiscal transfers.**  
क्षेत्रीय हस्तांतरण की चिंताएं बढ़ रही हैं; गरीब राज्य राजकोषीय हस्तांतरण पर निर्भर हैं।
- **Southern States question whether they are being penalised due to the inverse-income formula.**  
दक्षिणी राज्य सवाल उठा रहे हैं कि क्या वे 'इनवर्स-इनकम' फॉर्मूला के कारण दंडित हो रहे हैं।
- YI: The core of fiscal federal architecture was redistribution.  
YI: राजकोषीय संघीय संरचना का मूल सिद्धांत पुनर्वितरण था।
- But the Centre has used and misused its powers to centralise decision-making.  
लेकिन केंद्र ने अपने अधिकारों का उपयोग और दुरुपयोग दोनों ही किया है जिससे निर्णय-निर्माण केंद्रीकृत हुआ है।



## Cesses, surcharges and effects on States

### सेस, सरचार्ज और राज्यों पर प्रभाव

- AK: The fiscal structure shows that the Centre is weaker than States today.  
AK: वित्तीय ढांचा दिखाता है कि आज केंद्र राज्यों से अधिक कमजोर स्थिति में है।
- The **Centre borrows heavily and uses 80% of borrowing for revenue expenditure.**  
केंद्र भारी उधारी लेता है और उसका 80% राजस्व व्यय में जाता है।
- **States are now the primary infrastructure builders.**  
अब अवसंरचना chiefly राज्य ही बना रहे हैं।
- Growth hasn't been inclusive; jobless growth persists; regional inequality is rising.  
विकास समावेशी नहीं रहा; नौकरी-विहीन विकास बना हुआ है; क्षेत्रीय असमानता बढ़ रही है।
- YI: **Centre's rising use of cesses & surcharges reflects lack of good faith.**  
YI: केंद्र द्वारा सेस और सरचार्ज का बढ़ता उपयोग उसकी नीयत पर सवाल खड़े करता है।
- Centre is squeezing States and encroaching on their responsibilities through centrally sponsored schemes.  
केंद्र प्रायोजित योजनाओं के माध्यम से केंद्र राज्यों की जिम्मेदारियों में दखल दे रहा है।
- **Without the Planning Commission, the Finance Ministry now decides allocations for centrally sponsored schemes.**  
योजना आयोग के बिना, अब वित्त मंत्रालय ही केंद्र प्रायोजित योजनाओं का आवंटन तय करता है।

## Regional parties and single-party dominance

### क्षेत्रीय पार्टियाँ और एक-दल वर्चस्व

- AK: Regional capital has weakened in the past decade; this affects electoral strategies.  
AK: पिछले दशक में क्षेत्रीय पूंजी कमजोर हुई है; इससे चुनावी रणनीतियों पर प्रभाव पड़ा है।
- **Centralisation has reshaped electoral financing, especially with electoral bonds.**  
केंद्रीकरण ने चुनावी वित्तपोषण को बदल दिया है, विशेषकर इलेक्टोरल बॉन्ड्स से।
- YI: **Earlier coalitions relied heavily on regional parties; governance culture was cooperative.**  
YI: पहले के गठबंधनों में क्षेत्रीय दलों पर भारी निर्भरता थी; शासन की संस्कृति सहयोगात्मक थी।
- Today's governance style is centralized, not deliberative.  
आज शासन शैली केंद्रीकृत है, विचार-विमर्श आधारित नहीं।
- Current NDA regional partners (TDP, JD(U)) are more focused on maintaining regional power than fighting for federalism.  
वर्तमान NDA सहयोगी (TDP, JD(U)) राष्ट्रीय स्तर पर संघवाद की लड़ाई के बजाय अपने क्षेत्रों में सत्ता को सुरक्षित रखने पर अधिक केंद्रित हैं।

## Delimitation and 'one nation, one election'

### सीमा निर्धारण और 'वन नेशन, वन इलेक्शन'

- AK: **Delimitation will give more political power to large, populous States but economic power lies with smaller, wealthier regions.**  
AK: सीमा निर्धारण बड़े आबादी वाले राज्यों को अधिक राजनीतिक शक्ति देगा, जबकि आर्थिक शक्ति छोटे और समृद्ध क्षेत्रों के पास रहेगी।
- Regions with poor economic growth may struggle to wield political influence.  
कमजोर आर्थिक विकास वाले क्षेत्रों को राजनीतिक प्रभाव जमाने में मुश्किल होगी।
- YI: **'One nation, one election' is a tool using the logic of efficiency and public disenchantment.**  
YI: 'वन नेशन, वन इलेक्शन' दक्षता और जनता में बढ़ती असंतुष्टि के तर्क का उपयोग करने वाला एक उपकरण है।
- It is unlikely to solve the challenges the public faces; the real issue is structural challenges in Indian democracy.



यह जनता की वास्तविक समस्याओं का समाधान नहीं करेगा; असली मुद्दा भारतीय लोकतंत्र की संरचनात्मक चुनौतियाँ हैं।

## International Relations

21/11/2025

# 27-member new Nitish Cabinet takes charge; BJP gets 14 berths, JD(U) eight

**GS II: Minister**

**Amit Bhelari**  
PATNA

Janata Dal (United) president Nitish Kumar took oath as the Chief Minister of Bihar for a record 10th time in a grand ceremony here on Thursday.

Governor Arif Mohammad Khan administered the oath of office and secrecy to the 74-year-old leader. Prime Minister Narendra Modi, Union Home Minister Amit Shah, BJP president J.P. Nadda, and a host of other National Democratic Alliance leaders were present.

Besides Mr. Kumar, 26 Cabinet Ministers took the oath of office. Fourteen of them were from the BJP, eight from the Janata Dal (U), two from the Lok Janshakti Party (Ram Vilas),



**Show of unity:** Prime Minister Narendra Modi and Chief Minister Nitish Kumar at the swearing-in ceremony in Patna on Thursday. AFP

and one each from the Hindustani Awam Morcha (Secular) and Rashtriya Lok Morcha (RLM).

There are nine new faces, including Sanjay Kumar Singh of the LJP(RV) who defeated Rashtriya Janata Dal leader Lalu Prasad's son Tej Pratap Yadav in the Mahua constituency. The new Cabinet has one Mus-

lim and three women.

A dozen Ministers, including Nitish Mishra, who was considered the best performing in the previous government as the Industries Minister, have been dropped. Mr. Mishra won the election this time by more than 50,000 votes from Jhanjharpur.

Of the 26 Ministers, 21

are MLAs and four MLCs. A three-day session of the new Assembly will start from November 26, in which the Speaker will be elected and new members will take oath.

Mr. Kumar has made a fine balance of caste equations by giving representation to various sections in the Cabinet – eight from the general category, six each from the Other Backward Classes and Extremely Backward Classes, and five from the Scheduled Castes. Four Rajputs have been inducted, the highest number among castes.

Chief Ministers and Deputy Chief Ministers of several NDA-ruled States attended the swearing-in.

**EDITORIAL**

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## 27-member new Nitish Cabinet takes charge; BJP gets 14 berths, JD(U) eight 27-सदस्यीय नई नीतीश कैबिनेट ने कार्यभार संभाला; BJP को 14 स्थान, JD(U) को आठ

- 27-member new Nitish Cabinet takes charge; BJP gets 14 berths, JD(U) eight  
27-सदस्यीय नई नीतीश कैबिनेट ने कार्यभार संभाला; BJP को 14 स्थान, JD(U) को आठ
- Janata Dal (United) president **Nitish Kumar** took oath as the Chief Minister of Bihar for a record 10th time in a grand ceremony here on Thursday.  
जनता दल (यूनाइटेड) के अध्यक्ष **नीतीश कुमार** ने गुरुवार को यहां एक भव्य समारोह में बिहार के मुख्यमंत्री के रूप में रिकॉर्ड 10वीं बार शपथ ली।
- Governor **Arif Mohammad Khan** administered the oath of office and secrecy to the 74-year-old leader.  
राज्यपाल **आरिफ मोहम्मद खान** ने 74 वर्षीय नेता को पद और गोपनीयता की शपथ दिलाई।
- Prime Minister Narendra Modi, Union Home Minister Amit Shah, BJP president J.P. Nadda, and a host of other National Democratic Alliance leaders were present.



प्रधानमंत्री नरेंद्र मोदी, केंद्रीय गृह मंत्री अमित शाह, BJP अध्यक्ष जे.पी. नड्डा और कई अन्य राष्ट्रीय जनतांत्रिक गठबंधन नेता उपस्थित थे।

- Besides Mr. Kumar, **26 Cabinet Ministers** took the oath of office.  
श्री कुमार के अलावा **26 कैबिनेट मंत्रियों** ने पद की शपथ ली।
- Fourteen of them were from the **BJP**, eight from the **Janata Dal (U)**, two from the **Lok Janshakti Party (Ram Vilas)**, and one each from the **Hindustani Awam Morcha (Secular)** and **Rashtriya Lok Morcha (RLM)**.  
इनमें से 14 **BJP** से, आठ **जनता दल (यू)** से, दो **लोक जनशक्ति पार्टी (राम विलास)** से और एक-एक **हिंदुस्तानी आवाम मोर्चा (सेक्युलर)** तथा **राष्ट्रीय लोक मोर्चा (RLM)** से थे।
- There are **nine new faces**, including Sanjay Kumar Singh of the LJP(RV) who defeated Rashtriya Janata Dal leader Lalu Prasad's son Tej Pratap Yadav in the Mahua constituency.  
इसमें **नौ नए चेहरे** शामिल हैं, जिनमें LJP(RV) के संजय कुमार सिंह भी हैं, जिन्होंने महुआ सीट पर राष्ट्रीय जनता दल नेता लालू प्रसाद के पुत्र तेज प्रताप यादव को हराया।
- The new Cabinet has **one Muslim and three women**.  
नई कैबिनेट में **एक मुस्लिम और तीन महिलाएँ** हैं।
- A dozen Ministers, including **Nitish Mishra**, who was considered the best performing in the previous government as the Industries Minister, have been dropped.  
दर्जन भर मंत्रियों, जिनमें **नीतीश मिश्रा** भी शामिल हैं, जिन्हें पिछली सरकार में उद्योग मंत्री के रूप में सर्वश्रेष्ठ प्रदर्शन करने वाला माना जाता था, को हटा दिया गया है।
- Mr. Mishra won the election this time by more than 50,000 votes from Jhunjharpur.  
श्री मिश्रा इस बार झंझारपुर से 50,000 से अधिक वोटों से जीते।
- Of the 26 Ministers, **21 are MLAs and four MLAs**.  
26 मंत्रियों में से **21 विधायक और चार विधान परिषद सदस्य** हैं।
- A three-day session of the new Assembly will start from November 26, in which the Speaker will be elected and new members will take oath.  
नई विधानसभा का तीन दिवसीय सत्र 26 नवंबर से शुरू होगा, जिसमें अध्यक्ष का चुनाव होगा और नए सदस्य शपथ लेंगे।
- Mr. Kumar has made a fine balance of **caste equations** by giving representation to various sections in the Cabinet — eight from the general category, six each from the Other Backward Classes and Extremely Backward Classes, and five from the Scheduled Castes.  
श्री कुमार ने कैबिनेट में विभिन्न वर्गों को प्रतिनिधित्व देकर **जातीय समीकरणों** का संतुलन बनाया है — आठ सामान्य वर्ग से, छह-छह अन्य पिछड़ी जाति और अत्यंत पिछड़ी जाति से, तथा पाँच अनुसूचित जाति से।
- Four **Rajputs** have been inducted, the highest number among castes.  
चार **राजपूतों** को शामिल किया गया है, जो जातियों में सबसे अधिक संख्या है।
- Chief Ministers and Deputy Chief Ministers of several **NDA-ruled States** attended the swearing-in.  
कई **NDA-शासित राज्यों** के मुख्यमंत्री और उपमुख्यमंत्री शपथ समारोह में शामिल हुए।



# Search on for five declared foreigners by Assam tribunal

GS II: IR

**The Hindu Bureau**  
GUWAHATI

The police in Sonitpur district in northcentral Assam are searching for five people declared non-citizens by a **Foreigners' Tribunal (FT)**, officials said on Thursday.

Hanufa, Mariyam Nessa, Fatema, Monowara, and Amjad Ali, all from Dhobokata village, were declared foreigners *ex parte* on October 24.

The district administration issued separate orders on Wednesday for their expulsion from India within 24 hours.

The orders were issued by Ananda Kumar Das, District Commissioner, under

**The orders directed them to remove themselves 'from the territory of Assam within 24 hours'**

the **Immigrants (Expulsion from Assam) Act, 1950**. These were the earliest orders citing this Act since the State Cabinet approved its implementation earlier this year.

"...being a declared foreigner, your presence in India/Assam is detrimental to the interest of the general public and also for the internal security of the State," each order read. The orders directed them to remove themselves

"from the territory of Assam, India, within 24 hours from receiving this order via the Dhubri/Sribhumu/South Salmara-Manakachar route".

The mention of these routes on the India-Bangladesh border indicated that they may have entered the country from Bangladesh. "Further, you are intimated that in the event of any default in complying with this order, the government would be compelled to take appropriate action to remove you from the territory of the State of Assam, India," the orders read.

"The FT issued the order *ex parte* as the five people never turned up during hearings," Mr. Das said.

## Search on for five declared foreigners by Assam tribunal असम ट्रिब्यूनल द्वारा घोषित पाँच विदेशियों की तलाश जारी

- Search on for five declared foreigners by Assam tribunal असम ट्रिब्यूनल द्वारा घोषित पाँच विदेशियों की तलाश जारी
- The police in Sonitpur district in northcentral Assam are searching for five people declared non-citizens by a **Foreigners' Tribunal (FT)**, officials said on Thursday. उत्तर-मध्य असम के सोनीतपुर जिले की पुलिस **विदेशी न्यायाधिकरण (FT)** द्वारा गैर-नागरिक घोषित पाँच लोगों की तलाश कर रही है, अधिकारियों ने गुरुवार को कहा।
- Hanufa, Mariyam Nessa, Fatema, Monowara, and Amjad Ali, all from Dhobokata village, were declared foreigners **ex parte** on October 24. हनुफ़ा, मरियम नेसा, फ़ातिमा, मनोवरा और अमजद अली—ये सभी धुबोकाटा गांव के निवासी—24 अक्टूबर को **एक्स-पार्टी** घोषित किए गए।
- The district administration issued separate orders on Wednesday for their **expulsion from India within 24 hours**. जिला प्रशासन ने बुधवार को **24 घंटे के भीतर भारत से निष्कासन** के लिए अलग-अलग आदेश जारी किए।
- The orders were issued by **Ananda Kumar Das**, District Commissioner, under the **Immigrants (Expulsion from Assam) Act, 1950**. ये आदेश **आनंद कुमार दास**, जिला आयुक्त, द्वारा **इमिग्रेंट्स (एक्सपल्शन फ़ॉर्म असम) एक्ट, 1950** के तहत जारी किए गए।
- These were the earliest orders citing this Act since the State Cabinet approved its implementation earlier this year.



इस वर्ष की शुरुआत में राज्य कैबिनेट द्वारा इस अधिनियम के कार्यान्वयन को मंजूरी देने के बाद से यह इस अधिनियम का हवाला देने वाले सबसे शुरुआती आदेश हैं।

- "...being a declared foreigner, your presence in India/Assam is detrimental to the interest of the general public and also for the internal security of the State," each order read.  
"...एक घोषित विदेशी होने के नाते, भारत/असम में आपकी उपस्थिति सामान्य जनता के हितों और राज्य की आंतरिक सुरक्षा के लिए हानिकारक है," प्रत्येक आदेश में लिखा था।
- The orders directed them to remove themselves "from the territory of Assam, India, within 24 hours from receiving this order via the **Dhubri/Sribhumi/South Salmara-Mankachar route**".  
आदेशों ने उन्हें निर्देश दिया कि वे इस आदेश को प्राप्त करने के 24 घंटे के भीतर **धुबरी/श्रीभूमि/दक्षिण सालमारा-मनकाचर मार्ग** से "असम, भारत की सीमा से स्वयं को हटाएँ।"
- The mention of these routes on the India-Bangladesh border indicated that they may have entered the country from **Bangladesh**.  
भारत-बांग्लादेश सीमा पर स्थित इन मार्गों का उल्लेख संकेत देता है कि वे संभवतः **बांग्लादेश** से देश में आए थे।
- "Further, you are intimated that in the event of any default in complying with this order, the government would be compelled to take appropriate action to remove you from the territory of the State of Assam, India," the orders read.  
"आगे, आपको सूचित किया जाता है कि यदि आप इस आदेश का पालन करने में कोई चूक करते हैं, तो सरकार आपको असम राज्य की सीमा से हटाने के लिए उचित कार्रवाई करने के लिए बाध्य होगी," आदेशों में लिखा था।
- "The FT issued the order **ex parte** as the five people never turned up during hearings," Mr. Das said.  
"FT ने आदेश **एक्स-पार्टे** जारी किया क्योंकि ये पाँचों लोग सुनवाई के दौरान कभी प्रस्तुत नहीं हुए," श्री दास ने कहा।

## As trade row eases, U.S. clears missile sale to India

GS II: IR: India-US

**The Hindu Bureau**  
NEW DELHI

In a move that further underscores the easing of trade tensions between India and the U.S., the U.S. State Department has approved a possible sale of Javelin missiles and Excalibur projectiles and related equipment to India for an estimated total cost of \$92.8 million, the U.S. Defense Security Cooperation Agency (DSCA) said on Thursday. The DSCA said it had delivered the required certification notifying the U.S. Congress as well of the decisions.

Press releases issued in this connection said the proposed sale would support the foreign policy and national security objectives of the U.S. by bolster-



A file picture of a U.S. soldier firing a Javelin missile. AFP

ing the U.S.-India strategic relationship and improving the security of "a major defence partner which continues to be an important force for political stability, peace, and economic progress in the Indo-Pacific and South Asia regions".

The deals come three days after India announced

the conclusion of the first-ever long-term deal where Indian oil companies would import American LPG into the country.

"The Government of India has requested to buy up to two hundred sixteen (216) M982A1 Excalibur tactical projectiles," a release said. "The proposed sale will improve India's

capability to meet current and future threats by providing precision capability equipment, which will increase first strike accuracy in its brigades. India will have no difficulty absorbing these articles and services into its armed forces."

In a separate release, the DSCA said India had requested to buy 100 FGM-148 Javelin rounds, one Javelin FGM-148 missile and 25 Javelin Lightweight Command Launch Units (LwCLU) or Javelin Block 1 Command Launch Units (CLU).

The release added that the sale of Javelin missiles to India would "strengthen its homeland defence and deter regional threats".

The Excalibur deal is for \$47.1 million and the Jave-

lin deal is for \$45.7 million.

The sixth round of formal negotiations on a Bilateral Trade Agreement (BTA) – earlier meant to have taken place in the last week of August – took place in October. Indian government officials and Ministers have again started talking about the conclusion of the first tranche of the BTA soon.

The DSCA release added the Excalibur deal would also include the supply of ancillary items, Portable Electronic Fire Control Systems with Improved Platform Integration Kit (iPIK), primers, propellant charges, U.S. Government technical assistance, technical data, repair and return services, and other related elements of logistics and programme support.



## As trade row eases, U.S. clears missile sale to India व्यापार विवाद कम होने पर, अमेरिका ने भारत को मिसाइल बिक्री को मंजूरी दी

- As trade row eases, U.S. clears missile sale to India  
व्यापार विवाद कम होने पर, अमेरिका ने भारत को मिसाइल बिक्री को मंजूरी दी
- In a move that further underscores the easing of trade tensions between India and the U.S., the U.S. State Department has approved a possible sale of **Javelin missiles and Excalibur projectiles** and related equipment to India for an estimated total cost of **\$92.8 million**, the **U.S. Defense Security Cooperation Agency (DSCA)** said on Thursday.  
भारत और अमेरिका के बीच व्यापार तनाव कम होने को दर्शाते हुए, अमेरिकी विदेश विभाग ने **जैवलिन मिसाइलें और एक्सकैलिबर प्रोजेक्टाइल** तथा संबंधित उपकरण भारत को लगभग \$92.8 मिलियन की अनुमानित लागत पर संभावित बिक्री को मंजूरी दी है, अमेरिकी रक्षा सुरक्षा सहयोग एजेंसी (DSCA) ने गुरुवार को कहा।
- The DSCA said it had delivered the required certification notifying the U.S. Congress as well of the decisions.  
DSCA ने कहा कि उसने अमेरिकी कांग्रेस को भी निर्णयों की सूचना देने वाला आवश्यक प्रमाणपत्र भेज दिया है।
- Press releases issued in this connection said the proposed sale would support the foreign policy and national security objectives of the U.S. by bolstering the **U.S.-India strategic relationship** and improving the security of “a major defence partner which continues to be an important force for political stability, peace, and economic progress in the Indo-Pacific and South Asia regions”.  
इस संबंध में जारी प्रेस विज्ञप्तियों में कहा गया कि यह प्रस्तावित बिक्री **अमेरिका-भारत रणनीतिक संबंध** को मजबूत करके अमेरिकी विदेश नीति और राष्ट्रीय सुरक्षा उद्देश्यों का समर्थन करेगी और “एक प्रमुख रक्षा साझेदार की सुरक्षा में सुधार करेगी, जो इंडो-पैसिफिक और दक्षिण एशिया क्षेत्रों में राजनीतिक स्थिरता, शांति और आर्थिक प्रगति के लिए एक महत्वपूर्ण शक्ति बना हुआ है।”
- The deals come three days after India announced the conclusion of the first-ever long-term deal where Indian oil companies would import American LPG into the country.  
यह सौदा उस घोषणा के तीन दिन बाद आया जब भारत ने पहली बार दीर्घकालिक समझौता पूरा होने की घोषणा की, जिसके तहत भारतीय तेल कंपनियाँ अमेरिकी LPG का आयात करेंगी।
- “The Government of India has requested to buy up to **two hundred sixteen (216) M982A1 Excalibur tactical projectiles**,” a release said.  
“भारत सरकार ने दो सौ सोलह (216) **M982A1 एक्सकैलिबर टैक्टिकल प्रोजेक्टाइल** खरीदने का अनुरोध किया है,” एक विज्ञप्ति में कहा गया।
- “The proposed sale will improve India’s capability to meet current and future threats by providing precision capability equipment, which will increase first strike accuracy in its brigades. India will have no difficulty absorbing these articles and services into its armed forces.”  
“प्रस्तावित बिक्री भारत की वर्तमान और भविष्य की खतरों का सामना करने की क्षमता में सुधार करेगी, क्योंकि इससे सटीक मार क्षमता वाले उपकरण मिलेंगे, जो उसकी ब्रिगेड्स में प्रथम प्रहार की सटीकता बढ़ाएँगे। भारत को इन वस्तुओं और सेवाओं को अपनी सशस्त्र सेनाओं में सम्मिलित करने में कोई कठिनाई नहीं होगी।”
- In a separate release, the DSCA said India had requested to buy **100 FGM-148 Javelin rounds**, one Javelin FGM-148 missile and **25 Javelin Lightweight Command Launch Units (LwCLU) or Javelin Block 1 Command Launch Units (CLU)**.  
एक अलग विज्ञप्ति में DSCA ने कहा कि भारत ने **100 FGM-148 जैवलिन राउंड**, एक जैवलिन FGM-148 मिसाइल और **25 जैवलिन लाइटवेट कमांड लॉन्च यूनिट (LwCLU) या जैवलिन ब्लॉक 1 कमांड लॉन्च यूनिट (CLU)** खरीदने का अनुरोध किया है।
- The release added that the sale of Javelin missiles to India would “**strengthen its homeland defence and deter regional threats**”.



विज्ञप्ति में यह भी कहा गया कि जैवलिन मिसाइलों की बिक्री भारत की “होमलैंड डिफेंस को मजबूत करेगी और क्षेत्रीय खतरों को रोकने में मदद करेगी।”

- The Excalibur deal is for **\$47.1 million** and the Javelin deal is for **\$45.7 million**.  
एक्सकैलिबर सौदा **\$47.1 मिलियन** का है और जैवलिन सौदा **\$45.7 मिलियन** का है।
- The sixth round of formal negotiations on a **Bilateral Trade Agreement (BTA)** — earlier meant to have taken place in the last week of August — took place in October.  
**द्विपक्षीय व्यापार समझौते (BTA)** पर औपचारिक वार्ता का छठा दौर — जो अगस्त के अंतिम सप्ताह में होना था — अक्टूबर में हुआ।
- Indian government officials and Ministers have again started talking about the conclusion of the first tranche of the BTA soon.  
भारतीय सरकारी अधिकारियों और मंत्रियों ने जल्द ही BTA की पहली किस्त के निष्कर्ष पर फिर से बात करना शुरू कर दिया है।
- The DSCA release added the Excalibur deal would also include the supply of ancillary items, **Portable Electronic Fire Control Systems**, Improved Platform Integration Kit (iPIK), primers, propellant charges, U.S. Government technical assistance, technical data, repair and return services, and other related elements of logistics and programme support.

DSCA की विज्ञप्ति में यह भी जोड़ा गया कि एक्सकैलिबर सौदे में सहायक वस्तुओं की आपूर्ति भी शामिल होगी, जिनमें **पोर्टेबल इलेक्ट्रॉनिक फायर कंट्रोल सिस्टम**, उन्नत प्लेटफॉर्म इंटीग्रेशन किट (iPIK), प्राइमर, प्रोपेलेंट चार्ज, अमेरिकी सरकार की तकनीकी सहायता, तकनीकी डेटा, मरम्मत एवं पुनःप्रेषण सेवाएँ, और लॉजिस्टिक्स एवं कार्यक्रम समर्थन के अन्य संबंधित तत्व शामिल हैं।

## Ajit Doval hosts seventh meeting of Colombo Security Conclave in Delhi

**GS II: IR: India-Neighbours**  
**Kallol Bhattacharjee**  
NEW DELHI

At the seventh National Security Adviser-level meeting of the Colombo Security Conclave held here on Thursday, the member states focused on five pillars of cooperation that included radicalisation and organised crime.

The member states also agreed to enhance cooperation through training and capacity building.

The meeting, hosted by National Security Adviser Ajit Doval, included a comprehensive review of the security situation in the Indian Ocean Region and called for cooperation under five pillars of cooperation: “maritime safety and security, countering terrorism and radicalisation, combating trafficking and transnational organised crime, cyber security and protection of critical infrastructure and technology and humanitarian assis-



National Security Adviser Ajit Doval, with NSAs of other countries, including the **Maldives, Mauritius, Sri Lanka and Bangladesh**, at a meeting in New Delhi on Thursday. ANI

tance and disaster relief,” the Ministry of External Affairs said in a statement.

The member states at the event were led by Ibrahim Latheef, National Security Adviser of Maldives, Rahul Rasgotra, National Security Adviser of Mauritius, Air Vice Marshal Sampath Thuyacontha (Retd.), Secretary of Ministry of Defence of Sri Lanka, and Dr. Khalilur Rahman, National

Security Adviser of Bangladesh.

Major General Michael Rosette, Chief of Defence Forces of Seychelles Defence Forces, led the delegation from the Seychelles that joined the Colombo Security Conclave as a full member.

The Malaysian team that participated as a guest country for the first time was represented by Badrul

Shah Mohd. Idris, Deputy Director-General of the Malaysian National Security Council.

“The CSC member states also discussed enhancing cooperation under identified pillars, including through training and capacity building. They reiterated their commitment to the vision and objectives of CSC,” the MEA said.



## Ajit Doval hosts seventh meeting of Colombo Security Conclave in Delhi अजीत डोभाल ने दिल्ली में कोलंबो सिक्योरिटी कॉन्क्लेव की सातवीं बैठक की मेजबानी की

- Ajit Doval hosts seventh meeting of **Colombo Security Conclave** in Delhi  
अजीत डोभाल ने दिल्ली में कोलंबो सिक्योरिटी कॉन्क्लेव की सातवीं बैठक की मेजबानी की
- At the seventh National Security Adviser-level meeting of the **Colombo Security Conclave** held here on Thursday, the **member states focused on five pillars of cooperation that included radicalisation and organised crime.**  
गुरुवार को यहां आयोजित **कोलंबो सिक्योरिटी कॉन्क्लेव** की सातवीं राष्ट्रीय सुरक्षा सलाहकार-स्तरीय बैठक में सदस्य देशों ने सहयोग के पाँच स्तंभों पर ध्यान केंद्रित किया, जिनमें उग्रवाद और संगठित अपराध शामिल थे।
- The member states also agreed to enhance cooperation through **training and capacity building.**  
सदस्य देशों ने **प्रशिक्षण और क्षमता निर्माण** के माध्यम से सहयोग बढ़ाने पर भी सहमति व्यक्त की।
- The meeting, hosted by National Security Adviser **Ajit Doval**, included a comprehensive review of the security situation in the **Indian Ocean Region** and called for cooperation under five pillars of cooperation: “maritime safety and security, countering terrorism and radicalisation, combating trafficking and transnational organised crime, cyber security and protection of critical infrastructure and technology and humanitarian assistance and disaster relief,” the Ministry of External Affairs said in a statement.  
राष्ट्रीय सुरक्षा सलाहकार **अजीत डोभाल** द्वारा आयोजित इस बैठक में **हिंद महासागर क्षेत्र** में सुरक्षा स्थिति की व्यापक समीक्षा की गई और पाँच स्तंभों के तहत सहयोग का आह्वान किया गया: “समुद्री सुरक्षा और संरक्षण, आतंकवाद और उग्रवाद का मुकाबला, तस्करी और अंतरराष्ट्रीय संगठित अपराध से लड़ना, साइबर सुरक्षा और महत्वपूर्ण अवसंरचना व प्रौद्योगिकी की सुरक्षा, तथा मानवीय सहायता और आपदा राहत,” विदेश मंत्रालय ने एक बयान में कहा।
- The member states at the event were led by Ibrahim Latheef, National Security Adviser of Maldives, Rahul Rasgotra, National Security Adviser of Mauritius, Air Vice Marshal Sampath Thuyacontha (Retd.), Secretary of Ministry of Defence of Sri Lanka, and Dr. Khalilur Rahman, National Security Adviser of Bangladesh.  
कार्यक्रम में सदस्य देशों का नेतृत्व मालदीव के राष्ट्रीय सुरक्षा सलाहकार इब्राहिम लतीफ, मॉरीशस के राष्ट्रीय सुरक्षा सलाहकार राहुल रसगोत्रा, एयर वाइस मार्शल संपथ थुयकोथा (सेवानिवृत्त), श्रीलंका के रक्षा मंत्रालय के सचिव, और बांग्लादेश के राष्ट्रीय सुरक्षा सलाहकार डॉ. खलीलुर रहमान ने किया।
- Major General **Michael Rosette**, Chief of Defence Forces of Seychelles Defence Forces, led the delegation from Seychelles that joined the Colombo Security Conclave as a **full member.**  
**मेजर जनरल माइकल रोसेट**, सेशेल्स रक्षा बलों के रक्षा प्रमुख, ने सेशेल्स के प्रतिनिधिमंडल का नेतृत्व किया, जो कोलंबो सिक्योरिटी कॉन्क्लेव में **पूर्ण सदस्य** के रूप में शामिल हुआ।
- The Malaysian team that participated as a **guest country** for the first time was represented by Badrul Shah Mohd. Idris, Deputy Director-General of the Malaysian National Security Council.  
पहली बार **अतिथि देश** के रूप में भाग लेने वाली मलेशियाई टीम का प्रतिनिधित्व बदरुल शाह मोहम्मद इदरीस, मलेशियाई राष्ट्रीय सुरक्षा परिषद के उप-महानिदेशक ने किया।
- “The CSC member states also discussed enhancing cooperation under identified pillars, including through training and capacity building. They reiterated their commitment to the vision and objectives of CSC,” the MEA said.  
“CSC सदस्य देशों ने पहचाने गए स्तंभों के तहत सहयोग बढ़ाने पर भी चर्चा की, जिसमें प्रशिक्षण और क्षमता निर्माण भी शामिल है। उन्होंने CSC की दृष्टि और उद्देश्यों के प्रति अपनी प्रतिबद्धता दोहराई,” विदेश मंत्रालय ने कहा।

### Colombo Security Conclave

- Colombo Security Conclave (CSC) is a mini-lateral regional security framework in the Indian Ocean Region



- It brings together India and its maritime neighbours to cooperate on common security challenges such as maritime safety, terrorism, cyber threats and transnational crime
- Initially started as a trilateral maritime security initiative among India, Sri Lanka and Maldives in 2011; later revived and expanded as the “Colombo Security Conclave” around 2020

### **Origin and Evolution**

- Started as a trilateral Meeting on Maritime Security between India, Sri Lanka and Maldives in 2011 to coordinate patrols, information-sharing and maritime domain awareness in the Indian Ocean
- The mechanism slowed after 2014 due to political changes and regional frictions. It was revived and rebranded as “Colombo Security Conclave” around 2020, with a broader agenda beyond only maritime issues
- Mauritius joined as a member at the 5th NSA-level meeting in March 2022 in Maldives  
Bangladesh was officially welcomed as the 5th member at the 8th Deputy NSA-level meeting on 10 July 2024
- Seychelles, earlier an observer, was admitted as the 6th member at the 7th NSA-level meeting in New Delhi on 20 November 2025

### **Present Membership and Structure (as of November 2025)**

- Member States
- India
- Sri Lanka
- Maldives
- Mauritius
- Bangladesh
- Seychelles



# India, Israel ink terms of reference for trade talks

**GS II: IR: India-West Asia**

**Press Trust of India**

TEL AVIV

India and Israel on Thursday inked Terms of Reference to formally launch negotiations for a free trade agreement, Union Minister Piyush Goyal said.

The ToR include market access for goods by eliminating tariff and non-tariff barriers, investment facilitation, simplification of customs procedures, increasing cooperation for innovation and technology transfer, and easing norms to promote trade in services. "We have signed the ToRs today. Now we will soon finalise the dates for starting the negotiations for that," Mr. Goyal said.

He is leading a 60-member business delegation to Israel.



Union Minister Piyush Goyal with Minister of Economy and Industry of Israel Nir Barkat in Tel Aviv-Yafo on Thursday. X/@PIYUSHGOYAL

He will meet leaders and businesses to discuss ways to boost bilateral trade and investments.

The TOR was signed by Mr. Goyal and Israeli Economy and Industry Minister Nir Barkat. Mr. Goyal

said that the Israeli side has conveyed that they will not seek market access in sensitive areas such as dairy, rice, wheat and sugar.

India is Israel's second-largest trading partner in Asia.

## India, Israel ink terms of reference for trade talks

### भारत, इज़राइल ने व्यापार वार्ताओं के लिए टर्म्स ऑफ़ रेफरेंस पर हस्ताक्षर किए

- India, Israel ink terms of reference for trade talks  
भारत, इज़राइल ने व्यापार वार्ताओं के लिए टर्म्स ऑफ़ रेफरेंस पर हस्ताक्षर किए  
India and Israel on Thursday inked **Terms of Reference** to formally launch negotiations for a **free trade agreement**, Union Minister Piyush Goyal said.  
भारत और इज़राइल ने गुरुवार को **टर्म्स ऑफ़ रेफरेंस** पर हस्ताक्षर किए ताकि **मुक्त व्यापार समझौते** के लिए औपचारिक रूप से वार्ता शुरू की जा सके, केंद्रीय मंत्री पीयूष गौयल ने कहा।
- The ToR include market access for goods by eliminating tariff and non-tariff barriers, investment facilitation, simplification of **customs procedures, increasing cooperation for innovation and technology transfer, and easing norms to promote trade in services.**  
ToR में वस्तुओं के लिए बाज़ार पहुंच बढ़ाने हेतु शुल्क और गैर-शुल्क बाधाओं को हटाना, निवेश सुविधा, सीमा शुल्क प्रक्रियाओं को सरल बनाना, नवाचार और प्रौद्योगिकी हस्तांतरण के लिए सहयोग बढ़ाना, तथा सेवाओं के व्यापार को बढ़ावा देने के लिए मानदंडों में ढील शामिल है।
- "We have signed the ToRs today. Now we will soon finalise the dates for starting the negotiations for that," Mr. Goyal said.  
"हमने आज ToRs पर हस्ताक्षर किए हैं। अब हम जल्द ही वार्ता शुरू करने की तिथियाँ अंतिम रूप देंगे," श्री गौयल ने कहा।
- He is leading a **60-member business delegation** to Israel.  
वह इज़राइल के लिए **60-सदस्यीय व्यापार प्रतिनिधिमंडल** का नेतृत्व कर रहे हैं।



- He will meet leaders and businesses to discuss ways to boost bilateral trade and investments.  
वह नेताओं और व्यवसायिक समूहों से मिलकर द्विपक्षीय व्यापार और निवेश बढ़ाने के तरीकों पर चर्चा करेंगे।
- The TOR was signed by Mr. Goyal and Israeli Economy and Industry Minister **Nir Barkat**.  
TOR पर श्री गोयल और इज़राइल के अर्थव्यवस्था एवं उद्योग मंत्री **निर बरकात** ने हस्ताक्षर किए।
- Mr. Goyal said that the **Israeli side has conveyed that they will not seek market access in sensitive areas such as dairy, rice, wheat and sugar.**  
श्री गोयल ने कहा कि इज़राइली पक्ष ने सूचित किया है कि वे **डेयरी, चावल, गेहूँ और चीनी** जैसे संवेदनशील क्षेत्रों में बाज़ार पहुँच नहीं मांगेंगे।
- **India is Israel's second-largest trading partner in Asia.**  
भारत एशिया में इज़राइल का **दूसरा सबसे बड़ा व्यापारिक साझेदार** है।

# Mizoram govt. completes biometric enrolment of 58% of Myanmar refugees

**GS II: IR: Refugee Issue**

**The Hindu Bureau**  
GUWAHATI

The Mizoram government has completed the biometric enrolment of 58.15% of the 31,214 asylum seekers from Myanmar sheltered across the State's 11 districts, officials in Aizawl said on Wednesday.

The authorities have also collected the biometric and biographic data of 10.84% of the 2,354 refugees from Bangladesh's Chittagong Hill Tracts (CHT), the officials said.

The exercise has been affected by slow or no Internet connectivity and difficulty in identifying the refugees living outside the designated relief camps. However, the achievement so far is deemed significant because of the State government's earlier stand that collecting the biometrics would amount to "discrimination against people who are our blood and kindred brothers and sisters".

Chin people from Myanmar have been trickling into Mizoram since the military coup in the neighbouring country in February 2021. The Bawms



**Collecting information:** The exercise has been affected by slow or absent Internet connectivity. FILE PHOTO

from the Chittagong Hill Tracts began taking shelter in Mizoram after a military offensive by the Bangladesh armed forces a year later.

### **Ethnically related**

The Chins and Bawms are ethnically related to the majority Mizos of Mizoram. The State also houses almost 7,000 people displaced by the ethnic conflict in Manipur.

The biometric enrolment of refugees from Myanmar and Bangladesh began in July, following an order by the Ministry of Home Affairs. It is being carried out through the foreigners' identification portal.

Officials in Mizoram said a majority of the Chin refugees from Myanmar reside in Champhai district. Most of the Bawms from the CHT have taken refuge in Lawngtlai district.

"Topographical and technical issues are hampering the exercise, apart from slow or absence of Internet connectivity in remote areas along the international borders. Another problem is the identification of refugees residing outside the designated relief camps," a senior Home Department official said.

Many refugees from both countries have been living with their relatives or friends, or in rental accommodations.



## Mizoram govt. completes biometric enrolment of 58% of Myanmar refugees मिज़ोरम सरकार ने म्यांमार शरणार्थियों के 58% का बायोमेट्रिक पंजीकरण पूरा किया

- Mizoram govt. completes biometric enrolment of 58% of Myanmar refugees  
मिज़ोरम सरकार ने म्यांमार शरणार्थियों के 58% का बायोमेट्रिक पंजीकरण पूरा किया
- The Mizoram government has completed the biometric enrolment of **58.15%** of the **31,214 asylum seekers from Myanmar** sheltered across the State's 11 districts, officials in Aizawl said on Wednesday.  
मिज़ोरम सरकार ने बुधवार को कहा कि राज्य के 11 जिलों में रह रहे म्यांमार के **31,214 शरणार्थियों में से 58.15%** का बायोमेट्रिक पंजीकरण पूरा कर लिया गया है।
- The authorities have also collected the biometric and biographic data of **10.84%** of the **2,354 refugees from Bangladesh's Chittagong Hill Tracts (CHT)**, the officials said.  
अधिकारियों ने यह भी कहा कि बांग्लादेश के चिटगोंग हिल ट्रैक्ट्स (CHT) से आए **2,354 शरणार्थियों में से 10.84%** का बायोमेट्रिक और बायोग्राफिक डेटा भी एकत्र किया गया है।
- The exercise has been affected by slow or no Internet connectivity and difficulty in identifying the refugees living outside the designated relief camps.  
यह प्रक्रिया धीमी या अनुपस्थित इंटरनेट कनेक्टिविटी और निर्धारित राहत शिविरों के बाहर रहने वाले शरणार्थियों की पहचान में कठिनाई के कारण प्रभावित हुई है।
- However, the achievement so far is deemed significant because of the State government's earlier stand that collecting the biometrics would amount to "**discrimination** against people who are our blood and kindred brothers and sisters".  
हालांकि, यह उपलब्धि महत्वपूर्ण मानी जा रही है क्योंकि राज्य सरकार पहले कह चुकी थी कि बायोमेट्रिक एकत्र करना "हमारे रक्त संबंधी भाइयों और बहनों के खिलाफ भेदभाव" होगा।
- **Chin people from Myanmar** have been trickling into Mizoram since the **military coup** in the neighbouring country in February 2021.  
म्यांमार के **चिन समुदाय** के लोग फरवरी 2021 में हुए **सैन्य तख्तापलट** के बाद से मिज़ोरम आ रहे हैं।
- **The Bawms from the Chittagong Hill Tracts began** taking shelter in Mizoram after a military offensive by the **Bangladesh armed forces** a year later.  
चिटगोंग हिल ट्रैक्ट्स के **बॉम समुदाय** ने एक वर्ष बाद **बांग्लादेश की सशस्त्र सेनाओं** द्वारा सैन्य अभियान चलाने के बाद मिज़ोरम में शरण लेनी शुरू की।

### Ethnically related जातीय रूप से संबंधित

- The Chins and Bawms are ethnically related to the majority **Mizos** of Mizoram. The State also houses almost **7,000 people displaced** by the ethnic conflict in Manipur.  
चिन और बॉम समुदाय मिज़ोरम के बहुसंख्यक **मिज़ो** समुदाय से जातीय रूप से संबंधित हैं। राज्य में मणिपुर के जातीय संघर्ष से विस्थापित लगभग **7,000 लोग** भी रह रहे हैं।
- The biometric enrolment of refugees from Myanmar and Bangladesh began in **July**, following an order by the **Ministry of Home Affairs**.  
म्यांमार और बांग्लादेश के शरणार्थियों का बायोमेट्रिक पंजीकरण **जुलाई** में **गृह मंत्रालय** के आदेश के बाद शुरू हुआ।
- It is being carried out through the **foreigners' identification portal**.  
यह प्रक्रिया **विदेशी पहचान पोर्टल** के माध्यम से की जा रही है।
- Officials in Mizoram said a majority of the Chin refugees from Myanmar reside in **Champhai district**.  
मिज़ोरम के अधिकारियों ने कहा कि म्यांमार के अधिकांश चिन शरणार्थी **चांफाई जिले** में रहते हैं।
- Most of the Bawms from the CHT have taken refuge in **Lawngtlai district**.  
CHT के अधिकांश बॉम शरणार्थियों ने **लॉन्गतालाई जिले** में शरण ली है।
- "Topographical and technical issues are hampering the exercise, apart from slow or absence of Internet connectivity in remote areas along the international borders. Another problem is the identification of refugees residing outside the designated relief camps," a senior Home Department official said.



“अंतरराष्ट्रीय सीमाओं के पास दूरस्थ क्षेत्रों में धीमी या अनुपस्थित इंटरनेट कनेक्टिविटी के अलावा, **भौगोलिक और तकनीकी समस्याएँ** प्रक्रिया में बाधा डाल रही हैं। एक और समस्या यह है कि निर्धारित राहत शिविरों के बाहर रह रहे शरणार्थियों की पहचान करना मुश्किल है,” गृह विभाग के एक वरिष्ठ अधिकारी ने कहा।

- Many refugees from both countries have been living with their relatives or friends, or in rental accommodations.  
दोनों देशों से आए कई शरणार्थी अपने रिश्तेदारों या दोस्तों के साथ, या किराये के मकानों में रह रहे हैं।

## Loan approved by the ADB to upgrade Pakistan's power grid

GS II: IR: International Institutions:

**330** in \$ million. Pakistan will receive a \$330 million loan to upgrade its energy grid, which will help hydropower reach cities, the **Asian Development Bank** said. The country faces chronic power outages, and soaring electricity costs. AFP

## Loan approved by the ADB to upgrade Pakistan's power grid पाकिस्तान की पावर ग्रिड को उन्नत करने के लिए एडीबी द्वारा स्वीकृत ऋण

- Loan approved by the ADB to upgrade Pakistan's power grid पाकिस्तान की पावर ग्रिड को उन्नत करने के लिए एडीबी द्वारा स्वीकृत ऋण
- 330 in \$ million. Pakistan will receive a \$330 million loan to upgrade its energy grid, which will help hydropower reach cities, the **Asian Development Bank** said.  
330 मिलियन डॉलर। पाकिस्तान अपनी ऊर्जा ग्रिड को उन्नत करने के लिए 330 मिलियन डॉलर का ऋण प्राप्त करेगा, जिससे जलविद्युत शहरों तक पहुंचने में मदद मिलेगी, एशियाई विकास बैंक ने कहा।

The country faces chronic power outages, and soaring electricity costs.  
देश गंभीर बिजली कटौती और बढ़ती बिजली लागत का सामना कर रहा है।

## Asian Development Bank (ADB)

- Asian Development Bank (ADB) is a **regional multilateral development bank** established in **1966** to promote **economic growth, poverty reduction, and regional cooperation** in the **Asia-Pacific region**.
- Its headquarters is in **Manila, Philippines**.
- It works mainly through providing **loans, grants, technical assistance, and policy advice** to developing member countries.

### Membership

- Total members: **68 countries**
- **49** from the Asia-Pacific region
- **19** from outside the region
- India is a **founding member** of ADB (1966)

Major shareholders

- **Japan and the United States** (largest shareholders)
- **China, India, and Australia** (significant shareholders)



## Objectives of ADB

- Promote sustainable economic development
- Reduce poverty through inclusive growth
- Support infrastructure development
- Strengthen social sector and human development
- Improve climate resilience and environmental protection
- Enhance regional connectivity and trade facilitation

## 4. Key Focus Areas

ADB's current strategy is guided by “Strategy 2030”, which focuses on:

- Tackling **climate change** and enhancing climate resilience
- Promoting **inclusive economic growth**
- Advancing **gender equality**
- Supporting **urban development** and smart cities
- Enhancing **rural development** and food security
- Strengthening **health systems** (post-COVID reforms)
- Improving **digital infrastructure** and e-governance

ADB has committed that by **2030**, at least **75%** of its operations will support climate action and environmental sustainability.

### VIENNA

#### IAEA passes resolution demanding Iran's cooperation on nuclear sites

GS II: IR: International Institutions



The International Atomic Energy Agency (IAEA) Board on Thursday passed a resolution demanding Iran's full cooperation and access to nuclear sites. Iran rejected it, accusing Western nations of politicising the agency. The IAEA says Iran's enriched uranium stockpile nears weapons-grade, urging renewed inspections. AFP

है।

#### IAEA passes resolution demanding Iran's cooperation on nuclear sites परमाणु स्थलों पर ईरान के सहयोग की मांग करते हुए IAEA ने प्रस्ताव पारित किया

- The International Atomic Energy Agency (IAEA) Board on Thursday passed a resolution demanding Iran's full cooperation and access to nuclear sites. गुरुवार को अंतरराष्ट्रीय परमाणु ऊर्जा एजेंसी (IAEA) बोर्ड ने एक प्रस्ताव पारित किया जिसमें ईरान से पूर्ण सहयोग और उसके परमाणु स्थलों तक पहुंच की मांग की गई।
- Iran rejected it, accusing Western nations of politicising the agency. ईरान ने इसे खारिज कर दिया और पश्चिमी देशों पर एजेंसी को राजनीतिक बनाने का आरोप लगाया।
- The IAEA says Iran's enriched uranium stockpile nears weapons-grade, urging renewed inspections. IAEA का कहना है कि ईरान का समृद्ध यूरेनियम भंडार हथियार-ग्रेड स्तर के करीब पहुंच रहा है, इसलिए नई जांच की आवश्यकता



<b>GS Paper III: Economy, S&amp;T, Environment, DM, &amp;IS</b>	
<b>TOPICS COVERED</b>	<b>21_11_2025</b>
	<b>Economy</b>
1.	<b>In pre-Budget meet, trade unions seek inheritance tax, higher corporate tax</b> प्री-बजट बैठक में ट्रेड यूनियनों ने इनहेरिटेन्स टैक्स और उच्च कॉर्पोरेट टैक्स की मांग की
2.	<b>India's fisheries and aquaculture, its promising course</b> भारत की मत्स्य पालन और जलीय कृषि, इसका उभरता हुआ मार्ग
3.	<b>Eight core sectors put up worst ever show in 14 months</b> आठ कोर सेक्टर्स ने 14 महीनों में सबसे खराब प्रदर्शन किया
	<b>S&amp;T</b>
4.	<b>Pharmacogenomics: reading genes to tailor prescriptions for individuals</b> फार्माकोजीनोमिक्स: व्यक्तियों के लिए अनुकूलित दवाओं हेतु जीन पढ़ना
5.	<b>What are Acanthosis nigricans and how it may be a warning sign for prediabetes and diabetes?</b> एकैंथोसिस नाइग्रिकन्स क्या है और यह प्रीडायबिटीज़ एवं डायबिटीज़ का चेतावनी संकेत कैसे हो सकता है?
	<b>Environment</b>
6.	<b>At COP, India seeks 'just transition mechanism'</b> COP में, भारत ने 'जस्ट ट्रांजिशन मैकेनिज़्म' की मांग की
7.	<b>India's fisheries and aquaculture, its promising course</b> भारत की मत्स्य पालन और जलीय कृषि, इसका उभरता हुआ मार्ग



8.

**Why are stone quarries expanding in Kerala?**  
केरल में पत्थर की खदानें क्यों बढ़ रही हैं?

## In pre-Budget meet, trade unions seek inheritance tax, higher corporate tax

**GS III: Economy:**  
**Taxation**

NEW DELHI

Leaders of various trade unions met Union Finance Minister Nirmala Sitharaman here on Thursday for the customary pre-Budget consultations and submitted a memorandum demanding that resource mobilisation has to be done by increasing corporate tax and wealth tax and introducing inheritance tax instead of burdening common masses with the Goods and Services Tax on essential food items and medicine.

They urged Ms. Sitharaman to raise the ceiling of income tax for salaried classes and remove the ceiling on gratuity. While 10 Central Trade Unions submitted a joint memorandum, the Bharatiya Mazdoor Sangh presented a set of demands separately.

The trade union leaders urged the Finance Minister to focus on improving the purchasing power of the common people in the country and to make efforts to enhance the domestic demand. They said the tax structure could be



**Customary meet:** Union Finance Minister Nirmala Sitharaman with representatives of trade unions in New Delhi on Thursday. ANI

changed to help the working people and the coverage of social security mechanisms must be expanded looking at the overall insecurity in society. They said wage agreements were not implemented even in public undertakings, and asked the Centre to increase spending in the social sector.

### On scheme workers

On the status of about one crore scheme workers in the country, the BMS memorandum said the Union and State governments must recognise these workers as its staff considering the permanent and essential nature of their duties. "We suggest that until reg-

ularisation is done, the government should increase their honorarium, which has not been revised since 2018 despite significant inflation," the BMS said. The unions said in their memorandum that the 45th Indian Labour Conference had recommended "worker status" for all scheme workers, but it was not implemented yet.

They noted that the wealth inequality in the country has reached "an obscene level". Demanding that the new pension scheme be scrapped and the old pension scheme restored, they said the minimum provident pension must be enhanced from ₹1,000 to ₹9,000 and it should be linked with DA.



## In pre-Budget meet, trade unions seek inheritance tax, higher corporate tax प्री-बजट बैठक में ट्रेड यूनियनों ने इनहेरिटेन्स टैक्स और उच्च कॉर्पोरेट टैक्स की मांग की

- In pre-Budget meet, trade unions seek inheritance tax, higher corporate tax  
प्री-बजट बैठक में ट्रेड यूनियनों ने इनहेरिटेन्स टैक्स और उच्च कॉर्पोरेट टैक्स की मांग की
- Leaders of various trade unions met Union Finance Minister **Nirmala Sitharaman** here on Thursday for the customary pre-Budget consultations and submitted a memorandum demanding that resource mobilisation has to be done by increasing **corporate tax and wealth tax and introducing inheritance tax instead of burdening common masses with the Goods and Services Tax on essential food items and medicine.**  
विभिन्न ट्रेड यूनियनों के नेताओं ने गुरुवार को केंद्रीय वित्त मंत्री **निर्मला सीतारमण** से पारंपरिक प्री-बजट विचार-विमर्श के लिए मुलाकात की और एक ज्ञापन सौंपा जिसमें मांग की गई कि संसाधन जुटाने के लिए कॉर्पोरेट टैक्स और वेल्थ टैक्स बढ़ाया जाए और इनहेरिटेन्स टैक्स लागू किया जाए, न कि आम जनता पर आवश्यक खाद्य पदार्थों और दवाओं पर जीएसटी का बोझ डाला जाए।
- They urged Ms. Sitharaman to raise the ceiling of income tax for salaried classes and remove the ceiling on gratuity.  
उन्होंने श्रीमती सीतारमण से वेतनभोगी वर्ग के लिए इनकम टैक्स की सीमा बढ़ाने और ग्रेच्युइटी की सीमा हटाने का आग्रह किया।
- While 10 Central Trade Unions submitted a joint memorandum, the **Bharatiya Mazdoor Sangh (BMS)** presented a set of demands separately.  
जहाँ 10 केंद्रीय ट्रेड यूनियनों ने संयुक्त ज्ञापन दिया, वहीं **भारतीय मजदूर संघ (BMS)** ने अलग से मांगों का एक सेट प्रस्तुत किया।
- The trade union leaders urged the Finance Minister to focus on improving the purchasing power of the common people in the country and to make efforts to enhance the domestic demand.  
ट्रेड यूनियन नेताओं ने वित्त मंत्री से देश में आम लोगों की क्रय शक्ति में सुधार पर ध्यान देने और घरेलू मांग बढ़ाने के प्रयास करने का आग्रह किया।
- They said the tax structure could be changed to help the working people and the coverage of social security mechanisms must be expanded looking at the overall insecurity in society.  
उन्होंने कहा कि कर संरचना को कामगारों की मदद के लिए बदला जा सकता है और समाज में बढ़ती असुरक्षा को देखते हुए सामाजिक सुरक्षा तंत्र का विस्तार किया जाना चाहिए।
- They said wage agreements were not implemented even in public undertakings, and asked the Centre to increase spending in the social sector.  
उन्होंने कहा कि सार्वजनिक उपक्रमों में भी वेतन समझौते लागू नहीं किए गए और केंद्र से सामाजिक क्षेत्र में खर्च बढ़ाने की मांग की।

### On scheme workers स्कीम वर्कर्स पर

- On the status of about one crore scheme workers in the country, the BMS memorandum said the Union and State governments must recognise these workers as its staff considering the permanent and essential nature of their duties.  
देश में लगभग एक करोड़ स्कीम वर्कर्स की स्थिति पर, BMS ज्ञापन ने कहा कि केंद्र और राज्य सरकारों को इन श्रमिकों को उनके कर्तव्यों की स्थायी और आवश्यक प्रकृति को देखते हुए अपने स्टाफ के रूप में मान्यता देनी चाहिए।
- “We suggest that until regularisation is done, the government should increase their honorarium, which has not been revised since 2018 despite significant inflation,” the BMS said.  
“हम सुझाव देते हैं कि नियमितीकरण होने तक सरकार को उनका मानदेय बढ़ाना चाहिए, जिसे 2018 से महत्वपूर्ण महंगाई के बावजूद संशोधित नहीं किया गया है,” BMS ने कहा।



- The unions said in their memorandum that the **45th Indian Labour Conference** had recommended “worker status” for all scheme workers, but it was not implemented yet. यूनियनों ने अपने ज्ञापन में कहा कि **45वीं भारतीय श्रम सम्मेलन** ने सभी स्कीम वर्कर्स को “वर्कर स्टेटस” देने की सिफारिश की थी, लेकिन इसे अभी तक लागू नहीं किया गया है।
- They noted that the wealth inequality in the country has reached “an obscene level”. उन्होंने उल्लेख किया कि देश में धन असमानता “एक भयंकर स्तर” पर पहुँच गई है।
- Demanding that the **new pension scheme** be scrapped and the **old pension scheme** restored, they said the minimum provident pension must be enhanced from ₹1,000 to ₹9,000 and it should be linked with **DA**. उन्होंने मांग की कि **नई पेंशन योजना** को समाप्त किया जाए और **पुरानी पेंशन योजना** को बहाल किया जाए, तथा न्यूनतम भविष्य निधि पेंशन को ₹1,000 से बढ़ाकर ₹9,000 किया जाए और इसे **DA** से जोड़ा जाए।

## India's fisheries and aquaculture, its promising course +

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**F**isheries and aquaculture are among India's fastest-growing food-producing sectors, playing a vital role in livelihoods, nutrition, and trade. Over the decades, India has witnessed remarkable growth in aquatic food production that is driven by technological innovation, institutional support and proactive policy measures. Yet, the sector faces critical challenges. Overfishing, habitat degradation, water pollution and climate change are straining aquatic ecosystems. Small-scale fishers and farmers often lack access to finance, technology and markets, while poor traceability and inadequate post-harvest measures limit tapping of the best export and domestic market potential and compromise food security.

On World Fisheries Day 2025 (November 21), the Food and Agriculture Organization of the United Nations (FAO) calls for a renewed commitment to India's Blue Revolution and supports the Government of India's theme this year, which is “India's Blue Transformation: Strengthening Value Addition in Seafood Exports”.

### India's growth in fisheries and aquaculture

According to the FAO State of World Fisheries and Aquaculture (SOFIA) 2024, global capture fisheries produced 92.3 million tonnes in 2022, while aquaculture reached a record 130.9 million tonnes, valued at \$313 billion. India contributed 10.23 million tonnes of aquatic animals, making it the world's second-largest aquaculture producer.

India's aquatic food production, encompassing capture fisheries and aquaculture, has risen from 2.44 million tonnes in the 1980s to 17.54 million tonnes in 2022-23. Aquaculture has emerged as one of the key driver of this growth, reflecting sectoral modernisation through advanced technologies, infrastructure and institutional support.

Agencies such as the Indian Council of Agricultural Research (ICAR) fisheries institutes, Marine Products Export Development Authority, and National Fisheries Development Board have promoted innovation and best practices, while the Coastal Aquaculture Authority has regulated coastal aquaculture activities to ensure



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environmental compliance. The private sector has expanded investments from hatcheries to exports, reinforcing value chain efficiency.

The past decade has ushered in a new phase of transformation, beginning with India's Blue Revolution initiative and advancing under the Pradhan Mantri Matsya Sampada Yojana (PMMSY). These programmes have driven production growth, particularly in inland and brackish water aquaculture, while improving safety, regulation, and resilience in fisheries.

Key reforms include vessel transponders for fisher safety, digital and credit inclusion through the Kisan Credit Card, and the establishment of Matsya Seva Kendras for integrated support. The Climate-Resilient Coastal Fishermen Villages Programme and the draft National Fisheries Policy 2020 are positive developments.

### The FAO's support across India

The FAO has been a long-standing partner in India's fisheries and aquaculture journey, supporting the country's transition toward sustainability and resilience. The FAO's decades of collaboration with India have shaped policy, strengthened institutions, and advanced innovation in the sector.

The FAO's collaboration with India began with the Bay of Bengal Programme (BOBP), one of FAO's earliest regional small-scale fisheries initiatives. The FAO, through BOBP, has supported the Government of India in improving small-scale fishing technologies, strengthening sea safety, and enhancing post-harvest management.

The FAO's Bay of Bengal Large Marine Ecosystem (BOBLME) project strengthened India's efforts to balance fisheries and conservation, supporting the Ecosystem Approach to Fisheries Management (EAFM), and National Plans of Action to combat Illegal, Unreported, and Unregulated (IUU) fishing, a major threat to marine ecosystems and sustainable fisheries, conserve endangered species and sustain small-scale fisheries.

To support India's rapid strides in the field of aquaculture, the FAO is supporting a Global Environment Facility (GEF)-funded project in

Andhra Pradesh on 'Transforming Aquaculture to a Sustainable, Reduced Footprint and Climate-Resilient Food System', guided by Guidelines for Sustainable Aquaculture (GSA) and Ecosystem Approach to Aquaculture (EAA) principles. The project aims to support the Department of Fisheries, Government of Andhra Pradesh, in promoting climate-resilient, sustainable aquaculture, benefiting the State and serving as a model for India to take forward the government's Blue Revolution.

As part of the aquatic value chain, strengthening of fishing ports and fishing harbours is also one of the main thrust areas of the Government of India. A Technical Cooperation Programme (TCP) of the FAO intends to assist the Government of India to strengthen the technical capacities of fishing ports to address main environmental, social and economic challenges that affect the aquatic value chain. Two pilot fishing ports, specifically Vanakbarra (Union Territory of Dadra and Nagar Haveli and Diu without legislation) and Jakhau in Gujarat, will benefit from this TCP that will provide them with specific strategic and operational tools to identify and formulate investments projects, whose implementation would address main challenges.

### Focus on sustainability

India's fisheries and aquaculture sectors are on a promising trajectory. Yet, sustainability must remain central. Managing fishing efforts through science-based stock assessments, promoting co-managed Monitoring Control and Surveillance (MCS) to curb IUU fishing, following Guidelines for Sustainable Aquaculture and embedding ecosystem-based approaches are key priorities. Strengthening certification, traceability, and digital tools – while ensuring inclusivity for smallholders – will enhance competitiveness in domestic and global markets.

The FAO remains committed to supporting India's journey toward sustainable aquatic food systems, ensuring food and nutritional security, and reducing environmental and climate footprints, guiding India's Blue Revolution toward a resilient and inclusive future.

## India's fisheries and aquaculture, its promising course

### भारत की मत्स्य पालन और जलीय कृषि, इसका उभरता हुआ मार्ग

- India's fisheries and aquaculture, its promising course भारत की मत्स्य पालन और जलीय कृषि, इसका उभरता हुआ मार्ग
- Fisheries and aquaculture are among India's fastest-growing food-producing sectors, playing a vital role in livelihoods, nutrition, and trade.



मत्स्य पालन और जलीय कृषि भारत के सबसे तेजी से बढ़ते खाद्य-उत्पादक क्षेत्रों में हैं, जो आजीविका, पोषण और व्यापार में महत्वपूर्ण भूमिका निभाते हैं।

- Over the decades, India has witnessed remarkable growth in aquatic food production that is driven by technological innovation, institutional support and proactive policy measures.

दशकों में, भारत ने जलीय खाद्य उत्पादन में उल्लेखनीय वृद्धि देखी है, जिसे तकनीकी नवाचार, संस्थागत समर्थन और सक्रिय नीति उपायों ने आगे बढ़ाया है।

- Yet, the sector faces critical challenges. Overfishing, habitat degradation, water pollution and climate change are straining aquatic ecosystems.  
फिर भी, यह क्षेत्र महत्वपूर्ण चुनौतियों का सामना कर रहा है। अति-मछली पकड़ना, आवास हास, जल प्रदूषण और जलवायु परिवर्तन जलीय पारिस्थितिक तंत्र पर दबाव डाल रहे हैं।
- Small-scale fishers and farmers often lack access to finance, technology and markets, while poor traceability and inadequate post-harvest measures limit tapping of the best export and domestic market potential and compromise food security.  
छोटे स्तर के मछुआरों और किसानों के पास वित्त, तकनीक और बाजारों की कमी है, जबकि खराब ट्रेसिबिलिटी और अपर्याप्त फसल-पश्चात उपाय निर्यात और घरेलू बाजार क्षमता को सीमित करते हैं और खाद्य सुरक्षा को प्रभावित करते हैं।

On **World Fisheries Day 2025 (November 21)**, the **FAO** calls for renewed commitment to India's **Blue Revolution** and supports the Government's theme "India's Blue Transformation: Strengthening Value Addition in Seafood Exports".

**विश्व मत्स्य दिवस 2025 (21 नवंबर)** पर **FAO** ने भारत की **ब्लू रिवोल्यूशन** के प्रति नए सिरे से प्रतिबद्धता की मांग की और सरकार की थीम "इंडिया ब्लू ट्रांसफॉर्मेशन: समुद्री भोजन निर्यात में मूल्य संवर्धन सुदृढ़ करना" का समर्थन किया।

## India's growth in fisheries and aquaculture मत्स्य पालन और जलीय कृषि में भारत की वृद्धि

- According to the **FAO SOFIA 2024**, global capture fisheries produced **92.3 million tonnes** in 2022, while aquaculture reached a record **130.9 million tonnes** valued at \$313 billion.  
**FAO SOFIA 2024** के अनुसार, 2022 में वैश्विक कैप्चर फिशरी का उत्पादन **92.3 मिलियन टन** रहा, जबकि जलीय कृषि **130.9 मिलियन टन** के रिकॉर्ड स्तर पर पहुंची, जिसकी कीमत \$313 बिलियन थी।
- India contributed **10.23 million tonnes**, making it the **world's second-largest aquaculture producer**.  
भारत ने **10.23 मिलियन टन** योगदान किया, जिससे वह **दुनिया का दूसरा सबसे बड़ा जलीय कृषि उत्पादक** बना।
- India's aquatic food production rose from **2.44 million tonnes (1980s) to 17.54 million tonnes (2022-23)**.  
भारत का जलीय खाद्य उत्पादन **1980 के दशक के 2.44 मिलियन टन** से बढ़कर **2022-23 में 17.54 मिलियन टन** हो गया।
- Aquaculture has emerged as a key driver of this growth, reflecting sectoral modernisation through advanced technologies, infrastructure and institutional support.  
जलीय कृषि इस वृद्धि का मुख्य प्रेरक बनकर उभरा है, जो उन्नत तकनीकों, बुनियादी ढांचे और संस्थागत समर्थन के माध्यम से क्षेत्रीय आधुनिकीकरण को दर्शाता है।
- Agencies such as **ICAR fisheries institutes**, **MPEDA**, and **National Fisheries Development Board** promoted innovation and best practices.  
**ICAR मत्स्य संस्थान**, **MPEDA**, और **राष्ट्रीय मत्स्य विकास बोर्ड** ने नवाचार और सर्वोत्तम प्रथाओं को बढ़ावा दिया है।
- The **Coastal Aquaculture Authority** regulated coastal aquaculture for environmental compliance.  
**तटीय जलीय कृषि प्राधिकरण** ने पर्यावरणीय अनुपालन सुनिश्चित करने के लिए तटीय जलीय कृषि को विनियमित किया।



- Private sector investment expanded from hatcheries to exports, strengthening the value chain.  
निजी क्षेत्र के निवेश ने हैचरियों से लेकर निर्यात तक विस्तार किया, जिससे मूल्य श्रृंखला मजबूत हुई।
- The **Blue Revolution** and **PMMSY** ushered in transformation in production, especially inland and brackish water aquaculture.  
**ब्लू रिवोल्यूशन** और **PMMSY** ने विशेष रूप से अंतर्देशीय और खारे पानी की जलीय कृषि में परिवर्तन लाया।
- Key reforms include vessel transponders, Kisan Credit Card inclusion, Matsya Seva Kendras, Climate-Resilient Fishermen Villages Programme, and draft National Fisheries Policy 2020.  
प्रमुख सुधारों में पोत ट्रांसपोंडर, किसान क्रेडिट कार्ड समावेशन, मत्स्य सेवा केंद्र, जलवायु-लचीला मछुआरा गांव कार्यक्रम, और मसौदा राष्ट्रीय मत्स्य नीति 2020 शामिल हैं।

## FAO's support across India

### भारत में FAO का समर्थन

- FAO has been a long-standing partner in India's fisheries and aquaculture journey.  
FAO भारत की मत्स्य और जलीय कृषि यात्रा में लंबे समय से साझेदार रहा है।
- The FAO began collaboration through the **Bay of Bengal Programme (BOBP)**, supporting small-scale fishing technologies, sea safety and post-harvest management.  
FAO ने **बंगाल की खाड़ी कार्यक्रम (BOBP)** के माध्यम से सहयोग शुरू किया, जिसने छोटे पैमाने की मछली तकनीकों, समुद्री सुरक्षा और फसल-पश्चात प्रबंधन में समर्थन दिया।
- The **BOBLME project** strengthened conservation efforts and action against **Illegal, Unreported, and Unregulated (IUU) fishing**.  
**BOBLME परियोजना** ने संरक्षण प्रयासों और **अवैध, अपूर्ण, और अनियमित (IUU) मछली पकड़ने** के खिलाफ कार्यों को मजबूत किया।
- FAO is supporting a **GEF-funded aquaculture project** in Andhra Pradesh on sustainable, climate-resilient aquaculture guided by **GSA** and **EAA** principles.  
FAO आंध्र प्रदेश में **GEF-समर्थित जलीय कृषि परियोजना** द्वारा सतत, जलवायु-लचीला जलीय कृषि को बढ़ावा दे रहा है, जिसे **GSA** और **EAA** सिद्धांतों द्वारा मार्गदर्शित किया जाता है।
- FAO's **Technical Cooperation Programme (TCP)** helps strengthen fishing ports such as **Vanakbara** and **Jakhau** to address environmental, social and economic challenges.  
FAO का **तकनीकी सहयोग कार्यक्रम (TCP) वनकबारा** और **जखाऊ** जैसे मछली बंदरगाहों को पर्यावरणीय, सामाजिक और आर्थिक चुनौतियों से निपटने की क्षमता प्रदान करता है।

## Focus on sustainability

### सततता पर ध्यान

- India's fisheries and aquaculture are on a promising path but sustainability must remain central.  
भारत की मत्स्य और जलीय कृषि प्रगति पर हैं, लेकिन सततता को केंद्र में बने रहना चाहिए।
- Priorities include science-based stock assessments, co-managed **Monitoring Control and Surveillance (MCS)**, controlling IUU fishing, and ecosystem-based approaches.  
प्राथमिकताओं में विज्ञान-आधारित स्टॉक आकलन, सह-प्रबंधित **MCS**, IUU मछली पकड़ने पर नियंत्रण, और पारिस्थितिकी-आधारित दृष्टिकोण शामिल हैं।
- Strengthening certification, traceability, digital tools and ensuring inclusivity for smallholders will enhance competitiveness.  
प्रमाणन, ट्रेसिबिलिटी, डिजिटल उपकरण और छोटे उत्पादकों की समावेशिता प्रतिस्पर्धा बढ़ाएगी।
- The FAO remains committed to supporting India's journey toward sustainable aquatic food systems, food and nutritional security, and reduced climate footprint.  
FAO भारत की सतत जलीय खाद्य प्रणाली, खाद्य व पोषण सुरक्षा, और जलवायु प्रभाव घटाने की यात्रा का समर्थन करने के लिए प्रतिबद्ध है।



- It aims to guide India's **Blue Revolution** toward a **resilient and inclusive future**.  
FAO का उद्देश्य भारत की ब्लू रिवोल्यूशन को लचीले और समावेशी भविष्य की ओर मार्गदर्शित करना है।

# Eight core sectors put up worst ever show in 14 months

Flat trajectory in October as growth in steel, cement, fertilisers, refinery products balanced out by contractions in coal, power, natural gas, crude

**GS III: Economy**  
**The Hindu Bureau**  
NEW DELHI

**G**rowth in industrial activity in the eight core sectors of the economy remained flat in October 2025, the worst performance in 14 months, according to official data.

Growth in the Index of Eight Core Industries stood at 0% in October 2025, down from 3.8% in October of the previous year and 3% in September this year. October's performance is the worst since August last year, when the index had contracted 1.5%.

The eight core industries – coal, crude oil, natural gas, refinery products, fertilisers, steel, cement and electricity – together account for 40.27% of the Index for Industrial Production (IIP).

The flat trajectory in October was primarily due to growth in the steel, cement, fertilisers and refinery products sectors being balanced out by contractions in the coal, electricity, natural gas, and crude oil sectors.

The steel sector grew



**Flop show:** Growth in the Index of Eight Core Industries plunged to 0% in Oct. 2025 from 3.8% in the previous year. GETTY IMAGES/ISTOCK

6.7% in October 2025, which, although the second-highest among the eight core sectors, was a six-month low for the steel sector.

The cement sector grew by 5.3% in October 2025, faster than the 3.1% growth in October last year as well as the 5% growth in September 2025.

The fertiliser sector grew the fastest among the eight core sectors, at 7.4% in October 2025, the fastest in seven months. The refinery products sector grew 4.6% in October 2025, the sector's best performance in nine months.

On the other hand, the coal sector contracted

8.5% this October, coming on the back of a period of prolonged monsoons and the onset of cooler weather, which translated to a subdued demand for power and contributed to lower mining activity.

The natural gas sector also slumped 5%, its worst performance in seven months, whilst production of crude oil declined 1.2%.

Chief economist at ratings agency ICRA Aditi Nayar said given the deterioration in the performance of the mining and electricity segments, the IIP growth could ease to about 2.5-3.5% in October from the 4% seen in September.

**coal, crude oil, natural gas, refinery products, fertilisers, steel, cement and electricity** — together account for **40.27%** of the Index for Industrial Production (IIP).

आठ कोर उद्योग — कोयला, कच्चा तेल, प्राकृतिक गैस, रिफाइनरी उत्पाद, उर्वरक, स्टील, सीमेंट और बिजली — मिलकर IIP का 40.27% हिस्सा बनाते हैं।

- The flat trajectory in October was primarily due to growth in the steel, cement, fertilisers and refinery products sectors being balanced out by contractions in the coal, electricity, natural gas, and crude oil sectors.

अक्टूबर में स्थिरता का कारण स्टील, सीमेंट, उर्वरक, रिफाइनरी उत्पाद क्षेत्रों की वृद्धि को कोयला, बिजली, प्राकृतिक गैस, कच्चा तेल क्षेत्रों में गिरावट से संतुलित होना था।

**Eight core sectors put up worst ever show in 14 months**

**आठ कोर सेक्टर्स ने 14 महीनों में सबसे खराब प्रदर्शन किया**

- Flat trajectory in October as growth in steel, cement, fertilisers, refinery products balanced out by contractions in coal, power, natural gas, crude

अक्टूबर में स्टील, सीमेंट, उर्वरक, रिफाइनरी उत्पादों में वृद्धि को कोयला, बिजली, प्राकृतिक गैस, कच्चे तेल में गिरावट ने संतुलित कर दिया, जिससे वृद्धि स्थिर रही।

- Growth in industrial activity in the eight core sectors of the economy remained flat in October 2025, the worst performance in 14 months, according to official data.

आधिकारिक आंकड़ों के अनुसार, अक्टूबर 2025 में आठ कोर क्षेत्रों की औद्योगिक गतिविधि स्थिर रही, जो 14 महीनों का सबसे खराब प्रदर्शन है।

- Growth in the Index of Eight Core Industries stood at 0% in October 2025, down from 3.8% in October of the previous year and 3% in September this year.

अक्टूबर 2025 में आठ कोर उद्योग सूचकांक की वृद्धि 0% रही, जो पिछले वर्ष अक्टूबर के 3.8% और इस वर्ष सितंबर के 3% से कम है।

- October's performance is the worst since August last year, when the index had contracted 1.5%.

अक्टूबर का प्रदर्शन पिछले वर्ष अगस्त के बाद सबसे खराब है, जब सूचकांक 1.5% सिकुड़ गया था।

- The eight core industries —



- The steel sector grew **6.7%** in October 2025, which, although the second-highest among the eight core sectors, was a six-month low for the steel sector.  
अक्टूबर 2025 में **स्टील क्षेत्र** की वृद्धि **6.7%** रही, जो आठ कोर क्षेत्रों में दूसरी सबसे अधिक थी, लेकिन स्टील क्षेत्र के लिए छह महीनों का निचला स्तर था।
- The cement sector grew by **5.3%** in October 2025, faster than the 3.1% growth in October last year as well as the 5% growth in September 2025.  
अक्टूबर 2025 में **सीमेंट क्षेत्र** 5.3% बढ़ा, जो पिछले वर्ष अक्टूबर के 3.1% और सितंबर 2025 के 5% से अधिक है।
- The fertiliser sector grew the fastest among the eight core sectors, at **7.4%** in October 2025, the fastest in seven months.  
अक्टूबर 2025 में **उर्वरक क्षेत्र** 7.4% बढ़ा, जो आठ कोर क्षेत्रों में सबसे तेज़ और सात महीनों में उच्चतम वृद्धि थी।
- The refinery products sector grew **4.6%** in October 2025, the sector's best performance in nine months.  
अक्टूबर 2025 में **रिफाइनरी उत्पाद** क्षेत्र 4.6% बढ़ा, जो नौ महीनों में इसका सर्वश्रेष्ठ प्रदर्शन है।
- On the other hand, the coal sector contracted **8.5%** this October, coming on the back of a period of prolonged monsoons and the onset of cooler weather, which translated to subdued demand for power and contributed to lower mining activity.  
दूसरी ओर, इस अक्टूबर में **कोयला क्षेत्र** में **8.5%** की गिरावट आई, जो लंबी मानसून अवधि और ठंडे मौसम की शुरुआत के कारण बिजली की कम मांग और कम खनन गतिविधि से जुड़ी थी।
- The natural gas sector also slumped **5%**, its worst performance in seven months, whilst production of crude oil declined **1.2%**.  
**प्राकृतिक गैस क्षेत्र** भी **5%** गिरा, जो सात महीनों का सबसे खराब स्तर था, जबकि **कच्चे तेल** का उत्पादन **1.2%** घटा।
- Chief economist at ratings agency ICRA Aditi Nayar said given the deterioration in the performance of the mining and electricity segments, the IIP growth could ease to about **2.5-3.5%** in October from the 4% seen in September.  
ICRA की मुख्य अर्थशास्त्री अदिति नायर ने कहा कि **खनन और बिजली क्षेत्रों** में गिरावट को देखते हुए IIP वृद्धि सितंबर के 4% से घटकर अक्टूबर में **2.5-3.5%** रह सकती है।

S&T

21/11/2025



# Pharmacogenomics: reading genes to tailor prescriptions for individuals

Unlike traditional medicine's one-size-fits-all approach, the field recognises that **genetic differences can dramatically alter how our bodies metabolise and respond to drugs**; it represents a fundamental shift in how we think about **drug therapy** from treating populations to treating individuals, from trial-and-error to precision medication

**Dr. Renu Yadav**

**T**he old medical advice to "start low and go slow" reflects a fundamental challenge in healthcare: the same drug at the same dose can heal one patient while harming another. For decades, physicians have prescribed medications based on population averages, essentially conducting a trial-and-error experiment with each patient. Today, pharmacogenomics is rewriting this script by revealing how our genes influence drug response, transforming medication prescribing from guesswork to precision.

Pharmacogenomics examines how genetic variations affect an individual's response to medications, determining whether a drug will be effective, ineffective, or even dangerous for a particular person. Mostly, this variability arises from differences in drug-metabolising enzymes, particularly the cytochrome P450 (CYP) family, which processes approximately 75% of commonly prescribed medications.

Genetic variations in these enzymes create different metaboliser phenotypes. A "poor metaboliser" with low functional enzyme activity may accumulate toxic drug levels from standard doses, while an "ultra-rapid metaboliser" with enhanced enzyme activity may receive no therapeutic benefit. These aren't rare genetic quirks. Studies show that approximately 90% of people carry at least one actionable pharmacogenetic variant. The clinical implications are profound: genetic factors contribute significantly to adverse drug reactions (ADRs), which rank among the leading causes of hospitalisation and death in developed nations.

#### Real-world impact

The translation of pharmacogenomics from the laboratory to the clinic, has begun to deliver measurable gains across diverse areas of medicine. A clear example is Warfarin, a widely prescribed blood thinner with a notoriously narrow therapeutic window. Genetic variants in the CYP2C9 and VKORC1 genes account for approximately 50% of the variation in Warfarin dose requirements. Patients carrying certain variants may need only one-third of the standard dose to achieve therapeutic effect. Pharmacogenomic-guided dosing algorithms that incorporate these genetic markers have demonstrated improving outcomes, reducing adverse bleeding risks and helping patients reach therapeutic levels faster than traditional trial and error dosing methods.

In cardiovascular medicine, Clopidogrel, a cornerstone antiplatelet drug used after heart attacks and stenting, provides another compelling example. The drug requires activation by the CYP2C19 enzyme. Patients with loss-of-function CYP2C19 variants, particularly CYP2C19\*2 (found in 25-30% of the population), exhibit reduced drug



**Big advances:** Pharmacogenomics is rewriting the script by revealing how genes influence drug response, transforming medication prescribing from guesswork to precision. GETTY IMAGES

activation and significantly higher risks of cardiovascular events including stent thrombosis. Reflecting this evidence, the 2022 Clinical Pharmacogenetics Implementation Consortium (CPIC) guidelines now recommend alternative antiplatelet agents for CYP2C19 poor metabolizers undergoing percutaneous coronary intervention.

Beyond cardiology, psychiatry has also emerged as a fertile ground for pharmacogenomic implementation. Many antidepressants and antipsychotics are extensively metabolised by CYP2D6 and CYP2C19. The genetic variants in these enzymes can profoundly influence drug levels and side effects. Pre-emptive pharmacogenomic testing in psychiatric patients has demonstrated reduced adverse drug reactions, improved symptom control, and decreased healthcare costs. Oncology, too is advancing rapidly under the pharmacogenomics lens.

#### The economic equation

The economic case for pharmacogenomics lies in balancing the upfront cost of genetic testing with long-term savings achieved through fewer adverse events and improved therapeutic outcomes. Over the past decade, genetic testing costs have fallen dramatically i.e. from thousands of dollars to roughly \$200-500 for comprehensive panels today. Yet the true value of pharmacogenomics extends far beyond the price. Economic analyses consistently show that genetic-guided prescription is cost effective for several drug-gene pairs, particularly in chronic disease where patients require long-term medication management.

#### Healthcare systems recognise that preventing even one serious adverse reaction often offsets the cost of testing multiple patients

To assess this value, experts use a framework that considers several factors, such as severity and cost of side-effects, the frequency of genetic variants in the population, the availability of alternative drugs, and range of medications influenced by variations. However, the cost-effectiveness of pharmacogenomic testing varies significantly across different clinical settings. Increasingly, healthcare systems recognise that preventing even one serious adverse drug reaction often offsets the cost of testing multiple patients.

#### Implementation challenges

Despite compelling scientific evidence, pharmacogenomics still faces substantial barriers towards widespread clinical adoption. A 2023 scoping review identified knowledge gaps among healthcare providers as the primary obstacle. Most physicians and pharmacists receive minimal pharmacogenomic education in training, leaving them ill-equipped to order, interpret, and apply genetic test results. Beyond education, infrastructure limitations compound this challenge; many electronic health record systems lack adequate decision-support tools to integrate pharmacogenomic data into prescribing workflows.

Reimbursement uncertainty creates additional hesitation. While some health systems and insurers cover

pharmacogenomic testing for specific indications, coverage remains inconsistent across payers and jurisdictions. Meanwhile, regulatory pathways continue to evolve: over 100 Food and Drug Administration (FDA) drug labels now contain pharmacogenomic information, yet the clinical implications of these labels vary as some offer actionable recommendations while others are merely informative statements.

Finally, cultural and institutional resistance should not be underestimated. Changing prescribing practices requires not just evidence but also trusted implementation frameworks, local champions, and administrative support. Encouragingly, where implemented, these programmes demonstrate that systematic approaches addressing education, infrastructure, and workflow integration can successfully overcome these barriers.

#### The path forward

The future of pharmacogenomics lies in pre-emptive testing strategies, where genetic information is obtained before a medication is needed and remains available throughout a patient's healthcare journey.

Ultimately, pharmacogenomics represents a fundamental shift in how we think about drug therapy from treating populations to treating individuals, from reactive care to proactive prevention, from trial-and-error to precision medication. The prescription, quite literally, is written in our genes: we are now learning how to read it.

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#### THE GIST

Pharmacogenomics examines how genetic variations affect an individual's response to medications, determining whether a drug will be effective, ineffective, or even dangerous for a particular person. Studies show that approximately 90% of people carry at least one actionable pharmacogenetic variant

Despite compelling scientific evidence, pharmacogenomics still faces substantial barriers towards widespread clinical adoption. Knowledge gaps, minimal training, infrastructure limitations, reimbursement uncertainty are some of the barriers

The economic case for pharmacogenomics lies in balancing the upfront cost of genetic testing with long-term savings achieved through fewer adverse events and improved therapeutic outcomes. Future of pharmacogenomics lies in pre-emptive testing strategies, where genetic information is obtained before a medication is needed and remains available throughout a patient's healthcare journey

## Pharmacogenomics: reading genes to tailor prescriptions for individuals फार्माकोजीनोमिक्स: व्यक्तियों के लिए अनुकूलित दवाओं हेतु जीन पढ़ना

- Pharmacogenomics: reading genes to tailor prescriptions for individuals  
फार्माकोजीनोमिक्स: व्यक्तियों के लिए अनुकूलित दवाओं हेतु जीन पढ़ना
- Unlike traditional medicine's one-size-fits-all approach, the field recognises that **genetic differences** can dramatically alter how our bodies metabolise and respond to drugs; it represents a **fundamental shift** in how we think about drug therapy from treating populations to treating individuals, from trial-and-error to precision medication.

पारंपरिक चिकित्सा के वन-साइज़-फिट्स-ऑल दृष्टिकोण के विपरीत, यह क्षेत्र मानता है कि **आनुवंशिक भिन्नताएँ** हमारे शरीर की दवाओं को मेटाबोलाइज़ और प्रतिक्रिया करने की क्षमता को



नाटकीय रूप से बदल सकती हैं; यह दवा चिकित्सा की सोच में एक **मौलिक बदलाव** है — जनसंख्या से व्यक्ति-आधारित उपचार की ओर, ट्रायल-एंड-एरर से सटीक दवा की ओर।

- The old medical advice to “start low and go slow” reflects a fundamental challenge in healthcare: the same drug at the same dose can heal one patient while harming another.  
“कम से शुरू करें और धीरे-धीरे बढ़ें” जैसी पुरानी चिकित्सा सलाह स्वास्थ्य देखभाल की एक मौलिक चुनौती को दर्शाती है: वही दवा, वही खुराक एक मरीज को ठीक कर सकती है जबकि दूसरे को नुकसान पहुंचा सकती है।
- For decades, physicians have prescribed medications based on population averages, essentially conducting a **trial-and-error experiment** with each patient.  
दशकों से, चिकित्सकों ने जनसंख्या औसत के आधार पर दवाएं लिखी हैं, और मूल रूप से प्रत्येक मरीज के साथ **ट्रायल-एंड-एरर प्रयोग** किया है।
- Today, pharmacogenomics is rewriting this script by revealing how our **genes influence drug response**, transforming medication prescribing from guesswork to **precision**.  
आज, फार्माकोजीनोमिक्स इस परिदृश्य को बदल रहा है, यह दिखाते हुए कि हमारी **जीन्स दवा प्रतिक्रिया को कैसे प्रभावित करती हैं**, और दवा निर्धारण को अनुमान से **सटीकता** में बदल रहा है।
- Pharmacogenomics examines how genetic variations affect an individual's response to medications, determining whether a drug will be effective, ineffective, or even dangerous.  
फार्माकोजीनोमिक्स यह अध्ययन करता है कि आनुवंशिक परिवर्तन किसी व्यक्ति की दवा प्रतिक्रिया को कैसे प्रभावित करते हैं, और यह तय करते हैं कि दवा प्रभावी, अप्रभावी या खतरनाक होगी।
- Mostly, this variability arises from differences in **drug-metabolising enzymes**, particularly the **cytochrome P450 (CYP) family**, which processes about 75% of common medicines.  
यह विविधता मुख्य रूप से **दवा-मेटाबोलाइजिंग एंजाइम** विशेषकर **साइटोक्रोम P450 (CYP) परिवार** के अंतर से उत्पन्न होती है, जो लगभग 75% सामान्य दवाओं को प्रोसेस करता है।
- Genetic variations in these enzymes create different **metaboliser phenotypes** — “poor metaboliser” may accumulate toxic drug levels; “ultrarapid metaboliser” may receive no therapeutic benefit.  
इन एंजाइमों में आनुवंशिक विविधताएँ अलग-अलग **मेटाबोलाइज़र फिनोटाइप** बनाती हैं — “कमज़ोर मेटाबोलाइज़र” में दवा का विषाक्त स्तर जमा हो सकता है; “अल्ट्रापिड मेटाबोलाइज़र” को कोई चिकित्सीय लाभ नहीं मिल सकता।
- About **90% of people** carry at least one actionable pharmacogenetic variant.  
लगभग **90% लोग** कम से कम एक क्रियाशील फार्माकोजेनेटिक वेरिएंट रखते हैं।
- Genetic factors contribute significantly to **adverse drug reactions (ADRs)**, a leading cause of hospitalisation and death in developed nations.  
आनुवंशिक कारक **दुष्प्रभावी दवा प्रतिक्रियाओं (ADRs)** में महत्वपूर्ण योगदान देते हैं, जो विकसित देशों में अस्पताल में भर्ती और मृत्यु के प्रमुख कारणों में से हैं।

### Real-world impact

#### वास्तविक दुनिया में प्रभाव

- Pharmacogenomics has begun delivering measurable gains in multiple medical fields.  
फार्माकोजीनोमिक्स ने कई चिकित्सा क्षेत्रों में मापनीय लाभ देना शुरू किया है।
- **Warfarin**, a blood thinner with narrow therapeutic window, varies significantly due to CYP2C9 and VKORC1 gene variants accounting for about **50%** of dose variability.  
**वारफरिन**, एक रक्त-पतला करने वाली दवा, जिसकी चिकित्सीय सीमा संकरी है, CYP2C9 और VKORC1 जीन वेरिएंट के कारण खुराक में लगभग **50%** भिन्नता दिखाती है।
- Patients with certain variants may need only **one-third** of the standard dose.  
कुछ वेरिएंट वाले मरीजों को केवल **एक-तिहाई** मानक खुराक की आवश्यकता हो सकती है।
- Pharmacogenomic-guided dosing improves outcomes and reduces bleeding risk.  
फार्माकोजीनोमिक-निर्देशित खुराक परिणामों में सुधार करती है और रक्तस्राव जोखिम कम करती है।
- In cardiology, **Clopidogrel** needs CYP2C19 activation; **CYP2C19\*2** variant carriers (25-30%) face higher cardiovascular risk.



कार्डियोलॉजी में, क्लोपिडोग्रेल को CYP2C19 सक्रियण चाहिए; CYP2C19\*2 वेरिएंट (25-30%) वाले व्यक्तियों को अधिक हृदय जोखिम रहता है।

- CPIC 2022 guidelines recommend alternative drugs for CYP2C19 poor metabolisers.  
CPIC 2022 दिशा-निर्देश CYP2C19 कमजोर मेटाबोलाइज़र के लिए वैकल्पिक दवाओं की सलाह देते हैं।
- Psychiatry also benefits since many antidepressants and antipsychotics depend on CYP2D6 and CYP2C19 metabolism.  
मनोरोग क्षेत्र में भी लाभ है क्योंकि कई एंटीडिप्रेसेंट और एंटीसाइकोटिक दवाएँ CYP2D6 और CYP2C19 पर निर्भर हैं।
- Pre-emptive testing reduces ADRs and improves symptom control.  
पहले से किए गए जीन परीक्षण ADRs कम करते हैं और लक्षण नियंत्रण बेहतर करते हैं।
- Oncology is rapidly advancing under the pharmacogenomics lens.  
ऑन्कोलॉजी भी फार्माकोजीनोमिक्स के तहत तेज़ी से प्रगति कर रही है।

## The economic equation

### आर्थिक समीकरण

- Genetic testing costs have dropped from thousands of dollars to \$200–500 today.  
जीन परीक्षण की लागत हजारों डॉलर से घटकर आज \$200–500 रह गई है।
- Genetic-guided prescriptions are cost-effective in many chronic diseases.  
आनुवंशिक-निर्देशित दवा निर्धारण कई पुरानी बीमारियों में लागत-प्रभावी है।
- Preventing one serious ADR can offset testing costs for multiple patients.  
एक गंभीर ADR रोकना कई मरीजों के परीक्षण खर्च की भरपाई कर सकता है।

## Implementation challenges

### कार्यान्वयन की चुनौतियाँ

- A 2023 review identified lack of **provider knowledge** as the primary barrier.  
2023 की समीक्षा ने **स्वास्थ्यकर्मियों की जानकारी की कमी** को मुख्य बाधा बताया।
- Most clinicians lack training to order or interpret pharmacogenomic tests.  
अधिकांश चिकित्सकों के पास फार्माकोजीनोमिक परीक्षण ऑर्डर या समझने का प्रशिक्षण नहीं है।
- **Electronic health records** lack decision-support tools for integrating genetic data.  
**इलेक्ट्रॉनिक स्वास्थ्य रिकॉर्ड** में जीन डेटा एकीकृत करने के लिए निर्णय-समर्थन उपकरणों की कमी है।
- Insurance reimbursement is inconsistent.  
बीमा प्रतिपूर्ति असंगत है।
- **FDA drug labels** contain pharmacogenomic information but vary in usefulness.  
**FDA दवा लेबल** में जानकारी होती है लेकिन उनकी उपयोगिता अलग-अलग होती है।
- Cultural and institutional resistance slows adoption.  
सांस्कृतिक और संस्थागत प्रतिरोध अपनाने की गति धीमी करता है।

## The path forward

### आगे का रास्ता

- The future lies in **pre-emptive testing**, where genetic information is obtained before medication is needed.  
भविष्य **पूर्व-नियोजित परीक्षण** में है, जहाँ दवा की आवश्यकता से पहले ही जीन जानकारी प्राप्त की जाती है।
- Pharmacogenomics marks a shift from populations to **individual-level**, from reactive to **proactive**, from trial-and-error to **precision medicine**.  
फार्माकोजीनोमिक्स जनसंख्या आधारित उपचार से **व्यक्ति-स्तर** पर, प्रतिक्रियात्मक से **सक्रिय**, और ट्रायल-एंड-एरर से **सटीक चिकित्सा** की ओर एक बदलाव है।



- The prescription is written in our genes; we are now learning how to read it.  
पर्ची हमारे जीन में लिखी है; हम अब इसे पढ़ना सीख रहे हैं।

## What is **Acanthosis nigricans** and how it may be a warning sign for **prediabetes and diabetes?**

GS III: S&T

**Abhishek Kulkarni**

**Acanthosis nigricans (AN)** is a skin condition characterised by **dark, velvety patches on skin folds**. While it can occur due to various reasons, it is strongly linked to insulin resistance, which makes it an important early, warning sign for prediabetes and diabetes. For many individuals, AN is one of the first visible clues that the body is struggling to regulate blood sugar levels.

Acanthosis nigricans can manifest in skin folds and creases such as behind the neck, underarms, under the breasts, the groin, even the elbows or behind the knees as dark, thick, rough or velvety skin patches. The causes for AN can be obesity, insulin resistance, metabolic syndrome, diabetes mellitus and extremely rarely, in melanomas, stomach or liver malignancies. In children and young adults, the



The condition can manifest **behind the neck, underarms, under the breasts, the groin or the elbows and behind the knees**. GETTY IMAGES

presence of AN is often considered a clinical marker of rising diabetes risk.

The skin changes associated with AN do not appear overnight, but develop gradually over the course of several months. The affected skin may sometimes be itchy or emit a foul odour along with hyperpigmentation. When associated with insulin

resistance, the darkening often progresses fast.

Acanthosis nigricans is typically detected during a clinical examination. Because of its strong association with metabolic disorders, your doctor may recommend blood tests to check for blood sugar levels, insulin levels, a lipid profile, and other metabolic parameters to detect and

confirm underlying causes.

Treatment and outcomes depend on the underlying cause. In most cases related to obesity or insulin resistance, improving metabolic health can help lighten the skin discoloration. People with obesity may be encouraged to lose weight by making dietary modifications and lifestyle changes. Medications for insulin resistance and/or obesity may be used along with dietary and lifestyle modifications if the case profile mandates the same.

### **Treatment options**

The use of prescription creams to lighten or soften the affected areas, antibacterial soaps for gentle cleansing, topical antibiotic cream, and laser therapy can also help with the reduction of pigmentation once the primary cause is addressed.

Acanthosis nigricans does

not mean that your skin is dirty or dark. It can affect any skin type and colour. If you have AN, consult your doctor for lab testing and possibly imaging studies, to rule out serious illnesses, and to evaluate for prediabetes or diabetes, which remain the most common underlying causes.

Identifying AN early gives both children and adults a chance to detect prediabetes or diabetes before complications set in.

With timely evaluation, lifestyle corrections and treatment of the underlying cause, most people can reverse or significantly improve AN. Paying attention to subtle skin changes is therefore an important step towards protecting long term health.

(Dr. Abhishek Kulkarni, consultant, paediatric Endocrinology, Narayana Health, SRCC, Children's Hospital, Mumbai)

### What are Acanthosis nigricans and how it may be a warning sign for prediabetes and diabetes?

**एकैथोसिस नाइग्रिकन्स क्या है और यह प्रीडायबिटीज़ एवं डायबिटीज़ का चेतावनी संकेत कैसे हो सकता है?**

- What are Acanthosis nigricans and how it may be a warning sign for prediabetes and diabetes?  
एकैथोसिस नाइग्रिकन्स क्या है और यह प्रीडायबिटीज़ एवं डायबिटीज़ का चेतावनी संकेत कैसे हो सकता है?
- Acanthosis nigricans (AN) is a skin condition characterised by dark, velvety patches on skin folds.**  
एकैथोसिस नाइग्रिकन्स (AN) एक त्वचा की स्थिति है, जिसकी पहचान **त्वचा की सिलवटों पर काले, मखमली धब्बों** से होती है।
- While it can occur due to various reasons, **it is strongly linked to insulin resistance, which makes it an important early warning sign for prediabetes and diabetes.**  
यह कई कारणों से हो सकता है, लेकिन यह **इंसुलिन रेजिस्टेंस** से गहराई से जुड़ा होता है, जो इसे प्रीडायबिटीज़ और डायबिटीज़ का एक महत्वपूर्ण, प्रारंभिक चेतावनी संकेत बनाता है।
- For many individuals, AN is one of the first visible clues that the body is struggling to regulate blood sugar levels.  
कई लोगों के लिए, AN शरीर द्वारा ब्लड शुगर नियंत्रित करने में संघर्ष का पहला दृश्य संकेत हो सकता है।



- **Acanthosis nigricans can manifest in skin folds and creases such as behind the neck, underarms, under the breasts, the groin, even the elbows or behind the knees as dark, thick, rough or velvety skin patches.**  
एकैथोसिस नाइग्रिकन्स गर्दन के पीछे, बगल में, स्तनों के नीचे, जांघों में, और यहां तक कि कोहनी या घुटनों के पीछे **काली, मोटी, खुरदुरी या मखमली त्वचा** के रूप में दिखाई दे सकता है।
- The causes for AN can be obesity, insulin resistance, metabolic syndrome, diabetes mellitus and extremely rarely, in melanomas, stomach or liver malignancies.  
AN के कारण मोटापा, इंसुलिन रेजिस्टेंस, मेटाबॉलिक सिंड्रोम, डायबिटीज़ मेलिटस और बहुत ही दुर्लभ मामलों में मेलानोमा, पेट या लीवर कैंसर हो सकते हैं।
- In children and young adults, the presence of AN is often considered a clinical marker of rising diabetes risk.  
बच्चों और युवा वयस्कों में AN को बढ़ते डायबिटीज़ जोखिम का नैदानिक संकेतक माना जाता है।
- The skin changes associated with AN do not appear overnight, but develop gradually over the course of several months.  
AN से जुड़ी त्वचा में बदलाव अचानक नहीं आते, बल्कि कई महीनों में धीरे-धीरे विकसित होते हैं।
- The affected skin may sometimes be itchy or emit a foul odour along with hyperpigmentation.  
प्रभावित त्वचा में कभी-कभी खुजली या बदबू आ सकती है, साथ ही हाइपरपिग्मेंटेशन भी बढ़ सकता है।
- When associated with insulin resistance, the darkening often progresses fast.  
इंसुलिन रेजिस्टेंस होने पर त्वचा का काला पड़ना अक्सर तेज़ी से बढ़ता है।
- Acanthosis nigricans are typically detected during a clinical examination.  
एकैथोसिस नाइग्रिकन्स आमतौर पर चिकित्सीय जांच के दौरान पहचान में आता है।
- Because of its strong association with metabolic disorders, your doctor may recommend blood tests to check for blood sugar levels, insulin levels, a lipid profile, and other metabolic parameters to detect and confirm underlying causes.  
चूंकि यह मेटाबॉलिक विकारों से गहराई से जुड़ा है, इसलिए डॉक्टर ब्लड शुगर, इंसुलिन स्तर, लिपिड प्रोफाइल और अन्य मेटाबॉलिक मानकों की जांच की सलाह दे सकते हैं।

## Treatment and outcomes उपचार और परिणाम

- Treatment and outcomes depend on the underlying cause.  
उपचार और परिणाम मूल कारण पर निर्भर करते हैं।
- In most cases related to obesity or insulin resistance, improving metabolic health can help lighten the skin discoloration.  
मोटापा या इंसुलिन रेजिस्टेंस वाले अधिकांश मामलों में मेटाबॉलिक स्वास्थ्य में सुधार त्वचा के कालेपन को कम कर सकता है।
- People with obesity may be encouraged to lose weight by making dietary modifications and lifestyle changes.  
मोटापे वाले लोगों को आहार में बदलाव और जीवनशैली सुधार करके वजन कम करने के लिए प्रोत्साहित किया जा सकता है।
- Medications for insulin resistance and/or obesity may be used along with dietary and lifestyle modifications if the case profile mandates the same.  
यदि आवश्यक हो तो इंसुलिन रेजिस्टेंस और/या मोटापे की दवाइयाँ आहार और जीवनशैली परिवर्तनों के साथ प्रयोग की जा सकती हैं।

## Treatment options उपचार विकल्प

- The use of prescription creams to lighten or soften the affected areas, antibacterial soaps for gentle cleansing, topical antibiotic cream, and laser therapy can also help with the reduction of pigmentation once the primary cause is addressed.  
प्रिस्क्रिप्शन क्रीम, एंटीबैक्टीरियल साबुन, टॉपिकल एंटीबायोटिक क्रीम और लेज़र थेरेपी प्राथमिक कारण के उपचार के बाद कालेपन को कम करने में मदद कर सकती हैं।



- Acanthosis nigricans does not mean that your skin is dirty or dark. It can affect any skin type and colour.  
एकैथोसिस नाइग्रिकन्स का मतलब यह नहीं कि आपकी त्वचा गंदी या काली है। यह किसी भी त्वचा प्रकार और रंग को प्रभावित कर सकता है।
- If you have AN, consult your doctor for lab testing and possibly imaging studies, to rule out serious illnesses, and to evaluate for prediabetes or diabetes, which remain the most common underlying causes.  
यदि आपको AN है, तो गंभीर बीमारियों को नकारने और प्रीडायबिटीज़ या डायबिटीज़ का आकलन करने के लिए डॉक्टर से लैब टेस्ट और संभवतः इमेजिंग स्टडी कराने की सलाह लें।
- Identifying AN early gives both children and adults a chance to detect prediabetes or diabetes before complications set in.  
AN की जल्दी पहचान बच्चों और वयस्कों दोनों को जटिलताएँ उत्पन्न होने से पहले प्रीडायबिटीज़ या डायबिटीज़ का पता लगाने का अवसर देती है।
- With timely evaluation, lifestyle corrections and treatment of the underlying cause, most people can reverse or significantly improve AN.  
समय पर मूल्यांकन, जीवनशैली सुधार और मूल कारण के उपचार से अधिकतर लोग AN को उलट या काफी हद तक सुधार सकते हैं।
- Paying attention to subtle skin changes is therefore an important step towards protecting long term health.  
इसलिए त्वचा के सूक्ष्म परिवर्तनों पर ध्यान देना दीर्घकालीन स्वास्थ्य की सुरक्षा की दिशा में एक महत्वपूर्ण कदम है।



# At COP, India seeks 'just transition mechanism'

India says finance to adapt to climate change is an 'essential investment'; Environment Minister Bhupender Yadav emphasises the need for country-specific sustainable development pathways

GS III: Environment

Jacob Koshy  
BELEM

India, in tandem with a group of developing countries, has asked for the establishment of a 'just transition mechanism', a day before talks at the ongoing climate summit are expected to conclude. It has stressed that finance for adapting to climate change was not an "optional add-on" but an "essential investment" and that, currently, it was inadequately funded for the latter.

Established at COP27 (in 2022) and operationalised at COP28 (in 2023), the so-called Just Transition Work Programme is intended as a dedicated forum to create jobs for those who currently work in fossil fuel-dependent industries towards livelihoods in renewable energy sectors.

"Just transition necessarily includes strengthening resilience and adaptive capacity, creating employment, protecting livelihoods, eradicating poverty, ensuring food security, and providing so-



Bhupender Yadav said that countries must be given the flexibility to define and measure progress on climate action. @BYADAVBJP/X

## Just Transition Work Programme aims to create livelihoods in renewable energy sectors

cial protection. Countries must be able to design and implement their own sustainable development pathways consistent with their national priorities and circumstances," Environment Minister, Bhupender Yadav, said in a statement, on Thursday.

He said that a future 'Global Goal on Adaptation', envisaged as a sys-

tem of metrics to define countries' ability buffer against the havoc already wreaked by climate change, should be "country-driven and nationally determined and that countries ought to be given the flexibility to define and measure progress using national systems, capacities, and data realities."

These statements come even as uncertainty remains on whether the COP Presidency, led by Brazil senior diplomat Andrei Lago, will succeed in getting countries to agree on a broad political statement - called a cover text - that

will headline the main consensus points that countries have been debating in Belem.

Divisions continue to remain, primarily on whether developing countries would agree to language supporting a pathway or a roadmap signalling the end of the use of fossil fuel. On the other hand, developed countries resist language that says they are mandated to provide low-cost finance to developing countries to help them achieve these ends.

"Many Parties (countries) have highlighted their differing starting points and varied development needs. This reinforces the need for nationally determined, demand-driven transition pathways, rather than any uniform or prescriptive approach... global equity must remain central. Developing countries require sufficient policy space to bridge development gaps, address systemic vulnerabilities, and ensure the well-being of their people according to their stage of development and national conditions," he added.

## At COP, India seeks 'just transition mechanism' COP में, भारत ने 'जस्ट ट्रांजिशन मैकेनिज़्म' की मांग की

- At COP, India seeks 'just transition mechanism'  
COP में, भारत ने 'जस्ट ट्रांजिशन मैकेनिज़्म' की मांग की
- India says finance to adapt to climate change is an 'essential investment'; Environment Minister Bhupender Yadav emphasises the need for **country-specific sustainable development pathways**



भारत कहता है कि जलवायु परिवर्तन के अनुकूलन के लिए वित्त एक 'आवश्यक निवेश' है; पर्यावरण मंत्री भूपेंद्र यादव ने देश-विशिष्ट सतत विकास मार्गों की आवश्यकता पर जोर दिया

- India, in tandem with a group of developing countries, has asked for the establishment of a 'just transition mechanism', a day before talks at the ongoing climate summit are expected to conclude.  
भारत ने विकासशील देशों के एक समूह के साथ मिलकर चल रहे जलवायु शिखर सम्मेलन की वार्ता खत्म होने से एक दिन पहले 'जस्ट ट्रांजिशन मैकेनिज़्म' की स्थापना की मांग की है।
- It has stressed that finance for adapting to climate change was not an "optional add-on" but an "essential investment" and that, currently, it was inadequately funded for the latter.  
भारत ने जोर दिया कि जलवायु परिवर्तन के अनुकूलन हेतु वित्त "वैकल्पिक जोड़" नहीं बल्कि "आवश्यक निवेश" है, और वर्तमान में यह क्षेत्र अपर्याप्त रूप से वित्तपोषित है।
- Established at COP27 (2022) and operationalised at COP28 (2023), the so-called **Just Transition Work Programme** is intended as a dedicated forum to create jobs for those who currently work in fossil fuel-dependent industries towards livelihoods in renewable energy sectors.  
COP27 (2022) में स्थापित और COP28 (2023) में लागू जस्ट ट्रांजिशन वर्क प्रोग्राम का उद्देश्य जीवाश्म-ईंधन आधारित उद्योगों में काम कर रहे लोगों के लिए नवीकरणीय ऊर्जा क्षेत्रों में रोजगार सृजित करने हेतु एक विशेष मंच तैयार करना है।
- "Just transition necessarily includes strengthening resilience and adaptive capacity, creating employment, protecting livelihoods, eradicating poverty, ensuring food security, and providing social protection.  
"जस्ट ट्रांजिशन अनिवार्य रूप से प्रत्यास्थता और अनुकूलन क्षमता को मजबूत करना, रोजगार सृजन, आजीविका की रक्षा, गरीबी उन्मूलन, खाद्य सुरक्षा सुनिश्चित करना और सामाजिक सुरक्षा प्रदान करना शामिल करता है।
- Countries must be able to design and implement their own sustainable development pathways consistent with their national priorities and circumstances," Environment Minister Bhupender Yadav said in a statement, on Thursday.  
देशों को अपनी राष्ट्रीय प्राथमिकताओं और परिस्थितियों के अनुरूप अपने स्वयं के सतत विकास मार्ग तैयार और लागू करने में सक्षम होना चाहिए," पर्यावरण मंत्री भूपेंद्र यादव ने गुरुवार को एक बयान में कहा।
- He said that a future 'Global Goal on Adaptation', envisaged as a system of metrics to define countries' ability to buffer against the havoc already wreaked by climate change, should be "country-driven and nationally determined".  
उन्होंने कहा कि भविष्य का 'ग्लोबल गोल ऑन अडाप्टेशन', जिसे देशों की जलवायु परिवर्तन से हुई क्षति को झेलने की क्षमता को परिभाषित करने की मीट्रिक प्रणाली के रूप में कल्पना की गई है, "देश-प्रेरित और राष्ट्रीय रूप से निर्धारित" होना चाहिए।
- And that countries ought to be given the flexibility to define and measure progress using national systems, capacities, and data realities.  
और देशों को राष्ट्रीय प्रणालियों, क्षमताओं और डेटा वास्तविकताओं का उपयोग कर प्रगति को परिभाषित एवं मापने की लचीलापन दिया जाना चाहिए।
- These statements come even as uncertainty remains on whether the COP Presidency, led by Brazil senior diplomat **Andrei Lago**, will succeed in getting countries to agree on a broad political statement – called a **cover text** – that will headline the main consensus points that countries have been debating in Belem.  
ये बयान तब आए हैं जब यह अनिश्चितता बनी हुई है कि ब्राज़ील के वरिष्ठ राजनयिक **अंद्रे लागो** के नेतृत्व वाली COP अध्यक्षता देशों को एक व्यापक राजनीतिक बयान — जिसे **कवर टेक्स्ट** कहा जाता है — पर सहमत कराने में सफल होगी या नहीं।
- Divisions continue to remain, primarily on whether developing countries would agree to language supporting a pathway or a roadmap signalling the end of the use of **fossil fuel**.  
मतभेद बरकरार हैं, खासकर इस पर कि क्या विकासशील देश जीवाश्म ईंधन के उपयोग के अंत की ओर संकेत करने वाले मार्ग या रोडमैप का समर्थन करेंगे।
- On the other hand, developed countries resist language that says they are mandated to provide **low-cost finance** to developing countries to help them achieve these ends.



दूसरी ओर, विकसित देश उन भाषाओं का विरोध करते हैं जो कहती हैं कि उन्हें विकासशील देशों को लक्ष्यों की प्राप्ति हेतु **सस्ती वित्तीय सहायता** प्रदान करने के लिए बाध्य किया गया है।

- “Many Parties (countries) have highlighted their differing starting points and varied development needs.  
“कई पक्षों (देशों) ने अपने विभिन्न प्रारंभिक बिंदुओं और अलग-अलग विकास जरूरतों को रेखांकित किया है।
- This reinforces the need for nationally determined, demand-driven transition pathways, rather than any uniform or prescriptive approach... global equity must remain central.  
यह किसी समान या अनिवार्य दृष्टिकोण की बजाय राष्ट्रीय रूप से निर्धारित, मांग-आधारित संक्रमण मार्गों की आवश्यकता को मजबूत करता है... **वैश्विक समानता** केंद्र में रहनी चाहिए।

- Developing countries require sufficient policy space to bridge development gaps, address systemic vulnerabilities, and ensure the well-being of their people according to their stage of development and national conditions,” he added.  
उन्होंने कहा, विकासशील देशों को विकास अंतराल को पाटने, प्रणालीगत कमजोरियों को संबोधित करने और अपने लोगों के कल्याण को उनके विकास स्तर और राष्ट्रीय परिस्थितियों के अनुसार सुनिश्चित करने के लिए पर्याप्त **नीतिगत स्वतंत्रता** की आवश्यकता है।”

# Is air pollution a South Asian crisis?

What was the 2024 India-Pakistan Smog? How has air pollution become rampant across the South Asian region? What does the Greenpeace 2023 World Air Quality Report state? How do deteriorating AQI levels affect India economically? What should be the way ahead?

ISS III: Environment

MOB

## EXPLAINER

Dev Nath Pathak  
Vibha Bharadwaj

### The story so far:

**D**elhi is in the spotlight once again for its consistently deteriorating AQI levels. And like every year there has only been a knee-jerk reaction to the problem, rather than a sustainable solution. The Commission for Air Quality Management has gradually switched from stage 1 and 2 to stage 3 of the Graded Response Action Plan, and advisories have been issued for citizens who battle serious health risks. However, there is a dire need to understand the collusion of natural and man-made reasons for air pollution, for Delhi's air pollution crisis goes beyond India's sovereign borders.

### What is happening in South Asia?

In November 2024, eastern and northern Pakistan and north India faced a severe pollution event that came to be known as the '2024 India-Pakistan Smog'. Lahore and Delhi virtually competed on the scale of the most polluted city with the highest AQI reading globally. 'Brown clouds' formed in swathes over the cities distinctly visible in satellite images. While Lahore was faced with the worst AQI, Delhi's air gradually deteriorated due to a shift in wind patterns that carried pollutants across borders and within the region. Now in 2025, Delhi is once again followed by Lahore. *The Dawn* from Karachi reported that local pollution and smoke drifted in from India due to low-speed winds.

Bangladesh also has a significant share in the air pollution crisis. Dhaka is witnessing worsening AQI in the range from moderate to very poor during the winter season, as reported by the U.S. thinktank Atlantic Council. Likewise in the capital of Nepal, AQI remains alarmingly high every year, between moderate and unhealthy.



**Not the only one:** Commuters ride along a road amid dense smog in Lahore on October 30. AFP

### What are the reasons?

The Greenpeace 2023 World Air Quality Report underlined that poor air quality in South Asia is due to anthropogenic sources such as industrial and vehicular emissions, and burning of solid fuel and wastages. The shared air pollution across the Indo-Gangetic Plain and beyond, with tier-1 cities facing the consequences, can be accounted by factors such as the fixed topography of the region. Although separated by cartography, the regional topography of South Asia causes fixed ventilation of natural air and dispersal of pollutants. A trans-national and regional haze surfaces due to the complex composition of air particulates. Alongside the natural geography, there is a transnational and regional commonality – the failure in managing such crises due to abysmal political will.

The World Bank report on 'Air Pollution and Public Health in South Asia' in 2023 informed that nine out of the world's 10 cities with the worst air pollution are in South Asia. Sri Lanka, Maldives and Bhutan are known to be relatively less affected by transregional air pollution in the region of South Asia. This interplay of factors shows that mitigation requires attention to not only short-term solutions but also long-term strategies that focus on strong decarbonisation measures and structural reforms in agricultural practices and industry emissions across national borders.

### Is this a crisis of development?

Air pollution is related to larger issues of development and its adverse consequences for the environment. A World Bank study estimates that high AQI

levels in India results in about 3% of its GDP being spent on healthcare and lost labour capital. *The Lancet Health Journal* highlighted that in 2019 India's GDP reduced by 1.36% due to premature morbidity and mortality as a result of air pollution. A steep rise in the sale of automobile vehicles, lack of public transport, negligible support for non-vehicular mobility, and building concrete structures at the expense of urban greenery are some of the reasons which lead to deteriorating air quality. A 2023 UNEP report shows how current patterns of consumption and production are driving climate change, which in turn drives the air pollution crisis. Thus, the World Health Organization (WHO) accurately recognises that air quality significantly affects life expectancy, public health, economic productivity, and environmental justice. These sordid AQI figures are the result of poorly thought-out development. The consequences are visible not only in north India. Experts warn of worsening air in Mumbai and other cities on the southeast coast.

### What next?

A more nuanced model of governance with strong political will to curb the sources of the crisis; a caring human development model addressing the needs of the working class and farmers; and a more regionally informed model are some of the imperatives needed to find sustainable solutions.

A recent study by IIT Bhubaneswar highlighted the importance of a broader regional airshed scale management strategy to tackle air pollution, rather than merely addressing the issue in piecemeal.

Only with stronger policies that involve varied stakeholders from across borders and states, can one evolve a meteorological mindset to uproot the sources of air pollution.

*Dev Nath Pathak is associate dean, faculty of social sciences at South Asian University. Vibha Bharadwaj is a research scholar at Christ University, Bangalore.*

## THE GIS

▼ In November 2024, northern Pakistan and north India faced a severe event that came to be known as the '2024 India Smog'.

▼ The Greenpeace Quality Report on poor air quality is due to anthropogenic sources such as industrial emissions, and by fuel and wastage.

▼ *The Lancet Health* highlighted that India's GDP reduced by 1.36% due to premature morbidity and mortality as a result of air pollution.



## India's fisheries and aquaculture, its promising course भारत की मत्स्य पालन और जलीय कृषि, इसका उभरता हुआ मार्ग

- India's fisheries and aquaculture, its promising course  
भारत की मत्स्य पालन और जलीय कृषि, इसका उभरता हुआ मार्ग
- Fisheries and aquaculture are among India's fastest-growing food-producing sectors, playing a vital role in livelihoods, nutrition, and trade.  
मत्स्य पालन और जलीय कृषि भारत के सबसे तेजी से बढ़ते खाद्य-उत्पादक क्षेत्रों में हैं, जो आजीविका, पोषण और व्यापार में महत्वपूर्ण भूमिका निभाते हैं।
- Over the decades, India has witnessed remarkable growth in aquatic food production that is driven by technological innovation, institutional support and proactive policy measures.  
दशकों में, भारत ने जलीय खाद्य उत्पादन में उल्लेखनीय वृद्धि देखी है, जिसे तकनीकी नवाचार, संस्थागत समर्थन और सक्रिय नीति उपायों ने आगे बढ़ाया है।
- Yet, the sector faces critical challenges. Overfishing, habitat degradation, water pollution and climate change are straining aquatic ecosystems.  
फिर भी, यह क्षेत्र महत्वपूर्ण चुनौतियों का सामना कर रहा है। अति-मछली पकड़ना, आवास ह्रास, जल प्रदूषण और जलवायु परिवर्तन जलीय पारिस्थितिक तंत्र पर दबाव डाल रहे हैं।
- Small-scale fishers and farmers often lack access to finance, technology and markets, while poor traceability and inadequate post-harvest measures limit tapping of the best export and domestic market potential and compromise food security.  
छोटे स्तर के मछुआरों और किसानों के पास वित्त, तकनीक और बाजारों की कमी है, जबकि खराब ट्रेसिबिलिटी और अपर्याप्त फसल-पश्चात उपाय निर्यात और घरेलू बाजार क्षमता को सीमित करते हैं और खाद्य सुरक्षा को प्रभावित करते हैं।  
On **World Fisheries Day 2025 (November 21)**, the **FAO** calls for renewed commitment to India's **Blue Revolution** and supports the Government's theme "India's Blue Transformation: Strengthening Value Addition in Seafood Exports".  
**विश्व मत्स्य दिवस 2025 (21 नवंबर)** पर **FAO** ने भारत की **ब्लू रिवोल्यूशन** के प्रति नए सिरे से प्रतिबद्धता की मांग की और सरकार की थीम "इंडिया ब्लू ट्रांसफॉर्मेशन: समुद्री भोजन निर्यात में मूल्य संवर्धन सुदृढ़ करना" का समर्थन किया।

## India's growth in fisheries and aquaculture मत्स्य पालन और जलीय कृषि में भारत की वृद्धि

- According to the **FAO SOFIA 2024**, global capture fisheries produced **92.3 million tonnes** in 2022, while aquaculture reached a record **130.9 million tonnes** valued at \$313 billion.  
**FAO SOFIA 2024** के अनुसार, 2022 में वैश्विक कैप्चर फिशरी का उत्पादन **92.3 मिलियन टन** रहा, जबकि जलीय कृषि **130.9 मिलियन टन** के रिकॉर्ड स्तर पर पहुंची, जिसकी कीमत \$313 बिलियन थी।
- India contributed **10.23 million tonnes**, making it the **world's second-largest aquaculture producer**.  
भारत ने **10.23 मिलियन टन** योगदान किया, जिससे वह **दुनिया का दूसरा सबसे बड़ा जलीय कृषि उत्पादक** बना।
- India's aquatic food production rose from **2.44 million tonnes (1980s)** to **17.54 million tonnes (2022-23)**.  
भारत का जलीय खाद्य उत्पादन **1980 के दशक के 2.44 मिलियन टन** से बढ़कर **2022-23 में 17.54 मिलियन टन** हो गया।
- Aquaculture has emerged as a key driver of this growth, reflecting sectoral modernisation through advanced technologies, infrastructure and institutional support.  
जलीय कृषि इस वृद्धि का मुख्य प्रेरक बनकर उभरा है, जो उन्नत तकनीकों, बुनियादी ढांचे और संस्थागत समर्थन के माध्यम से क्षेत्रीय आधुनिकीकरण को दर्शाता है।
- Agencies such as **ICAR fisheries institutes**, **MPEDA**, and **National Fisheries Development Board** promoted innovation and best practices.



ICAR मत्स्य संस्थान, MPEDA, और राष्ट्रीय मत्स्य विकास बोर्ड ने नवाचार और सर्वोत्तम प्रथाओं को बढ़ावा दिया है।

- The **Coastal Aquaculture Authority** regulated coastal aquaculture for environmental compliance.

तटीय जलीय कृषि प्राधिकरण ने पर्यावरणीय अनुपालन सुनिश्चित करने के लिए तटीय जलीय कृषि को विनियमित किया।

- Private sector investment expanded from hatcheries to exports, strengthening the value chain.

निजी क्षेत्र के निवेश ने हैचरियों से लेकर निर्यात तक विस्तार किया, जिससे मूल्य श्रृंखला मजबूत हुई।

- The **Blue Revolution** and **PMMSY** ushered in transformation in production, especially inland and brackish water aquaculture.

ब्लू रिवोल्यूशन और PMMSY ने विशेष रूप से अंतर्देशीय और खारे पानी की जलीय कृषि में परिवर्तन लाया।

- Key reforms include vessel transponders, Kisan Credit Card inclusion, Matsya Seva Kendras, Climate-Resilient Fishermen Villages Programme, and draft National Fisheries Policy 2020.

प्रमुख सुधारों में पोत ट्रांसपोंडर, किसान क्रेडिट कार्ड समावेशन, मत्स्य सेवा केंद्र, जलवायु-लचीला मछुआरा गांव कार्यक्रम, और मसौदा राष्ट्रीय मत्स्य नीति 2020 शामिल हैं।

## FAO's support across India

### भारत में FAO का समर्थन

- FAO has been a long-standing partner in India's fisheries and aquaculture journey. FAO भारत की मत्स्य और जलीय कृषि यात्रा में लंबे समय से साझेदार रहा है।

- The FAO began collaboration through the **Bay of Bengal Programme (BOBP)**, supporting small-scale fishing technologies, sea safety and post-harvest management.

FAO ने बंगाल की खाड़ी कार्यक्रम (BOBP) के माध्यम से सहयोग शुरू किया, जिसने छोटे पैमाने की मछली तकनीकों, समुद्री सुरक्षा और फसल-पश्चात प्रबंधन में समर्थन दिया।

- The **BOBLME project** strengthened conservation efforts and action against **Illegal, Unreported, and Unregulated (IUU) fishing**.

BOBLME परियोजना ने संरक्षण प्रयासों और अवैध, अपूर्ण, और अनियमित (IUU) मछली पकड़ने के खिलाफ कार्यों को मजबूत किया।

- FAO is supporting a **GEF-funded aquaculture project** in Andhra Pradesh on sustainable, climate-resilient aquaculture guided by **GSA** and **EAA** principles.

FAO आंध्र प्रदेश में GEF-समर्थित जलीय कृषि परियोजना द्वारा सतत, जलवायु-लचीला जलीय कृषि को बढ़ावा दे रहा है, जिसे GSA और EAA सिद्धांतों द्वारा मार्गदर्शित किया जाता है।

- FAO's **Technical Cooperation Programme (TCP)** helps strengthen fishing ports such as **Vanakbara** and **Jakhau** to address environmental, social and economic challenges.

FAO का तकनीकी सहयोग कार्यक्रम (TCP) वनकबारा और जखाऊ जैसे मछली बंदरगाहों को पर्यावरणीय, सामाजिक और आर्थिक चुनौतियों से निपटने की क्षमता प्रदान करता है।

## Focus on sustainability

### सततता पर ध्यान

- India's fisheries and aquaculture are on a promising path but sustainability must remain central.

भारत की मत्स्य और जलीय कृषि प्रगति पर हैं, लेकिन सततता को केंद्र में बने रहना चाहिए।

- Priorities include science-based stock assessments, co-managed **Monitoring Control and Surveillance (MCS)**, controlling IUU fishing, and ecosystem-based approaches.

प्राथमिकताओं में विज्ञान-आधारित स्टॉक आकलन, सह-प्रबंधित MCS, IUU मछली पकड़ने पर नियंत्रण, और पारिस्थितिकी-आधारित दृष्टिकोण शामिल हैं।



- Strengthening certification, traceability, digital tools and ensuring inclusivity for smallholders will enhance competitiveness.  
प्रमाणन, ट्रेसिबिलिटी, डिजिटल उपकरण और छोटे उत्पादकों की समावेशिता प्रतिस्पर्धा बढ़ाएगी।
- The FAO remains committed to supporting India's journey toward sustainable aquatic food systems, food and nutritional security, and reduced climate footprint.  
FAO भारत की सतत जलीय खाद्य प्रणाली, खाद्य व पोषण सुरक्षा, और जलवायु प्रभाव घटाने की यात्रा का समर्थन करने के लिए प्रतिबद्ध है।
- It aims to guide India's **Blue Revolution** toward a **resilient and inclusive future**.  
FAO का उद्देश्य भारत की **ब्लू रिवोल्यूशन** को **लचीले और समावेशी भविष्य** की ओर मार्गदर्शित करना है।

## Why are stone quarries expanding in Kerala?

What is M-sand? How has banning river sand mining led to expanding quarries across Kerala?

**GS III: Environment**  
**T.V. Padma**

### The story so far:

**A** much-needed ban on river sand mining in Kerala has spurred stone quarrying. Many of these quarries are located near protected areas, according to a new report from scientists in the State.

### Why did Kerala ban river sand mining?

Kerala banned river sand mining in January 2016 to protect its rivers and their ecosystems from the degradation caused by excessive extraction. After the ban, M-sand, an artificial alternative produced by crushing hard rock such as granite into fine particles, quickly became a popular alternative, leading to the rise in stone quarrying. To assess the impact of the mining ban, scientists from the National Institute of Technology (NIT) Calicut analysed the expansion of 72 quarries they'd identified within 10 km of

protected areas. Using GIS and Google Earth Pro, they compared the quarries' average annual expansion three years before the ban to their expansion in 2016, immediately after the ban kicked in.

In a paper in *The Extractive Industries and Society*, the team reported that in 2016 alone, the quarries expanded by 174% in area, with some more than doubling in size. After comparing their data with that from other parts of the world, the researchers concluded that more quarrying may spell trouble for the region's biodiversity.

### Where are the quarries located?

"Unfortunately, a good number of these quarries are near protected areas," George Varghese of NIT Calicut and one of the study's authors said. The team also identified three quarries of particular concern, all within 10 km of the Malabar Wildlife Sanctuary in Kozhikode and Wayanad districts. These quarries grew

232% in size in 2016 alone. Three more quarries, within the buffer zone of the Silent Valley National Park across the Palakkad, Malappuram, and Nilgiris districts, also doubled in size.

### Why is sand-mining a problem?

The team's paper sheds light on the complexity of micro-level sand mining and extractive activities on natural resource trade flows, livelihood welfare conundrums, and socioecological systems, Matovu Baker, a research associate at the National Taiwan Ocean University in Keelung said. Dr. Baker, who studied the effects of river sand mining at Amrita Vishwa Vidyapeetham, said the paper demonstrates "emerging socioecological system trade-offs that are less documented and could lead to blue injustices," a counter-movement focusing on injustices to "small-scale fishing communities in coastal areas".

"The huge demand for M-sand has

drastically increased the quarrying area within a very short period," Aznarul Islam, associate professor at Aliah University in Kolkata, said. Dr. Islam and his colleagues have studied the consequences of riverbed sand mining on the Mayurakshi river in the 50 years spanning 1970 to 2020. While sand mining had a "mild impact" on the shape of the river channel between 1970 and 2010, a phase of accelerated mining phase 2010-2020 "vehemently altered the channel morphology," he said. However, "the strict ban on river sand mining [in Kerala] increased the manufactured sand mining at a rapid pace, which actually reduced the quality of the ecosystem and biota", Dr. Islam said.

### How is demand for sand changing?

India has been recording an ever-increasing demand for river and marine sand, especially at its major urban centres, according to the India Rivers Forum. The scope and severity of consequences vary depending on several on- and off-site mining activities, and interactions between demand and supply, Dr. Baker said. He highlighted the example of Chavara village in Kerala's Kollam district, where the removal of sediments affected the migratory routes of fish. There are several solutions, but they have to be sustainable, per Dr. Baker.  
*T.V. Padma is a science journalist based in New Delhi.*

### THE GIST

▼ Kerala banned river sand mining in January 2016 to protect its rivers from the degradation caused by excessive extraction.

▼ M-sand, an artificial alternative produced by crushing hard rock such as granite into fine particles, quickly became a popular alternative, leading to the rise in stone quarrying.

▼ "The huge demand for M-sand has drastically increased the quarrying area within a very short period," Aznarul Islam, associate professor at Aliah University in Kolkata, said.

## Why are stone quarries expanding in Kerala? केरल में पत्थर की खदानें क्यों बढ़ रही हैं?

- The much-needed ban on river sand mining in Kerala has spurred stone quarrying. Many of these quarries are located near protected areas, according to a new report from scientists in the State.  
केरल में नदी की रेत खनन पर आवश्यक प्रतिबंध ने पत्थर की खदानों को बढ़ावा दिया है। इनमें से कई खदानें संरक्षित क्षेत्रों के पास स्थित हैं, राज्य के वैज्ञानिकों की एक नई रिपोर्ट के अनुसार।

### What is M-sand?

#### एम-सैंड क्या है?

- Kerala banned river sand mining in January 2016 to protect its rivers and their ecosystems from the degradation caused by excessive extraction.  
केरल ने जनवरी 2016 में नदी की रेत खनन पर प्रतिबंध लगाया ताकि अत्यधिक दोहन से नदियों और उनके पारिस्थितिकी तंत्र को बचाया जा सके।
- After the ban, **M-sand**, an artificial alternative produced by crushing hard rock such as granite into fine particles, quickly became a popular alternative, leading to the rise in stone quarrying.  
प्रतिबंध के बाद **एम-सैंड**, जो ग्रेनाइट जैसे कठोर पत्थरों को क्रश कर तैयार की जाने वाली कृत्रिम रेत है, तेजी से लोकप्रिय हुई और पत्थर की खदानों में वृद्धि हुई।



- To assess the impact of the mining ban, scientists from the **National Institute of Technology (NIT) Calicut** analysed the expansion of 72 quarries they'd identified within 10 km of protected areas.  
खनन प्रतिबंध के प्रभाव का आकलन करने के लिए **एनआईटी कालीकट** के वैज्ञानिकों ने 10 किमी के भीतर स्थित **72 खदानों** के प्रसार का विश्लेषण किया।
- Using **GIS and Google Earth Pro**, they compared the quarries' average annual expansion three years before the ban to their expansion in 2016, immediately after the ban kicked in.  
**GIS और गूगल अर्थ प्रो** का उपयोग कर उन्होंने प्रतिबंध से तीन वर्ष पूर्व के खदान विस्तार की तुलना 2016 के विस्तार से की।
- In a paper in The Extractive Industries and Society, the team reported that in 2016 alone, the quarries expanded by **174%** in area, with some more than doubling in size.  
एक शोध पत्र में टीम ने बताया कि केवल 2016 में ही खदानों का क्षेत्रफल **174%** बढ़ गया, और कुछ खदानें आकार में दोगुनी हो गईं।
- After comparing their data with that from other parts of the world, the researchers concluded that more quarrying may spell trouble for the region's **biodiversity**.  
दुनिया के अन्य हिस्सों से डेटा की तुलना के बाद शोधकर्ताओं ने निष्कर्ष निकाला कि अधिक खनन क्षेत्र की **जैव विविधता** के लिए खतरा बन सकता है।

### Where are the quarries located?

#### खदानें कहाँ स्थित हैं?

- “Unfortunately, a good number of these quarries are near **protected areas**,” George Varghese of NIT Calicut and one of the study's authors said.  
“दुर्भाग्य से, इनमें से कई खदानें **संरक्षित क्षेत्रों** के पास हैं,” एनआईटी कालीकट के जॉर्ज वर्गीज़ ने कहा।
- The team also identified three quarries of particular concern, all within 10 km of the **Malabar Wildlife Sanctuary** in Kozhikode and Wayanad districts.  
टीम ने तीन चिंताजनक खदानों की पहचान की, जो कोझीकोड और वायनाड जिलों में **मलाबार वाइल्डलाइफ़ सेंचुरी** से 10 किमी के भीतर हैं।
- These quarries grew **232%** in size in 2016 alone.  
इन खदानों का आकार केवल 2016 में ही **232%** बढ़ गया।
- Three more quarries, within the **buffer zone of the Silent Valley National Park** across the Palakkad, Malappuram, and Nilgiris districts, also doubled in size.  
तीन और खदानें **साइलेंट वैली नेशनल पार्क के बफर ज़ोन** में स्थित हैं, और वे भी आकार में दोगुनी हो गईं।

### Why is sand-mining a problem?

#### रेत खनन समस्या क्यों है?

- The team's paper sheds light on the complexity of micro-level sand mining and extractive activities on natural resource trade flows, livelihood welfare conundrums, and socioecological systems, Matovu Baker said.  
टीम का शोध पत्र सूक्ष्म स्तर पर रेत खनन के **प्राकृतिक संसाधन प्रवाह, जीविका संकट, और सामाजिक-पर्यावरणीय प्रणालियों** पर जटिल प्रभावों को उजागर करता है, मतोवु बेकर ने कहा।
- Dr. Baker said the paper demonstrates “emerging socioecological system trade-offs that are less documented and could lead to **blue injustices**,” a counter-movement focusing on injustices to small-scale fishing communities.  
डॉ. बेकर ने कहा कि यह शोध ऐसे **सामाजिक-पर्यावरणीय समझौते** दिखाता है जो कम दस्तावेजित हैं और **ब्लू इनजस्टिसेस** की ओर ले जा सकते हैं, जो छोटे मछुआरा समुदायों पर अन्याय को दर्शाता है।
- “The huge demand for **M-sand** has drastically increased the quarrying area within a very short period,” Aznarul Islam said.  
अज़नारुल इस्लाम ने कहा कि **एम-सैंड की भारी मांग** ने बहुत कम समय में खदान क्षेत्रों को तेजी से बढ़ा दिया है।
- Dr. Islam reported that riverbed sand mining had a mild impact from 1970-2010, but the accelerated mining phase 2010-2020 **vehemently altered** the channel morphology.  
डॉ. इस्लाम ने बताया कि 1970-2010 के बीच नदी रेत खनन का प्रभाव कम था, लेकिन 2010-2020 की तेज़ खनन अवधि ने नदी की **आकृति को बड़े पैमाने पर बदल दिया**।



- However, the strict ban on river sand mining in Kerala increased **manufactured sand mining** at a rapid pace, reducing ecosystem quality and **biota**, he said.  
हालांकि, केरल में नदी रेत खनन के **कड़े प्रतिबंध** ने एम-सैंड खनन को बढ़ा दिया, जिससे **पारिस्थितिक गुणवत्ता** और **जीव-जंतु** प्रभावित हुए।

### How is demand for sand changing? रेत की मांग कैसे बदल रही है?

- India has been recording an ever-increasing demand for river and marine sand, especially at its major urban centres, according to the India Rivers Forum.  
इंडिया रिवर्स फोरम के अनुसार, भारत में नदी और **समुद्री रेत** की मांग लगातार बढ़ रही है, विशेष रूप से बड़े शहरों में।
- The scope and severity of consequences vary depending on several on- and off-site mining activities and interactions between demand and supply, Dr. Baker said.  
डॉ. बेकर ने कहा कि रेत खनन के प्रभावों का दायरा और गंभीरता **ऑन-साइट और ऑफ-साइट** गतिविधियों और मांग-आपूर्ति पर निर्भर करती है।
- He highlighted the example of **Chavara village** in Kerala's Kollam district, where the removal of sediments affected the migratory routes of fish.  
उन्होंने केरल के कोल्लम जिले के **चवरा गाँव** का उदाहरण दिया, जहाँ तलछट हटाने से मछलियों के **प्रवास मार्ग** प्रभावित हुए।
- There are several solutions, but they have to be **sustainable**, per Dr. Baker.  
कई समाधान मौजूद हैं, लेकिन वे **सतत** होने चाहिए, डॉ. बेकर के अनुसार।