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Sharmila claims gold in para shot put F57

PCS

C'WEALTH GAMES

Press Trust of India
GLASGOW

Sharmila Dhankar scripted history on Monday as she won India's first para athletics gold medal in the Commonwealth Games, clinching the top spot in the women's shot put F57 event here.

The 40-year-old produced a season-best throw of 9.81m to end India's 20-year wait for a para athletics medal in the CWG.

Another Indian, Shilpa Shyla, was awarded the bronze medal following an Indian protest in controversial circumstances. Shyla had produced a personal best effort of 7.26m.

Nigeria's Eucharua Iyazi was initially placed at the bronze medal position but after a protest and official review, her only valid mark was adjudged a foul.

fourth place. However, it is likely that a counter protest may also be launched by Nigeria.

F57 classification is for athletes with lower limb impairments, limb deficiencies, or reduced muscle power.

Infected with polio on her left leg at the age of two, Sharmila won a gold medal in the Fazza International Para Athletics Championship this year. She also took part in the 2022 Birmingham Games and finished fourth.

Meanwhile, India's Srihari Nataraj qualified for the 100m backstroke semifinals but veteran Sajjan Prakash failed to go past the Heats of 50m butterfly event on Tuesday. Srihari finished fifth in his Heat and 13th overall with a timing of 55.58 seconds. The 16 fastest swimmers advanced to the semifinals. Sajjan, however, failed to qualify after finishing eighth in his Heat and 28th overall.

her only valid mark was adjudged a foul.

नाइजीरिया की यूकेरिया इयियाज़ी को प्रारंभ में कांस्य पदक की स्थिति में रखा गया था, लेकिन विरोध और आधिकारिक समीक्षा के बाद उनके एकमात्र वैध प्रयास को फाउल घोषित कर दिया गया।

- **F57 classification is for athletes with lower limb impairments, limb deficiencies, or reduced muscle power.**

एफ57 वर्गीकरण उन खिलाड़ियों के लिए है जिनमें निचले अंगों की अक्षमता, अंगों की कमी या मांसपेशियों की शक्ति में कमी होती है।

- **Infected with polio on her left leg at the age of two, Sharmila won a gold medal in the Fazza International Para Athletics Championship this year.**

दो वर्ष की आयु में अपने बाएँ पैर में पोलियो से प्रभावित हुई शर्मिला ने इस वर्ष फज्जा इंटरनेशनल पैरा एथलेटिक्स चैंपियनशिप में स्वर्ण पदक जीता।

29J7. Sharmila claims gold in para shot put F57 एफ57 पैरा शॉट पुट में शर्मिला ने जीता स्वर्ण पदक

- **Sharmila Dhankar** scripted history on Monday as she won **India's first para athletics gold medal** in the **Commonwealth Games**, clinching the top spot in the **women's shot put F57** event here.

शर्मिला ठांकर ने सोमवार को इतिहास रच दिया, जब उन्होंने कॉमनवेल्थ गेम्स में भारत का पहला पैरा एथलेटिक्स स्वर्ण पदक जीतते हुए यहाँ महिला शॉट पुट एफ57 स्पर्धा में पहला स्थान हासिल किया।

- The **40-year-old** produced a **season-best throw of 9.81m** to end India's **20-year wait** for a para athletics medal in the **CWG**.

40 वर्षीय खिलाड़ी ने 9.81 मीटर का सीज़न का सर्वश्रेष्ठ थ्रो करते हुए कॉमनवेल्थ गेम्स (CWG) में पैरा एथलेटिक्स पदक के लिए भारत के 20 वर्ष लंबे इंतजार को समाप्त किया।

- Another Indian, **Shilpa Shyla**, was awarded the **bronze medal** following an Indian protest in controversial circumstances.

एक अन्य भारतीय खिलाड़ी शिल्पा शायला को विवादास्पद परिस्थितियों में भारत द्वारा दर्ज कराए गए विरोध के बाद कांस्य पदक प्रदान किया गया।

- **Shyla** had produced a **personal best effort** of **7.26m**. **शायला ने 7.26 मीटर का अपना व्यक्तिगत सर्वश्रेष्ठ प्रदर्शन किया था।**

- **Nigeria's Eucharua Iyazi** was initially placed at the **bronze medal** position but after a protest and official review,

Kushare clinches a historic silver for India in high jump

The 31-year-old is the first from the country to finish second in the discipline at the Games; Jamaica's Beckford takes home the gold; injuries dash the hopes of Tejaswin and hurdler Shirse

PCS
K. Keerthivasan
GLASGOW

For every attempt by Sarvesh Kushare in the men's high jump final of the Commonwealth Games at the Scotstoun Stadium here on Monday, the modest gathering of spectators responded with warm applause and cheers. But when the Indian stepped up for his third and final attempt at 2.28m in expectations of a gold medal — after Romaine Beckford had failed to clear the same height in his final attempt — sepulchral silence descended over the stadium. It was evident that the crowd wanted the 31-year-old Indian to win.

However, it wasn't to be. Kushare settled for the silver medal — the first for India in able-bodied athletics at this Games. It was also the first silver by an Indian high jumper at the quadrennial event.

Beckford had sailed past 2.25m in his first try, while the Indian National record holder managed the same height only in his third, handing the Jamaican the gold on countback.

"I am happy to win a medal in my second Commonwealth Games. The cold weather affected my warm-up and warm-down routine. I was a bit con-



No time to relax: Kushare said he will now focus on the Asian Games, AFP

fused, but it was a good learning experience and a lot of fun. I won't relax now and will focus on the Asian Games," said Kushare.

However, it turned out to be a disappointing day for Tejaswin Sankar, the bronze medallist at the 2022 Birmingham Commonwealth Games.

Initially, there was confusion when the official Commonwealth Games website displayed a DNS (Did Not Start) against his name.

When queried, officials said it was a "technical glitch". A few minutes later, spectators saw Tejaswin on the stadium's giant screen

waving at them.

The 27-year-old failed in his opening attempt at 2.05m before retiring from the competition.

Later, Tejaswin said he withdrew because of severe pain caused by tendonitis in his knee.

"I think I've always had tendonitis in my knee. There isn't a high jumper in the world who hasn't suffered tendonitis. It was just one of those days. I was confident of doing well and winning a medal. In fact, I was feeling good and was in great shape during my warm-up," he said while trying to control his tears.

Tejaswin said he would

now focus on recovering in time for his next event, the decathlon on Friday.

"I'll try to fix this injury. I'm not on vacation. There are two days before my next event, and I'll start my recovery," he said.

Jack Kimani of England finished third (2.2m), while the third Indian in the field, Adarsh Ram, came fifth (2.15).

Meanwhile, Tejas Shirse finished eighth and last in the men's 110m hurdles final in 15.39 seconds and was seen limping towards the end of the race.

"I felt pain in my left ankle during the warm-up before the race," Shirse said.

29J7. Kushare clinches a historic silver for India in high jump

कुशारे ने हाई जंप में भारत के लिए ऐतिहासिक रजत पदक जीता

- For every attempt by **Sarvesh Kushare** in the **men's high jump final** of the **Commonwealth Games** at the **Scotstoun Stadium** here on Monday, the modest gathering of spectators responded with warm applause and cheers.

सोमवार को यहां **स्कॉटस्टाउन स्टेडियम** में आयोजित **कॉमनवेल्थ गेम्स** की पुरुषों की **हाई जंप फाइनल** स्पर्धा में **सर्वेश कुशारे** के हर प्रयास पर मौजूद सीमित संख्या में दर्शकों ने गर्मजोशी से तालियां बजाकर और उत्साहवर्धन कर उनका स्वागत किया।

- Kushare** settled for the **silver medal** — the first for India in **able-bodied athletics** at this Games.

कुशारे को रजत पदक से संतोष करना पड़ा — जो इन खेलों में **सक्षम (एबल-बॉडीड) एथलेटिक्स** में भारत का पहला पदक था।

- It was also the **first silver** by an Indian **high jumper** at the **quadrennial event**.

यह चार वर्षीय आयोजन में किसी भारतीय हाई जंपर द्वारा जीता गया पहला रजत पदक भी था।

Summary of Sportspersons, Event, Medal, and Significance

Sportsperson	Sport/Event	Competition	Rank/Position	Medal	Specific Uniqueness / Achievement
Sharmila Dhankar	Women's Shot Put F57 (Para Athletics)	Commonwealth Games	1st	Gold	Won India's first-ever Para Athletics Gold Medal in the history of the Commonwealth Games. Ended India's 20-year wait for a Para Athletics medal at the CWG with a season-best throw of 9.81 m. Previously finished 4th at the 2022 Birmingham CWG and had earlier won gold at the Fazza International Para Athletics Championship.
Shilpa Shyla	Women's Shot Put F57 (Para Athletics)	Commonwealth Games	3rd (upgraded from 4th)	Bronze	Initially finished 4th, but was upgraded to Bronze after India's successful protest against Nigeria's athlete. Recorded a personal best throw of 7.26 m.
Sarvesh Kushare	Men's High Jump	Commonwealth Games	2nd	Silver	Became the first Indian high jumper to win a Silver Medal in Commonwealth Games history. Also won India's first medal in able-bodied athletics at these Games. Lost gold on countback after both he and Romaine Beckford cleared 2.25 m, but Beckford cleared it in fewer attempts.
Romaine Beckford (Jamaica)	Men's High Jump	Commonwealth Games	1st	Gold	Won the gold medal on the countback rule, having cleared 2.25 m on his first attempt, whereas Sarvesh Kushare required three attempts.
Jack Kimani (England)	Men's High Jump	Commonwealth Games	3rd	Bronze	Cleared 2.20 m to secure the bronze medal.



GS Paper 1: History	29 July 2026
TOPICS COVERED	
29J7 QUIZ	

Questions and answers to the previous day's daily quiz: 1. **Three** properties from India were the first to be given UNESCO World Heritage Site status in 1983. **Ans: Ajanta Caves, Ellora Caves, the Agra Fort**
 2. Unique feature of the Khangchendzonga National Park inscribed to the list. **Ans: It is the only one in the Mixed category**
 3. The inscribed property across Tamil Nadu, West Bengal and Himachal Pradesh. **Ans: The Mountain Railways of India (Nilgiri Mountain Railway, Darjeeling Himalayan Railway and Kalka Shimla Railway)**
 4. Name the two sites that were at different times part of 'World Heritage in Danger' list. **Ans: Manas Wildlife Sanctuary and the monuments at Hampi**
 5. This site is transnational being shared with six other countries. **Ans: The Architectural Work of Le Corbusier**
 6. Inscribed in 2003, this site exhibits the earliest traces of human life in India. **Ans: Rock Shelters of Bhimbetka, Madhya Pradesh**
 7. The Indian currency notes featuring the Konark Sun Temple and the Sanchi Stupa. **Ans: Rs. 10 and Rs. 200 respectively**
 Visual: Name this WHS and the State in which it is located. **Ans: Rani ki Vav, Gujarat**

29J7. QUIZ

1. Which properties from India were the first to be inscribed on the UNESCO World Heritage List in 1983?

- **Ajanta Caves (Maharashtra), Ellora Caves (Maharashtra), and Agra Fort (Uttar Pradesh) became the first Indian properties to be inscribed on the UNESCO World Heritage List in 1983.**
- **Ajanta Caves are renowned for their Buddhist rock-cut monasteries and murals, dating from approximately the 2nd century BCE to the 6th century CE.**
- **Ellora Caves represent a unique coexistence of Buddhist, Hindu and Jain monuments, constructed**

between the 6th and 10th centuries CE.

- **Agra Fort, built primarily under Emperor Akbar (1565 onwards), served as the principal Mughal imperial residence before the capital shifted to Delhi.**

2. What is the unique feature of the Khangchendzonga National Park among India's UNESCO World Heritage Sites?

- **Khangchendzonga National Park, located in Sikkim, was inscribed on the UNESCO World Heritage List in 2016.**
- **It is India's only Mixed World Heritage Site, recognised for both its exceptional natural biodiversity and rich cultural and spiritual heritage.**
- **The park encompasses ecosystems ranging from subtropical forests to alpine meadows and glaciers, including parts of Mount Khangchendzonga, the world's third-highest mountain (8,586 m).**
- **It is sacred to the Lepcha community and Tibetan Buddhist traditions, where mountains, lakes and forests possess deep religious significance.**
- **The park also shelters globally important wildlife such as the Snow Leopard, Red Panda, Himalayan Tahr and Musk Deer, making it significant for biodiversity conservation.**

3. Which UNESCO World Heritage property extends across Tamil Nadu, West Bengal and Himachal Pradesh?

- **The Mountain Railways of India is a serial UNESCO World Heritage Property comprising:**
- **Darjeeling Himalayan Railway (West Bengal) – inscribed 1999.**
- **Nilgiri Mountain Railway (Tamil Nadu) – added 2005.**
- **Kalka-Shimla Railway (Himachal Pradesh) – added 2008.**
- **These railways represent remarkable examples of 19th- and early 20th-century mountain engineering, overcoming steep gradients through tunnels, bridges, loops and zigzags.**

4. Name the two Indian UNESCO World Heritage Sites that were, at different times, placed on the List of World Heritage in Danger.

- **Manas Wildlife Sanctuary (Assam) was placed on the List of World Heritage in Danger in 1992 due to armed conflict, poaching and severe damage to park infrastructure.**
- **Following sustained conservation efforts by the Government of India, the Government of Assam and international partners, it was removed from the Danger List in 2011.**



- **The Group of Monuments at Hampi (Karnataka)** was placed on the Danger List from **1999 to 2006** because of concerns regarding infrastructure development and threats to its archaeological integrity.
- After corrective conservation measures and improved site management, UNESCO removed Hampi from the Danger List in **2006**.
- These examples illustrate that UNESCO may temporarily list sites as "in danger" to encourage stronger conservation measures rather than revoke their World Heritage status.

5. Which Indian UNESCO World Heritage Site is part of a transnational serial property shared with six other countries?

- This World Heritage Property was inscribed in **2016** as a **transnational serial nomination**.
- It includes **17 architectural works** distributed across **seven countries**:
- Argentina
- Belgium
- France
- Germany
- India
- Japan
- Switzerland.
- India's contribution is the **Capitol Complex at Chandigarh**, designed by the renowned architect **Le Corbusier**.

6. Which UNESCO World Heritage Site, inscribed in 2003, contains the earliest known traces of human life in India?

- The **Rock Shelters of Bhimbetka**, located in **Raisen District, Madhya Pradesh**, were inscribed on the **UNESCO World Heritage List in 2003**.
- The site contains **over 700 rock shelters**, many of which preserve prehistoric paintings depicting hunting, dancing, rituals and everyday life.
- Archaeological evidence indicates **continuous human occupation from the Lower Palaeolithic period through the Mesolithic, Chalcolithic and later historical periods**.
- The paintings employ natural pigments and represent one of the world's longest continuous artistic traditions.
- Bhimbetka provides crucial evidence regarding the evolution of prehistoric human life, cultural development and artistic expression on the Indian subcontinent.

7. Which Indian currency notes feature the Konark Sun Temple and the Sanchi Stupa?

- The **₹10 banknote** of the **Mahatma Gandhi (New) Series**, issued by the **Reserve Bank of India**, features the **Konark Sun Temple (Odisha)** on its reverse side.
- The **Konark Sun Temple**, built during the **13th century** by **King Narasimhadeva I** of the Eastern Ganga dynasty, was inscribed as a UNESCO World Heritage Site in **1984**.
- The **₹200 banknote** displays the **Sanchi Stupa (Madhya Pradesh)**.
- The **Buddhist Monuments at Sanchi**, established originally under **Emperor Ashoka in the 3rd century BCE**, were inscribed on the UNESCO World Heritage List in **1989**.
- Both monuments highlight India's rich cultural heritage through the country's currency.

8. Visual Identification: Name this UNESCO World Heritage Site and the State in which it is located.

- **Rani-ki-Vav (Queen's Stepwell)** is situated at **Patan in Gujarat**.
- It was built during the **11th century CE** by **Queen Udayamati** in memory of her husband **King Bhima I** of the Solanki (Chaulukya) dynasty.
- The monument was inscribed on the **UNESCO World Heritage List in 2014**.



- It is celebrated as one of the finest surviving examples of India's stepwell architecture, featuring intricate sculptures of **Vishnu, Lakshmi, Shiva, celestial beings and mythological figures**.

GS Paper 1: Society		29 July 2026
TOPICS COVERED		
29J7	'Gen Alpha' students stage walkout for basic facilities 'जेन अल्फा' के विद्यार्थियों ने बुनियादी सुविधाओं की मांग को लेकर कक्षाओं का बहिष्कार किया	

'Gen Alpha' students stage walkout for basic facilities

GS I Society
Ishita Mishra
 NEW DELHI

Days after the Cockroach Janta Party-led student protest in Delhi drew national attention, a similar expression of dissent has emerged from Uttar Pradesh's Fatehpur district on Tuesday.

Hundreds of students at a government-aided school walked out of their classrooms and staged a protest demanding better infrastructure. The school administration had to call in police personnel to maintain order.

29J7. 'Gen Alpha' students stage walkout for basic facilities

'जेन अल्फा' के विद्यार्थियों ने बुनियादी सुविधाओं की मांग को लेकर कक्षाओं का बहिष्कार किया

Days after the **Cockroach Janta Party (CJP)**-led student protest in Delhi drew national attention, a similar expression of dissent emerged from **Uttar Pradesh's Fatehpur district** on Tuesday.

दिल्ली में कॉकरोच जनता पार्टी (CJP) के नेतृत्व में हुए छात्र आंदोलन के राष्ट्रीय स्तर पर ध्यान आकर्षित करने के कुछ दिनों बाद, मंगलवार को उत्तर प्रदेश के फतेहपुर जिले से भी इसी प्रकार का विरोध प्रदर्शन सामने आया।

Hundreds of students at a government-aided school walked out of their classrooms and staged a protest demanding better infrastructure.

एक सरकारी सहायता प्राप्त विद्यालय के सैकड़ों विद्यार्थी अपनी कक्षाओं से बाहर निकल आए और बेहतर आधारभूत संरचना की मांग को लेकर प्रदर्शन किया।

Human Generations: Timeline and Characteristics

Generation	Birth Years (Approx.)	Current Age (2026)	Popular Name	Key Characteristics
Silent Generation	1928–1945	81–98 years	Traditionalists	Experienced the Great Depression and World War II; value discipline, loyalty, and hard work.
Baby Boomers	1946–1964	62–80 years	Boomers	Born during the post-World War II population boom; witnessed rapid industrialization and economic growth.
Generation X (Gen X)	1965–1980	46–61 years	Gen X	Grew up before the internet; adaptable, independent, and career-oriented.
Millennials (Generation Y)	1981–1996	30–45 years	Gen Y / Millennials	Came of age during the internet revolution; familiar with computers, mobile phones, and social media.
Generation Z (Gen Z)	1997–2012	14–29 years	Zoomers	First true digital natives ; grew up with smartphones, social media, online learning, and streaming platforms.
Generation	2013–2024	2–13	Gen Alpha	Born entirely in the era of AI, tablets,



Generation	Birth Years (Approx.)	Current Age (2026)	Popular Name	Key Characteristics
Alpha (Gen Alpha)	(approx.)	years		voice assistants, and smart devices; expected to be the most technologically connected generation.
Generation Beta (Gen Beta)	2025–2039 (projected)	0–1 year	Gen Beta	The first generation born into an AI-driven world. They are expected to grow up with advanced robotics, generative AI, autonomous vehicles, smart homes, and immersive technologies.

GS Paper 1: Geography	29 July 2026
TOPICS COVERED	
29J7	UN chief makes rare Cyprus visit to help ease decades-old ethnic division संयुक्त राष्ट्र प्रमुख ने दशकों पुराने जातीय विभाजन को कम करने के लिए साइप्रस की दुर्लभ यात्रा की

UN chief makes rare Cyprus visit to help ease decades-old ethnic division

GS I: Geography
Associated Press
NICOSIA

U.N. Secretary-General Antonio Guterres on a rare visit to Cyprus said on Tuesday he was demonstrating his commitment to resolving the island nation's decades-old ethnic division, even as expectations remain low for a speedy breakthrough leading to a peace accord.

"I will do everything I can to support the Greek Cypriots and Turkish Cypriots in this very important moment," Mr. Guterres said after talks with Greek Cypriot President Nikos Christodoulides.

The U.N. chief also met with Turkish Cypriot leader Tufan Erhurman and was scheduled to hold joint meetings with both la-



Peace moves: UN Secretary-General Antonio Guterres in a meeting with Cyprus President Nikos Christodoulides on Tuesday. REUTERS

ter in the day and on Wednesday.

The first visit by a U.N. chief in 16 years came during renewed efforts to resume formal peace talks after a nearly decade-long hiatus. The last major push, which Mr. Guterres mediated in 2017, col-

lapsed in recriminations over who and what was to blame for the impasse.

Numerous rounds of U.N.-mediated talks have shared the same fate since 1974, when the island was divided following a Turkish invasion prompted by an Athens-backed coup with

the stated goal of union with Greece. Turkish Cypriots declared independence in the island's northern third in 1983 but it is only recognised by Turkey, which maintains more than 35,000 troops there. Cyprus joined the European Union in 2004, but only the internationally recognised south enjoys full benefits.

A few months before his U.N. term expires, Mr. Guterres wants to convene a wider meeting to involve top diplomats from Cyprus' guarantors – Greece, Turkey and Britain – to declare a formal start to peace talks. It is hoped a declaration would offer momentum to the process so that Mr. Guterres' successor could see it through.

29J7. UN chief makes rare Cyprus visit to help ease decades-old ethnic division

संयुक्त राष्ट्र प्रमुख ने दशकों पुराने जातीय विभाजन को कम करने के लिए साइप्रस की दुर्लभ यात्रा की



- **U.N. Secretary-General Antonio Guterres**, on a rare visit to **Cyprus**, said on **Tuesday** he was demonstrating his commitment to resolving the island nation's **decades-old ethnic division**, even as expectations remain low for a speedy breakthrough leading to a **peace accord**.
संयुक्त राष्ट्र महासचिव एंटोनियो गुटेरेस ने मंगलवार को साइप्रस की एक दुर्लभ यात्रा के दौरान कहा कि वे इस द्वीपीय राष्ट्र के दशकों पुराने जातीय विभाजन को समाप्त करने के प्रति अपनी प्रतिबद्धता प्रदर्शित कर रहे हैं, यद्यपि शीघ्र शांति समझौते की दिशा में किसी बड़ी सफलता की संभावना अभी भी कम है।
- **"I will do everything I can to support the Greek Cypriots and Turkish Cypriots in this very important moment,"** Mr. Guterres said after talks with **Greek Cypriot President Nikos Christodoulides**.
ग्रीक साइप्रियट राष्ट्रपति निकोस क्रिस्टोडूलिडिस के साथ वार्ता के बाद श्री गुटेरेस ने कहा, **"मैं इस अत्यंत महत्वपूर्ण समय में ग्रीक साइप्रियटों और तुर्की साइप्रियटों का समर्थन करने के लिए हर संभव प्रयास करूंगा।"**
- The **U.N. chief** also met with **Turkish Cypriot leader Tufan Erhurman** and was scheduled to hold **joint meetings** with both leaders later in the day and on **Wednesday**.
संयुक्त राष्ट्र प्रमुख ने तुर्की साइप्रियट नेता तुफान एरहुरमान से भी मुलाकात की तथा दिन में बाद में और बुधवार को दोनों नेताओं के साथ संयुक्त बैठकें निर्धारित थीं।
- The first visit by a **U.N. chief** in **16 years** came during renewed efforts to resume formal **peace talks** after a nearly **decade-long hiatus**.
16 वर्षों में किसी संयुक्त राष्ट्र प्रमुख की यह पहली यात्रा ऐसे समय हुई है, जब लगभग एक दशक के अंतराल के बाद औपचारिक शांति वार्ता पुनः आरंभ करने के प्रयास किए जा रहे हैं।
- The last major push, which Mr. **Guterres** mediated in **2017**, collapsed in recriminations over who and what was to blame for the impasse.
2017 में श्री गुटेरेस की मध्यस्थता में हुआ अंतिम बड़ा प्रयास इस बात पर पारस्परिक आरोप-प्रत्यारोप के कारण विफल हो गया कि गतिरोध के लिए कौन और क्या जिम्मेदार था।
- Numerous rounds of **U.N.-mediated talks** have shared the same fate since **1974**, when the island was divided following a **Turkish invasion** prompted by an **Athens-backed coup** with the stated goal of union with **Greece**.
1974 से अब तक संयुक्त राष्ट्र की मध्यस्थता में हुई अनेक वार्ताओं का यही परिणाम रहा है। उसी वर्ष ग्रीस के साथ एकीकरण के उद्देश्य से एथेंस समर्थित तख्तापलट के बाद हुए तुर्की आक्रमण के परिणामस्वरूप यह द्वीप विभाजित हो गया था।
- **Turkish Cypriots** declared **independence** in the island's northern third in **1983**, but it is only recognised by **Türkiye**, which maintains more than **35,000 troops** there.
तुर्की साइप्रियटों ने **1983** में द्वीप के उत्तरी एक-तिहाई भाग को स्वतंत्र घोषित किया, किन्तु इसे केवल तुर्किये ही मान्यता देता है, जिसने वहाँ **35,000 से अधिक सैनिक** तैनात कर रखे हैं।
- **Cyprus** joined the **European Union (EU)** in **2004**, but only the internationally recognised **southern** part enjoys the full benefits.
साइप्रस **2004** में यूरोपीय संघ (EU) का सदस्य बना, किन्तु केवल अंतरराष्ट्रीय स्तर पर मान्यता प्राप्त दक्षिणी भाग को ही इसकी पूर्ण सदस्यता के लाभ प्राप्त हैं।
- A few months before his **U.N.** term expires, Mr. **Guterres** wants to convene a wider meeting involving top diplomats from **Cyprus' guarantors — Greece, Türkiye, and Britain —** to declare a formal start to **peace talks**.
अपने संयुक्त राष्ट्र कार्यकाल की समाप्ति से कुछ महीने पहले श्री गुटेरेस साइप्रस के गारंटर देशों — ग्रीस, तुर्किये, और ब्रिटेन — के शीर्ष राजनयिकों की एक व्यापक बैठक बुलाना चाहते हैं, ताकि शांति वार्ता की औपचारिक शुरुआत की घोषणा की जा सके।
- It is hoped that such a declaration would provide **momentum** to the process so that Mr. **Guterres' successor** could see it through.
आशा व्यक्त की जा रही है कि ऐसी घोषणा इस प्रक्रिया को नया गति-प्रोत्साहन (Momentum) देगी, जिससे श्री गुटेरेस के उत्तराधिकारी इस शांति प्रक्रिया को सफलतापूर्वक आगे बढ़ा सकेंगे।

GS Paper II: Polity	29 July 2026
TOPICS COVERED	
29J7	Panel on SC status for Dalit converts yet to submit report दलित धर्मांतरितों को अनुसूचित जाति का दर्जा देने पर गठित समिति ने अभी तक रिपोर्ट प्रस्तुत नहीं की

Panel on SC status for Dalit converts yet to submit report

GS II: Polity
Abhinav Lakshman
NEW DELHI

More than a month after the Justice K.G. Balakrishnan (retired)-led commission finished its study to examine whether Scheduled Caste status can be accorded to Dalit converts, its report has not yet been submitted, *The Hindu* has learnt.

Sources aware of the developments said that while the report was readied last month, "annexures" for it are being "put together" and that the report will likely be submitted "soon". Significantly, the last deadline for the commission's work expired on June 10, and the government has since not issued any notification extending the time for the panel's work.

The three-member Commission of Inquiry was constituted in October 2022.

29J7. Panel on SC status for Dalit converts yet to submit report दलित धर्मांतरितों को अनुसूचित जाति का दर्जा देने पर गठित समिति ने अभी तक रिपोर्ट प्रस्तुत नहीं की

- More than a month after Justice **K.G. Balakrishnan (Retd.)-led Commission** finished its study to examine whether **Scheduled Caste (SC) status** can be accorded to **Dalit converts**, its **report** has not yet been submitted, *The Hindu* has learnt.

न्यायमूर्ति के.जी. बालकृष्णन (सेवानिवृत्त) की अध्यक्षता वाले आयोग द्वारा दलित धर्मांतरितों को अनुसूचित जाति (SC) का दर्जा दिए जाने की संभावना पर अपना अध्ययन पूरा किए हुए एक महीने से अधिक समय बीत जाने के बावजूद उसकी रिपोर्ट अभी तक प्रस्तुत नहीं की गई है, यह जानकारी *द हिंदू* को मिली है।

- The **three-member Commission of Inquiry** was constituted in **October 2022**.

यह तीन सदस्यीय जाँच आयोग अक्टूबर 2022 में गठित किया गया था।

GS Paper II: International Relations	29 July 2026
TOPICS COVERED	
29J7	Iran's Afghan balancing act amid regional upheaval क्षेत्रीय उथल-पुथल के बीच ईरान का अफ़ग़ान संतुलनकारी दृष्टिकोण
29J7	Senegal offers 'unwavering support' as Mali battles separatist insurgents अलगवादी विद्रोहियों से संघर्ष के बीच सेनेगल ने माली को 'अटूट समर्थन' का आश्वासन दिया
29J7	U.K. to resume military drills in Kenya after delay over human rights concerns मानवाधिकार संबंधी चिंताओं के कारण हुई देरी के बाद ब्रिटेन केन्या में सैन्य अभ्यास पुनः शुरू करेगा
29J7	Beyond national interest: role of ethics and emotions in world politics राष्ट्रीय हित से परे: विश्व राजनीति में नैतिकता और भावनाओं की भूमिका



Iran's Afghan balancing act amid regional upheaval

SS II IR

The funeral proceedings of Iran's late Supreme Leader, Ayatollah Ali Khamenei, that stretched over a week amid a spiralling war and significant internal turmoil at the seat of power for Shiism, saw multiple personalities visit Tehran. Almost unnoticed, however, was the presence of delegations from both the Taliban and the opposition Northern Alliance. The two have been fighting each other, in various iterations, over Afghanistan since the 1990s.

Complex equations

The presence of the Taliban's Deputy Prime Minister for Economic Affairs Mullah Abdul Ghani Baradar along with Taliban Foreign Minister Amir Khan Muttaqi on the one hand and the Northern Alliance's Ahmed Massoud, son of the group's founder Ahmed Shah Massoud on the other, highlighted the delicate game of geopolitics that continues to persist on Tehran's eastern front. While Iran is the one country which has built the strongest influence with Kabul since the collapse of the government of President Ashraf Ghani (August 2021), it still does not officially recognise the Taliban government. This is hardly surprising, considering that until the 1990s, Iran, along with India, Russia, Tajikistan and other neighbouring and foreign states, supported the Northern Alliance.

The chaotic withdrawal of the United States from Afghanistan, in August 2021, two decades after a post-9/11 war launched against al Qaeda was a critical moment in Tehran. The consistent and massive deployment of western military power on its borders was a perpetual nightmare that had to be factored into its calculations. Pakistan's support for and incubation of the Afghan Taliban, while simultaneously backing the U.S.-led 'war on terror', created a sinkhole of competing interests, where the Venn diagram of who was supporting whom became so



Kabir Taneja

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The events of
2021 on Iran's
eastern front
continue to
influence
Tehran's choices
amid the war
in 2026

convoluted that foreign powers often ceded the upper hand to regional players. The fact that al Qaeda founder Osama Bin Laden was eventually found in Abbottabad, Pakistan (May 2011), in a large house – and not a cave in the infamous Tora Bora – was not a coincidence.

The Afghan chessboard

The Iranian viewpoint on the Taliban and the Afghan landscape changed significantly after 9/11. While Tehran remains sceptical of the Taliban and the future of its rule to this day, it simultaneously recognises that an insurgency-turned-government will always carry a question mark over its long-term stability. The ideological and tribal fissures that persist also require micromanagement, which means creating enemies along volatile borders is not in anyone's long-term interests.

Following 2021, the Taliban was in search of both power and patronage. Iran could offer some of the power, but only a limited amount of the patronage. The calculation behind this was to free up a major front from as much conflict as possible. The Northern Alliance, largely concentrated in the mountainous northern province of Panjshir, was both weak and disorganised, with infighting having hollowed out any possibility of cohesion and structure. In fact, since February, as clouds of war gathered, the Taliban reiterated that it would support Iran should the country come under attack. Zabiullah Mujahid, a spokesman close to Taliban emir Hibatullah Akhundzada, said in an interview with Iranian state radio that they would support Iran if need be. The nature and extent of such support, of course, remain subjects of debate. Diplomatic support from Kabul has been robust over the past year, including access to the country's civilian airports.

But the Iranians hosting Masoud and the Northern Alliance delegation in Tehran shows

that, despite the war in West Asia, Iran is not willing to put all its eggs in one basket when it comes to Afghanistan. The country, and its intricacies, remain a problem that needs strategic management. The fact that the Taliban is still prioritising solidifying its own power and structure, especially between Kabul, the political capital, and Kandahar, the ideological one, highlights that homogeneously supporting the group is still not seen as being wise. For Tehran, this geography remains critical. For example, Quds Force, the powerful Islamic Revolutionary Guard Corps' (IRGC) elite external operations branch, has been run by Esmail Qaani since the assassination of Qasem Soleimani in 2020 by the U.S. Qaani, is known to be a Khorasan hand (Iran's north/eastern neighbours such as Afghanistan, Turkmenistan, among others). Qaani's operational history goes back to the Taliban versus Northern Alliance era of the 1990s.

Ties with Pakistan

The war currently engulfing West Asia is expected to remain a constant for at least a few months to come. Pakistan's role as a mediator between Tehran and Washington DC, has given a new lease of 'brotherhood' between the two. Nonetheless, their aims are divergent. For Pakistan, the objective is to get back into the good books of both the U.S. and Gulf partners (Islamabad now has troops stationed in Saudi Arabia). For Iran, it is about reaching out to the U.S. through a neighbour it knows, if not trusts, better than most. The Iran-Pakistan bilateral relationship is incidental to everything else.

Increasingly, no binaries exist in international diplomacy. Neither do brotherhoods. Every hug is exchanged with one eye always open. These realities predate contemporary politics in South Asia and West Asia, long before the disintegration of western power began to take the shape we are witnessing today.

29J7. Iran's Afghan balancing act amid regional upheaval

क्षेत्रीय उथल-पुथल के बीच ईरान का अफ़ग़ान संतुलनकारी दृष्टिकोण

- Almost unnoticed, however, was the presence of delegations from both the **Taliban** and the **opposition Northern Alliance**.

हालाँकि, लगभग अनदेखी रह गई तालिबान तथा विपक्षी नॉर्दर्न अलायंस के प्रतिनिधिमंडलों की उपस्थिति।

- While **Iran** is the one country which has built the strongest influence with **Kabul** since the collapse of the government of **President Ashraf Ghani (August 2021)**, it still does not officially recognise the **Taliban government**.

यद्यपि ईरान ने अगस्त 2021 में राष्ट्रपति अशरफ़ ग़नी की सरकार के पतन के बाद से काबुल में सबसे अधिक प्रभाव स्थापित किया है, फिर भी वह अब तक तालिबान सरकार को आधिकारिक मान्यता नहीं देता है।

- This is hardly surprising, considering that **until the 1990s, Iran, along with India, Russia, Tajikistan** and other neighbouring and foreign states, supported the **Northern Alliance**.

यह आश्चर्यजनक नहीं है, क्योंकि 1990 के दशक तक ईरान, भारत, रूस, ताजिकिस्तान तथा अन्य पड़ोसी एवं विदेशी देशों के साथ मिलकर नॉर्दर्न अलायंस का समर्थन करता रहा था।

- The consistent and massive deployment of **Western military power** on its borders was a perpetual nightmare that had to be factored into its calculations.

अपनी सीमाओं पर पश्चिमी सैन्य शक्ति की निरंतर और व्यापक तैनाती ईरान के लिए एक स्थायी चिंता का विषय थी, जिसे उसकी रणनीतिक गणनाओं में सदैव ध्यान में रखना पड़ता था।

- Pakistan's** support for and incubation of the **Afghan Taliban**, while simultaneously backing the **U.S.-led 'war on terror'**, created a sinkhole of competing interests, where the Venn diagram of who was supporting whom became so convoluted that foreign powers often ceded the upper hand to regional players.

पाकिस्तान द्वारा अफ़ग़ान तालिबान को समर्थन और संरक्षण प्रदान करने के साथ-साथ अमेरिका-नेतृत्व वाले



‘आतंकवाद के विरुद्ध युद्ध’ का समर्थन करने से परस्पर प्रतिस्पर्धी हितों की ऐसी जटिल स्थिति उत्पन्न हुई, जिसमें कौन किसका समर्थन कर रहा था, यह इतना उलझ गया कि बाहरी शक्तियाँ प्रायः क्षेत्रीय शक्तियों के सामने बढ़त खो बैठीं।

- The fact that al Qaeda founder Osama Bin Laden was eventually found in Abbottabad, Pakistan (May 2011), in a large house — and not a cave in the infamous Tora Bora — was not a coincidence.

यह तथ्य कि अल-कायदा के संस्थापक ओसामा बिन लादेन अंततः मई 2011 में पाकिस्तान के एबटाबाद में एक बड़े मकान में पाए गए—न कि कुख्यात तोरा बोरा की किसी गुफा में—महज़ एक संयोग नहीं था।

The Afghan chessboard

अफ़ग़ान शतरंज की बिसात

- The **Northern Alliance**, largely concentrated in the mountainous northern province of **Panjshir**, was both weak and disorganised, with **infighting** having hollowed out any possibility of cohesion and structure.
मुख्यतः उत्तरी पर्वतीय प्रांत पंजशीर में केंद्रित नॉर्दर्न अलायंस कमजोर और असंगठित था तथा आंतरिक गुटबाज़ी ने उसकी एकजुटता और संगठनात्मक संरचना की किसी भी संभावना को समाप्त कर दिया था।
- Zabihullah Mujahid**, a spokesman close to Taliban emir **Hibatullah Akhundzada**, said in an interview with **Iranian state radio** that they would support **Iran** if need be.
तालिबान के अमीर **हिबतुल्लाह अखुंदज़ादा** के निकट सहयोगी एवं प्रवक्ता **ज़बीहुल्लाह मुजाहिद** ने ईरानी सरकारी रेडियो को दिए एक साक्षात्कार में कहा कि आवश्यकता पड़ने पर वे ईरान का समर्थन करेंगे।
- The nature and extent of such support, of course, remain subjects of debate.
निस्संदेह, ऐसे समर्थन की प्रकृति और सीमा अब भी चर्चा का विषय बनी हुई है।
- Diplomatic support from Kabul** has been robust over the past year, including access to the country's **civilian airports**.
पिछले एक वर्ष के दौरान काबुल से प्राप्त कूटनीतिक समर्थन सुदृढ़ रहा है, जिसमें देश के नागरिक हवाई अड्डों तक पहुँच भी शामिल है।
- But the **Iranians** hosting **Masood** and the **Northern Alliance** delegation in **Tehran** shows that, despite the war in **West Asia**, **Iran** is not willing to put all its eggs in one basket when it comes to **Afghanistan**.
किन्तु ईरानियों द्वारा **मसूद** तथा नॉर्दर्न अलायंस के प्रतिनिधिमंडल की तेहरान में मेज़बानी यह दर्शाती है कि पश्चिम एशिया में युद्ध के बावजूद ईरान, अफ़ग़ानिस्तान के संदर्भ में अपनी पूरी रणनीति एक ही पक्ष पर निर्भर नहीं करना चाहता।
- The country, and its intricacies, remain a problem that needs **strategic management**.
यह देश और उसकी जटिलताएँ अब भी ऐसी समस्या हैं, जिनके लिए रणनीतिक प्रबंधन आवश्यक है।
- For example, **Quds Force**, the powerful **Islamic Revolutionary Guard Corps (IRGC)** elite external operations branch, has been run by **Esmail Qaani** since the assassination of **Qasem Soleimani** in 2020 by the U.S.
उदाहरण के लिए, शक्तिशाली इस्लामिक रिवालयूशनरी गार्ड कॉर्प्स (IRGC) की विशिष्ट बाह्य अभियान शाखा कुद्स फ़ोर्स का नेतृत्व 2020 में अमेरिका द्वारा क़ासिम सुलेमानी की हत्या के बाद से इस्माइल क़ानी कर रहे हैं।
- Qaani** is known to be a **Khorasan** hand (**Iran's** north/eastern neighbours such as **Afghanistan, Turkmenistan**, among others).
क़ानी को ख़ुरासान क्षेत्र का विशेषज्ञ माना जाता है, जिसमें ईरान के उत्तर एवं पूर्व के पड़ोसी देश जैसे अफ़ग़ानिस्तान, तुर्कमेनिस्तान आदि शामिल हैं।

Ties with Pakistan

पाकिस्तान के साथ संबंध



- **Pakistan's** role as a **mediator** between **Tehran** and **Washington DC** has given a new lease of **'brotherhood'** between the two.
तेहरान और वॉशिंगटन डी.सी. के बीच मध्यस्थ के रूप में पाकिस्तान की भूमिका ने दोनों देशों के बीच 'भाईचारे' को नई ऊर्जा प्रदान की है।
- Nonetheless, their aims are divergent.
फिर भी, दोनों के उद्देश्य परस्पर भिन्न हैं।
- **For Pakistan**, the objective is to get back into the good books of both the **U.S.** and **Gulf partners** (Islamabad now has troops stationed in **Saudi Arabia**).
पाकिस्तान का उद्देश्य अमेरिका तथा खाड़ी देशों के साझेदारों का पुनः विश्वास प्राप्त करना है (वर्तमान में इस्लामाबाद के सैनिक सऊदी अरब में तैनात हैं)।
- **For Iran**, it is about reaching out to the **U.S.** through a neighbour it knows, if not trusts, better than most.
ईरान के लिए यह अपने ऐसे पड़ोसी के माध्यम से अमेरिका तक पहुँच बनाने का प्रयास है, जिसे वह अधिकांश अन्य देशों की तुलना में अधिक अच्छी तरह जानता है, भले ही उस पर पूर्ण विश्वास न करता हो।

Senegal offers 'unwavering support' as Mali battles separatist insurgents

GS II: IR
Agence France-Presse
BAMAKO

Senegal's President Bassirou Diomaye Faye offered "unwavering support" to neighbouring Mali on Tuesday as he visited its junta leader whose government is fighting a jihadist and separatist insurgency.

Mr. Faye's visit to meet Malian leader Assimi Goita is his first trip since being appointed chair of the west African regional bloc Economic Community of West African States (ECOWAS). However, the meeting was primarily bilateral and Mr. Faye was not accompanied by other ECOWAS members, diplomatic sources said.

Fighters from the Tuareg



Senegal President Bassirou Diomaye Faye with Malian leader Assimi Goita upon his arrival for a working visit on Tuesday. REUTERS

reg separatist movement FLA and al-Qaeda-linked jihadist group JNIM have carried out coordinated assaults against Mali in recent months.

Mr. Faye expressed "Senegal's unequivocal and firmest condemnation of

these heinous, cowardly, and barbaric acts, which are becoming increasingly frequent".

The rebels in April seized the strategic northern city of Kidal and also killed Malian Defence Minister Sadio Camara.

The fall of Kidal, a strategic town in Mali's desert north and an independence stronghold, was a particular blow for the ruling junta, which seized power in two coups in 2020 and 2021 promising to restore the country's territorial integrity.

"I reiterate that Senegal stands ready to support Mali through this ordeal, so that together we may confront the manifold challenges and threats to peace and stability across the region and the wider Sahel," Mr. Faye said.

Mr. Goita did not make a public comment. The junta has struggled to deliver on its promise to restore security after years of jihadist and separatist unrest.

29J7. Senegal offers 'unwavering support' as Mali battles separatist insurgents

अलगाववादी विद्रोहियों से संघर्ष के बीच सेनेगल ने माली को 'अटूट समर्थन' का आश्वासन दिया

- **Senegal's President Bassirou Diomaye Faye** offered "unwavering support" to neighbouring **Mali** on **Tuesday** as he visited its **junta leader**, whose government is fighting a **jihadist and separatist insurgency**.
सेनेगल के राष्ट्रपति बासिरु दियोमाये फाये ने मंगलवार को पड़ोसी माली के सैन्य शासन (जुंटा) के नेता से मुलाकात के दौरान "अटूट समर्थन" का आश्वासन दिया, जिसकी सरकार जिहादी तथा अलगाववादी विद्रोह से संघर्ष कर रही है।
- Mr. **Faye's** visit to meet **Malian leader Assimi Goita** is his first trip since being appointed **Chair** of the **West African regional bloc Economic Community of West African States (ECOWAS)**.

फाये की माली के नेता अस्सीमी गोइता से यह मुलाकात पश्चिम अफ्रीकी राज्यों के आर्थिक समुदाय (ECOWAS) के अध्यक्ष नियुक्त होने के बाद उनकी पहली यात्रा है।

- However, the meeting was primarily **bilateral** and Mr. **Faye** was not accompanied by other **ECOWAS** members, diplomatic sources said.
हालाँकि, कूटनीतिक सूत्रों के अनुसार यह बैठक मुख्यतः **द्विपक्षीय** थी और श्री **फाये** के साथ **ECOWAS** के अन्य सदस्य उपस्थित नहीं थे।
- **Fighters from the Tuareg separatist movement FLA and al-Qaeda-linked jihadist group JNIM have carried out coordinated assaults against Mali in recent months.**
हाल के महीनों में **तुआरेग अलगाववादी संगठन FLA** तथा **अल-कायदा से संबद्ध जिहादी संगठन JNIM** के लड़ाकों ने **माली** पर समन्वित हमले किए हैं।

U.K. to resume military drills in Kenya after delay over human rights concerns

GS II: IR
Associated Press
NAIROBI

Kenya and Britain on Tuesday agreed to resume military training in the East African nation after a delay in signing a new defence cooperation agreement that was largely attributed to Kenyan legislators' concerns about protecting nearby communities.

Neither government commented on allegations of human rights violations involving British soldiers during previous training exercises.

Kenya's Foreign Affairs Minister, Musalia Mudavadi, said the government welcomed the decision to proceed with the training after a partnership "built



A file photo of British Army Training Unit and Kenya Defence Forces engaged in an exercise in March 2018. AFP

over decades on mutual respect, constructive engagement, and a shared commitment to peace and security.”

The suspension in training was announced on July 23. Kenyan authorities had denied local media reports

that training would resume later this year.

Britain has about 200 military personnel permanently based in Kenya who train more than 1,000 Kenyan soldiers each year before deployment to neighbouring Somalia to combat al-Shabab, al-Qaeda's East African affiliate.

The British government has invested more than \$9.6 million annually in the partnership.

But pressure on the British presence grew after the body of 21-year-old Agnes Wanjiru was found in a septic tank in Nanyuki, near the British army training ground, in 2012, weeks after witnesses said she was seen leaving a bar with British soldiers.

29J7. U.K. to resume military drills in Kenya after delay over human rights concerns

मानवाधिकार संबंधी चिंताओं के कारण हुई देरी के बाद ब्रिटेन केन्या में सैन्य अभ्यास पुनः शुरू करेगा

- **Kenya** and **Britain** on Tuesday agreed to resume **military training** in the **East African** nation after a delay in signing a new **defence cooperation agreement** that was largely attributed to **Kenyan legislators'** concerns about protecting nearby communities.

केन्या और ब्रिटेन ने मंगलवार को पूर्वी अफ्रीकी देश में सैन्य प्रशिक्षण पुनः आरम्भ करने पर सहमति व्यक्त की। यह निर्णय नए रक्षा सहयोग समझौते पर हस्ताक्षर में हुई देरी के बाद लिया गया, जिसका प्रमुख कारण केन्याई विधायकों द्वारा आसपास के समुदायों की सुरक्षा को लेकर व्यक्त की गई चिंताएँ थीं।



- Neither **government** commented on allegations of **human rights violations** involving **British soldiers** during previous training exercises.
पूर्व के प्रशिक्षण अभ्यासों के दौरान **ब्रिटिश सैनिकों** पर लगे **मानवाधिकार उल्लंघन** के आरोपों पर किसी भी सरकार ने कोई टिप्पणी नहीं की।
- Kenya's Foreign Affairs Minister, Musalia Mudavadi**, said the government welcomed the decision to proceed with the training after a partnership "built over decades on **mutual respect, constructive engagement**, and a shared commitment to **peace and security**."
केन्या के विदेश मंत्री मुसालिया मुदावादी ने कहा कि सरकार इस प्रशिक्षण को आगे बढ़ाने के निर्णय का स्वागत करती है। उन्होंने कहा कि यह साझेदारी दशकों से **पारस्परिक सम्मान, रचनात्मक सहभागिता** तथा **शांति और सुरक्षा** के प्रति साझा प्रतिबद्धता पर आधारित रही है।
- The **suspension** in training was announced on **July 23**.
प्रशिक्षण के **निलंबन** की घोषणा **23 जुलाई** को की गई थी।
- Kenyan authorities** had denied local media reports that **Britain** was considering relocating some military training activities to neighbouring **Tanzania**.
केन्याई अधिकारियों ने स्थानीय मीडिया की उन रिपोर्टों का खंडन किया था, जिनमें कहा गया था कि **ब्रिटेन** कुछ सैन्य प्रशिक्षण गतिविधियों को पड़ोसी **तंज़ानिया** स्थानांतरित करने पर विचार कर रहा है।
- The **British government**, in a statement, said **Kenya's government** had agreed to issue the necessary **licences** and **permissions**, and that training would resume later this year.
ब्रिटिश सरकार ने एक बयान में कहा कि **केन्या सरकार** आवश्यक **लाइसेंस और अनुमतियाँ** जारी करने पर सहमत हो गई है तथा प्रशिक्षण इस वर्ष के अंत में पुनः आरम्भ होगा।
- Britain** has about **200 military personnel** permanently based in **Kenya** who train more than **1,000 Kenyan soldiers** each year before deployment to neighbouring **Somalia** to combat **al-Shabab, al-Qaeda's East African affiliate**.
ब्रिटेन के लगभग **200 सैन्य कर्मी** स्थायी रूप से **केन्या** में तैनात हैं, जो हर वर्ष **1,000 से अधिक केन्याई सैनिकों** को प्रशिक्षण देते हैं। इसके बाद उन्हें पड़ोसी **सोमालिया** में **अल-शबाब**, जो **अल-कायदा** का पूर्वी अफ्रीकी सहयोगी संगठन है, के विरुद्ध अभियान के लिए भेजा जाता है।

Beyond national interest: role of ethics and emotions in world politics

History offers numerous examples of ethics shaping international politics. Foreign policy is not merely an exercise in strategic calculation; it is also shaped by moral perceptions and collective emotions, as illustrated by the change in public perception towards the Israel-Palestine conflict.

GS IV: Ethics

Dhananjay Tripathi

The language of world politics has become remarkably predictable. Every military strike, diplomatic initiative, economic sanction, or strategic partnership is justified in the name of national interest. Television debates and commentaries have a common vocabulary – power, deterrence, balance of power, strategic autonomy, and security. It almost appears as though International Relations has become an emotionless discipline, focused on power concentration, where morality and ethics have little place. Yet the defining geopolitical crises of recent years tell a very different story.

Influence of Western traditions

International Relations, both as an academic discipline and as a practice of diplomacy, has been largely shaped by Western intellectual traditions, with much of academic research originating in the United States of America. No wonder, famous IR scholar, Stanley Hoffman, in his article, argued that IR is an American Social Science. It is difficult to refute Hoffman's argument because initially the modern international order emerged when European powers dominated much of the world, leaving the Global South with little role in designing the institutions, norms, and rules that continue to govern global politics. However, the discipline itself acquired its modern identity after the Second World War, with the U.S. based scholar, Hans Morgenthau's Realism becoming the dominant framework for understanding international affairs. Realism portrays the international system as anarchic and argues that states, in the absence of a central authority, are compelled to pursue their national interests. Although the theory is far more nuanced than its popular interpretation suggests, public discourse has reduced it to two defining ideas—anarchy and national interest. Over time, Realism travelled from classrooms to newsrooms, becoming the default language through which foreign policy is interpreted.

There is much to appreciate in the Realist tradition. It reminds us that power, military capability, and strategic calculations remain central to international politics. However, the dominance of Realism has also encouraged the belief that foreign policy is little more than a rational pursuit of national interest. Ethical considerations are often dismissed as idealistic, while emotions are treated as irrational distractions. Yet certain recent scholarship in International Relations have increasingly challenged this assumption. Scholars such as Neta Crawford have argued that emotions are not the opposite of rationality; rather, they are integral to political judgment. Fear, grief, anger, humiliation, empathy, and pride actively shape how leaders interpret threats, define interests, and respond to crises. Foreign policy, therefore, is not merely an exercise in cold strategic calculation, but also a product of moral perceptions and collective emotions. This dynamic is encapsulated by scholar Brent Sasley, who notes that while state leaders make



Moral reckoning: A protest held in solidarity with Palestine, condemning Israel's actions against Gaza, in Bengaluru on September 26, 2025. ALLEN EGENUSE J.

formal decisions as members of a group, "they do so within a particular (social) context and on that (social) basis".

Question of political legitimacy

The recent U.S.-Iran conflict illustrates this point. Much of the strategic analysis focused on military capabilities, damage assessments, and the future balance of power in West Asia. Comparatively little attention was paid to the emotional and ethical consequences of the conflict. The assassination of Ayatollah Ali Khamenei, who was not only Iran's Supreme Leader but also one of the most influential religious figures in the Shia world, produced consequences that extended far beyond military calculations. Rather than weakening the Iranian state, his death generated an extraordinary wave of national solidarity. A society that had appeared politically divided only months earlier united around a shared sense of loss, nationalism, and religious identity. Crawford's observation that grief and the desire for revenge continue to shape political behaviour long after the battlefield has fallen silent is particularly relevant in this context. Military planners may calculate strategic gains, but societies often respond through memory, identity, and emotion. Therefore, it is important to note that foreign policy must not be judged solely by the actions of a government, but also by how those actions shape and influence global public opinion. The debate surrounding the assassination largely focused on how Washington would engage with a post-Khamenei Iran. Far less attention was devoted to the ethical questions raised by such an operation and its implications for America's moral standing.

The changing international perception of Israel offers another important example. Following the Hamas attacks of October 2023, Israel received widespread sympathy and support across much of the world. Most governments affirmed Israel's right to defend itself. However, as the humanitarian crisis in Gaza deepened, due to mindless aggression shown by the

Israeli army, public opinion began to shift. Large demonstrations across Europe and North America reflected growing concerns over civilian suffering and questioned the proportionality of Israel's military response. In this, governments and societies increasingly spoke in different voices. While many governments continued to emphasise security considerations, public opinion became increasingly influenced by humanitarian concerns. Thus, while military superiority can alter realities on the battlefield, it cannot prevent the erosion of moral legitimacy.

Ethical concerns over globalisation

History offers numerous examples of ethics shaping international politics. Throughout the Cold War, the U.S. consistently presented itself as the defender of democracy, human rights, and individual liberty while portraying Soviet communism as an authoritarian system hostile to political freedom. The post-war liberal international order derived much of its legitimacy not merely from military and economic strength but also from its claim to uphold universal values. Even globalisation was promoted as a project that would bring societies closer together through greater interdependence and cooperation. Although globalisation generated unprecedented economic growth, it failed to bridge the structural inequalities between the Global North and the Global South, leading many to question whether the liberal international order had fulfilled its ethical promises.

The position of Global South

Historically, the Global South has been among the most vocal in injecting moral considerations into international politics. The Non-Aligned Movement (NAM) was not merely a strategy to avoid Cold War rivalries; it represented a normative vision of sovereign equality and a collective call for a more just world order. Contemporary India continues to invoke similar ideas through its emphasis on the Global South and the civilisational

philosophy of '*Vasudhaiva Kutumbakam*'—the world is one family. Notably, India's international standing has historically rested not only on its growing economic and strategic capabilities but also on its democratic institutions, pluralism, and anti-colonial legacy. During the Bangladesh Liberation War of 1971, for instance, international public opinion gradually shifted in India's favour after the humanitarian catastrophe in East Pakistan became widely known. More recently, India's consistent opposition to cross-border terrorism has enjoyed broad international support because it resonates with widely accepted ethical norms.

This moral capital, however, cannot be taken for granted; it must be continuously reinforced through consistent foreign policy choices. For instance, India's relatively restrained response to recent developments in West Asia has generated debate over whether its pursuit of strategic autonomy truly aligns with the ethical principles it frequently projects. Ultimately, India's international standing is built on more than just its market size. It is widely applauded as a vibrant, multicultural nation where democracy has successfully endured.

In conclusion, it is a mistake to interpret International Relations merely as the study of the redistribution of power; it is equally crucial to understand how that power is evaluated. In a world defined by Artificial Intelligence, digital media, transnational activism, and instantaneous communication, wars are no longer judged solely by governments or strategic analysts. Instead, real-time images of civilian suffering, humanitarian crises, and political violence actively shape international narratives as they unfold. While Realism remains highly relevant for explaining why states pursue power and security, achieving a comprehensive and nuanced understanding of world politics requires us to examine how societies accept, reject, or morally evaluate that power. (Dhananjay Tripathi teaches International Relations at the South Asian University, New Delhi.)



29J7. Beyond national interest: role of ethics and emotions in world politics

राष्ट्रीय हित से परे: विश्व राजनीति में नैतिकता और भावनाओं की भूमिका

- **Television debates** and commentaries have a common vocabulary — **power, deterrence, balance of power, strategic autonomy, and security**.
टेलीविजन बहसों और टिप्पणियों में एक समान शब्दावली का प्रयोग होता है — शक्ति, प्रतिरोध क्षमता (Deterrence), शक्ति संतुलन, रणनीतिक स्वायत्तता तथा सुरक्षा।
- It almost appears as though **International Relations** has become an emotionless discipline, focused on **power concentration**, where **morality and ethics** have little place.
ऐसा प्रतीत होता है मानो अंतरराष्ट्रीय संबंध (International Relations) एक भावनाहीन विषय बन गया हो, जिसका मुख्य ध्यान शक्ति के केंद्रीकरण पर है और जहाँ नैतिकता तथा आचारशास्त्र के लिए बहुत कम स्थान है।
- No wonder, famous **IR scholar, Stanley Hoffman**, in his article, argued that **IR is an American Social Science**.
इसी कारण प्रसिद्ध अंतरराष्ट्रीय संबंध विशेषज्ञ स्टैनली हॉफमैन ने अपने लेख में तर्क दिया कि अंतरराष्ट्रीय संबंध (IR) एक अमेरिकी सामाजिक विज्ञान है।
- It is difficult to refute **Hoffman's** argument because initially the modern **international order** emerged when **European powers** dominated much of the world, leaving the **Global South** with little role in designing the institutions, norms, and rules that continue to govern global politics.
हॉफमैन के इस तर्क का खंडन करना कठिन है, क्योंकि आधुनिक अंतरराष्ट्रीय व्यवस्था का उदय उस समय हुआ जब यूरोपीय शक्तियाँ विश्व के अधिकांश भाग पर प्रभुत्व रखती थीं, जिससे वैश्विक दक्षिण (Global South) को उन संस्थाओं, मानदंडों और नियमों के निर्माण में बहुत कम भूमिका मिली जो आज भी वैश्विक राजनीति को संचालित करते हैं।
- **Realism** portrays the **international system** as **anarchic** and argues that **states**, in the absence of a central authority, are compelled to pursue their **national interests**.
यथार्थवाद (Realism) अंतरराष्ट्रीय व्यवस्था को अराजक (Anarchic) मानता है तथा यह तर्क देता है कि किसी केंद्रीय प्राधिकरण के अभाव में राज्य अपने राष्ट्रीय हितों का अनुसरण करने के लिए बाध्य होते हैं।
- Over time, **Realism** travelled from **classrooms to newsrooms**, becoming the default language through which **foreign policy** is interpreted.
समय के साथ यथार्थवाद कक्षाओं से निकलकर समाचार कक्षों तक पहुँच गया और विदेश नीति की व्याख्या की प्रमुख भाषा बन गया।
- It reminds us that **power, military capability, and strategic calculations** remain central to **international politics**.
यह हमें स्मरण कराती है कि शक्ति, सैन्य क्षमता तथा रणनीतिक गणनाएँ आज भी अंतरराष्ट्रीय राजनीति के केंद्रीय तत्व हैं।
- **Ethical considerations** are often dismissed as idealistic, while **emotions** are treated as irrational distractions.
नैतिक विचारों को प्रायः आदर्शवादी मानकर नज़रअंदाज़ कर दिया जाता है, जबकि भावनाओं को अताकिंक विचलन समझा जाता है।
- Scholars such as **Neta Crawford** have argued that **emotions** are not the opposite of **rationality**; rather, they are integral to **political judgment**.
नेटा क्रॉफ़र्ड जैसे विद्वानों का तर्क है कि भावनाएँ, तर्कसंगतता की विरोधी नहीं हैं; बल्कि वे राजनीतिक निर्णय का अभिन्न अंग हैं।
- **Fear, grief, anger, humiliation, empathy, and pride** actively shape how leaders interpret **threats**, define **interests**, and respond to **crises**.
भय, शोक, क्रोध, अपमान, सहानुभूति तथा गौरव जैसी भावनाएँ सक्रिय रूप से यह निर्धारित करती हैं कि नेता खतरों की व्याख्या कैसे करते हैं, हितों को कैसे परिभाषित करते हैं और संकटों पर कैसे प्रतिक्रिया देते हैं।



- **Foreign policy**, therefore, is not merely an exercise in cold **strategic calculation**, but also a product of **moral perceptions** and **collective emotions**.
अतः विदेश नीति केवल ठंडी रणनीतिक गणना का परिणाम नहीं होती, बल्कि यह नैतिक धारणाओं और सामूहिक भावनाओं का भी उत्पाद होती है।
- Large demonstrations across **Europe** and **North America** reflected growing concerns over **civilian suffering** and questioned the **proportionality** of **Israel's military response**.
यूरोप और उत्तरी अमेरिका में हुए बड़े प्रदर्शनों ने नागरिकों की पीड़ा को लेकर बढ़ती चिंताओं को व्यक्त किया तथा इज़राइल की सैन्य प्रतिक्रिया की अनुपातिकता पर प्रश्न उठाए।
- **History** offers numerous examples of **ethics** shaping **international politics**.
इतिहास में ऐसे अनेक उदाहरण हैं जहाँ नैतिकता ने अंतरराष्ट्रीय राजनीति को प्रभावित किया है।
- Throughout the **Cold War**, the **U.S.** consistently presented itself as the defender of **democracy**, **human rights**, and **individual liberty** while portraying **Soviet communism** as an **authoritarian system** hostile to **political freedom**.
शीत युद्ध के दौरान अमेरिका ने स्वयं को लोकतंत्र, मानवाधिकारों तथा व्यक्तिगत स्वतंत्रता का रक्षक बताया, जबकि सोवियत साम्यवाद को राजनीतिक स्वतंत्रता के विरोधी सत्तावादी तंत्र के रूप में प्रस्तुत किया।

The position of Global South

वैश्विक दक्षिण की स्थिति

- The **Non-Aligned Movement (NAM)** was not merely a strategy to avoid **Cold War** rivalries; it represented a **normative vision** of **sovereign equality** and a collective call for a more **just world order**.
गुटनिरपेक्ष आंदोलन (NAM) केवल शीत युद्ध की प्रतिद्वंद्विताओं से बचने की रणनीति नहीं था; यह संप्रभु समानता की मानक-आधारित दृष्टि तथा अधिक न्यायपूर्ण विश्व व्यवस्था की सामूहिक पुकार का प्रतिनिधित्व करता था।
- Notably, **India's international standing** has historically rested not only on its growing **economic** and **strategic capabilities** but also on its **democratic institutions**, **pluralism**, and **anti-colonial legacy**.
उल्लेखनीय है कि भारत की अंतरराष्ट्रीय प्रतिष्ठा ऐतिहासिक रूप से केवल उसकी बढ़ती आर्थिक और रणनीतिक क्षमताओं पर ही नहीं, बल्कि उसके लोकतांत्रिक संस्थानों, बहुलतावाद तथा औपनिवेशिक-विरोधी विरासत पर भी आधारित रही है।
- During the **Bangladesh Liberation War of 1971**, for instance, **international public opinion** gradually shifted in **India's** favour after the **humanitarian catastrophe** in **East Pakistan** became widely known.
उदाहरण के लिए, 1971 के बांग्लादेश मुक्ति संग्राम के दौरान पूर्वी पाकिस्तान में उत्पन्न मानवीय त्रासदी के व्यापक रूप से ज्ञात होने के बाद अंतरराष्ट्रीय जनमत धीरे-धीरे भारत के पक्ष में हो गया।
- More recently, **India's** consistent opposition to **cross-border terrorism** has enjoyed broad international support because it resonates with widely accepted **ethical norms**.
हाल के वर्षों में सीमापार आतंकवाद के प्रति भारत के निरंतर विरोध को व्यापक अंतरराष्ट्रीय समर्थन प्राप्त हुआ है, क्योंकि यह व्यापक रूप से स्वीकृत नैतिक मानदंडों के अनुरूप है।
- This **moral capital**, however, cannot be taken for granted; it must be continuously reinforced through consistent **foreign policy** choices.
किन्तु इस नैतिक पूँजी को स्वयंसिद्ध नहीं माना जा सकता; इसे निरंतर सुसंगत विदेश नीति के निर्णयों के माध्यम से सुदृढ़ करना आवश्यक है।
- In a world defined by **Artificial Intelligence**, **digital media**, **transnational activism**, and **instantaneous communication**, wars are no longer judged solely by **governments** or **strategic analysts**.



कृत्रिम बुद्धिमत्ता, डिजिटल मीडिया, सीमापार सक्रियता तथा तात्कालिक संचार से परिभाषित विश्व में अब युद्धों का मूल्यांकन केवल सरकारों या रणनीतिक विश्लेषकों द्वारा नहीं किया जाता।

- Instead, real-time images of civilian suffering, humanitarian crises, and political violence actively shape international narratives as they unfold.

इसके स्थान पर नागरिकों की पीड़ा, मानवीय संकटों तथा राजनीतिक हिंसा की वास्तविक समय की छवियाँ घटनाओं के साथ-साथ अंतरराष्ट्रीय विमर्श को सक्रिय रूप से आकार देती हैं।

GS Paper III: Science and Technology		29 July 2026
TOPICS COVERED		
29J7	Kerala teen affected by amoebic brain infection critical केरल का किशोर अमीबिक मस्तिष्क संक्रमण से ग्रस्त, हालत गंभीर	
29J7	A.P., AstraZeneca ink pact for genomic solutions centre आंध्र प्रदेश और एस्ट्राज़ेनेका ने जीनोमिक समाधान केंद्र के लिए समझौता किया	
29J7	Study finds multiple dengue virus strains circulating together in India अध्ययन में भारत में डेंगू वायरस के अनेक प्रकार एक साथ फैलने की पुष्टि	
29J7	Andromeda: galactic middle age एंड्रोमेडा: आकाशगंगा का मध्य आयु चरण	
29J7	Cipla gets U.S. FDA nod for generic of asthma, COPD drug सिप्ला को अस्थमा और सीओपीडी की जेनेरिक दवा के लिए अमेरिकी FDA की मंजूरी मिली	
29J7	'China starts making home-grown immersion DUV chipmaking tools' 'चीन ने स्वदेशी इमर्शन DUV चिप निर्माण उपकरणों का उत्पादन शुरू किया'	
29J7	Seoul uses AI-powered cameras to detect suicide risk and help save lives सियोल आत्महत्या के जोखिम का पता लगाने और जीवन बचाने के लिए एआई-संचालित कैमरों का उपयोग कर रहा है	

Kerala teen affected by amoebic brain infection critical

GS III: S&T
The Hindu Bureau
KASARAGOD

Kasaragod district in Kerala has reported another case of amoebic meningoencephalitis (amoebic brain infection), with an 18-year-old testing positive for the rare but life-threatening disease. The teenager is in a critical condition at the intensive care unit of a hospital in Mangaluru.

According to preliminary information, the teen had bathed, along with his friends, in a pond located along the Kanhangad-Panathur State highway about a week ago. He developed health complica-

The 18-year-old fell sick after reportedly taking bath in a pond in Kasaragod

tions soon afterwards, and subsequent tests confirmed the infection.

The Health Department and the police issued a warning directing people not to bathe in the pond until further notice. The authorities have also advised those who bathed in the pond to report to the nearest health centre. The pond is a popular bathing spot for local residents, students, and travellers.

29J7. Kerala teen affected by amoebic brain infection critical

केरल का किशोर अमीबिक मस्तिष्क संक्रमण से ग्रस्त, हालत गंभीर

- Kasaragod district in Kerala has reported another case of amoebic meningoencephalitis (amoebic brain infection), with an 18-year-old testing positive for the rare but life-threatening disease.

केरल के कासरगोड ज़िले में अमीबिक मेनिंगोएन्सेफेलाइटिस (अमीबिक मस्तिष्क संक्रमण) का एक और मामला सामने आया है, जिसमें एक 18 वर्षीय किशोर इस दुर्लभ किन्तु जानलेवा बीमारी से संक्रमित पाया गया है।



GS III: S&T

A.P., AstraZeneca ink pact for genomic solutions centre

The Andhra Pradesh government on Tuesday signed a Memorandum of Understanding (MoU) with AstraZeneca India to establish an integrated genomic solutions centre in Amaravati, marking a major step towards precision cancer care. The initiative aims to create India's first integrated precision oncology research and treatment ecosystem, enabling personalised cancer diagnosis and treatment through advanced genomic technologies. It will provide advanced genomic testing and biomarker analysis for patients with lung and breast cancers.

- The initiative aims to create India's first integrated precision oncology research and treatment ecosystem, enabling personalised cancer diagnosis and treatment through advanced genomic technologies.

इस पहल का उद्देश्य भारत का पहला एकीकृत प्रिसिजन ऑन्कोलॉजी अनुसंधान एवं उपचार पारिस्थितिकी तंत्र विकसित करना है, जिससे उन्नत जीनोमिक प्रौद्योगिकियों के माध्यम से व्यक्तिनिष्ठ (पर्सनलाइज़्ड) कैंसर निदान और उपचार संभव हो सकेगा।

- It will provide advanced genomic testing and biomarker analysis for patients with lung cancer and breast cancer.

यह केंद्र फेफड़ों के कैंसर तथा स्तन कैंसर से पीड़ित रोगियों के लिए उन्नत जीनोमिक परीक्षण और बायोमार्कर विश्लेषण की सुविधा प्रदान करेगा।

29J7. A.P., AstraZeneca ink pact for genomic solutions centre

आंध्र प्रदेश और एस्ट्राज़ेनेका ने जीनोमिक समाधान केंद्र के लिए समझौता किया

- The Andhra Pradesh government on Tuesday signed a Memorandum of Understanding (MoU) with AstraZeneca India to establish an integrated genomic solutions centre in Amaravati, marking a major step towards precision cancer care.

आंध्र प्रदेश सरकार ने मंगलवार को एस्ट्राज़ेनेका इंडिया के साथ समझौता ज्ञापन (MoU) पर हस्ताक्षर किए, जिसके तहत अमरावती में एक एकीकृत जीनोमिक समाधान केंद्र स्थापित किया जाएगा। यह सटीक कैंसर उपचार (प्रिसिजन कैंसर केयर) की दिशा में एक महत्वपूर्ण कदम है।

Andromeda: galactic middle age

GS III: S&T

Vasudevan Mukunth

Astronomers have used data collected by the Hubble Space Telescope to piece together the clearest yet map of star formation across most of the Andromeda Galaxy over the last 500 million years. The Andromeda is 2-2.5-times wider than the Milky Way, and the two galaxies have a coin-toss's chance of colliding within the next 10 billion years.

Using their map, the astronomers found that the Andromeda's star formation rate has been steadily dropping, especially over the last 40 million years. Recent star formation was concentrated in the Galaxy's ring structures, and that is where the rate is declining most as well.

They also found a 'dead zone' near M32, a small satellite galaxy of the Andromeda. Specifically, in the part of Andromeda closest to M32, they found new stars had almost completely stopped forming — an indication that M32 had likely crashed through or interacted with Andromeda's disc of stars (stellar disc) recently, disrupting the gas clouds from which new stars are born.

The team interpreted their data to mean the Andromeda Galaxy is currently transitioning to its 'middle age', away from being a vibrant, active galaxy and towards a quiescent state akin to retirement. The researchers also said that astronomers need better ways to



A true-colour photo of the Andromeda Galaxy. M32 is visible above. DAVID DAYAG (CC BY-SA)

measure distant galaxies: if a galaxy's activity is changing fast, their usual tools could be revealing a false picture of its health. Thus, they concluded, understanding Andromeda can point the way to better understanding the lives of massive galaxies.

The findings were published in *The Astrophysical Journal* on July 27.

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

29J7. Andromeda: galactic middle age

एंड्रोमेडा: आकाशगंगा का मध्य आयु चरण

- Astronomers have used data collected by the Hubble Space Telescope to piece together the clearest yet map of star formation across most of the Andromeda Galaxy over the last 500 million years.

खगोलविदों ने पिछले 500 मिलियन वर्षों के दौरान एंड्रोमेडा आकाशगंगा के अधिकांश भाग में हुई तारों के निर्माण की अब तक की सबसे स्पष्ट रूपरेखा तैयार करने के लिए हबल स्पेस टेलीस्कोप द्वारा संकलित आँकड़ों का उपयोग किया है।

- The Andromeda is 2-2.5-times wider than the Milky Way, and the two galaxies have a coin-toss's chance of colliding within the next 10 billion years.

एंड्रोमेडा आकाशगंगा मिल्की वे की तुलना में 2 से 2.5 गुना अधिक चौड़ी है, और अगले 10 अरब वर्षों के भीतर इन दोनों आकाशगंगाओं के टकराने की संभावना लगभग समान (50-50) मानी जाती है।

- Recent star formation was concentrated



in the Galaxy's **ring structures**, and that is where the rate is declining most as well.

हाल का तारों का निर्माण मुख्यतः आकाशगंगा की वलयकार संरचनाओं (Ring Structures) में केंद्रित था, और वहीं इसकी दर में सबसे अधिक गिरावट भी दर्ज की गई है।

- They also found a **'dead zone'** near **M32**, a small **satellite galaxy** of the **Andromeda**. उन्होंने एंड्रोमेडा की एक छोटी उपग्रह आकाशगंगा (Satellite Galaxy) M32 के निकट एक 'डेड ज़ोन' भी पाया।
- Specifically, in the part of **Andromeda** closest to **M32**, they found new stars had almost completely stopped forming — an indication that **M32** had likely crashed through or interacted with **Andromeda's stellar disc** recently, disrupting the **gas clouds** from which new stars are born.

विशेष रूप से, **M32** के सबसे निकट स्थित एंड्रोमेडा के भाग में उन्होंने पाया कि नए तारों का निर्माण लगभग पूरी तरह रुक गया है—यह इस बात का संकेत है कि **M32** ने हाल ही में एंड्रोमेडा के तारकीय चक्र (Stellar Disc) से होकर गुजरा या उसके साथ अंतःक्रिया की, जिससे उन गैसीय बादलों में व्यवधान उत्पन्न हुआ जिसे नए तारों का जन्म होता है।

- The team interpreted their data to mean the **Andromeda Galaxy** is currently transitioning to its **'middle age'**, away from being a vibrant, active galaxy and towards a **quiescent state** akin to retirement.

शोध दल ने अपने आँकड़ों की व्याख्या करते हुए निष्कर्ष निकाला कि एंड्रोमेडा आकाशगंगा वर्तमान में अपने 'मध्य आयु चरण' में प्रवेश कर रही है, जहाँ वह एक सक्रिय एवं जीवंत आकाशगंगा से धीरे-धीरे शांत अवस्था (Quiescent State) की ओर बढ़ रही है, जो मानो सेवानिवृत्ति के समान है।

- Thus, they concluded, **understanding Andromeda** can point the way to better understanding the lives of **massive galaxies**.

इस प्रकार उन्होंने निष्कर्ष निकाला कि एंड्रोमेडा को समझना विशाल आकाशगंगाओं के जीवन-चक्र को बेहतर ढंग से समझने का मार्ग प्रशस्त कर सकता है।

Cipla gets U.S. FDA nod for generic of asthma, COPD drug

TS III: S&T
HYDERABAD

Cipla has received approval from the U.S. Food and Drug Administration (U.S. FDA) for its abbreviated new drug application (ANDA) for generic Advair Diskus (fluticasone propionate and salmeterol inhalation powder) in three strengths — 100/50 mcg, 250/50 mcg, and 500/50 mcg.

This approval represents Cipla's first **dry powder inhaler (DPI)** approval from its U.S.-based manufacturing network. The product is expected to be launched in the second quarter (Q2) of FY27 in the U.S., the company said on Monday.



The U.S. Food and Drug Administration headquarters in White Oak, Maryland. REUTERS

The product is a therapeutically equivalent version of Advair Diskus, a widely prescribed combination therapy indicated for the treatment of asthma and chronic obstructive pulmonary disease (COPD). Citing IQVIA numbers, Cipla said the U.S.

market for fluticasone propionate and salmeterol inhalation powder is approximately \$908 million.

"This approval marks our first dry powder inhaler from our New York facility and reflects our targeted investments in building differentiated inhalation manufacturing capabilities in the U.S.," CEO-Cipla North America Marc Falkin said.

MD and Global CEO Achin Gupta said the approval reinforces Cipla's commitment to expanding access to complex therapies in the U.S. and highlights its strength in developing and scaling sophisticated inhalation products through integrated capabilities."

29J7. Cipla gets U.S. FDA nod for generic of asthma, COPD drug

सिप्ला को अस्थमा और सीओपीडी की जेनेरिक दवा के लिए अमेरिकी FDA की मंजूरी मिली

- Cipla has received approval from the **U.S. Food and Drug Administration (U.S. FDA)** for its **Abbreviated New Drug Application (ANDA)** for generic **Advair Diskus** (fluticasone propionate and salmeterol inhalation powder) in three strengths — **100/50 mcg, 250/50 mcg, and 500/50 mcg**.

सिप्ला को अमेरिकी खाद्य एवं औषधि प्रशासन (U.S. FDA) से अपनी संक्षिप्त नई औषधि आवेदन (ANDA) के अंतर्गत जेनेरिक एडवायर डिस्कस (Advair Diskus) (फ्लूटिकासोन प्रोपियोनेट एवं सैल्मेटेरोल इनहेलेशन पाउडर) की तीन शक्तियों — 100/50 माइक्रोग्राम, 250/50

माइक्रोग्राम तथा 500/50 माइक्रोग्राम — के लिए स्वीकृति प्राप्त हुई है।



‘China starts making home-grown immersion DUV chipmaking tools’

DUV effort led by Shanghai's Aishengna, which absorbed teams from top Chinese lithography startups; Western curbs may drive adoption of local tools if foreign servicing tightens; Aishengna was established in August 2023 with registered capital of 7 billion yuan (\$1.0 billion)

GS III: S&T

NEWS ANALYSIS

Reuters
SINGAPORE

China has begun mass producing domestically developed immersion deep-ultraviolet (DUV) lithography machines, a technology crucial to advanced chipmaking, a person familiar with the matter said, marking a key step forward in Beijing's drive to reduce its reliance on foreign technologies.

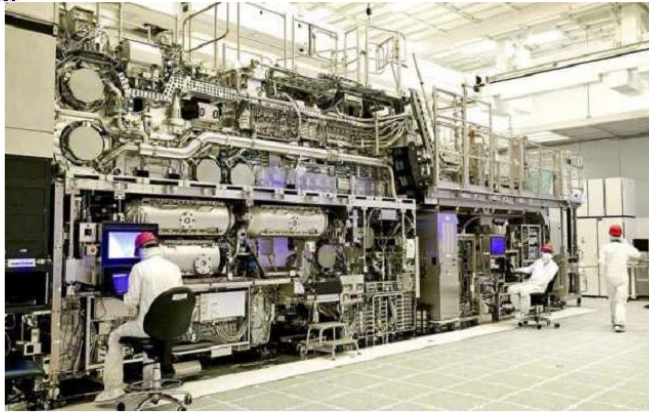
Shanghai Aishengna Electronic Technology Group, a little-known Chinese state-owned company, is leading the production effort after incorporating teams from top Chinese lithography startups, the source said, declining to be named due to the sensitivity of the subject.

Self-sufficiency boost

The development represents a win for Beijing's nationwide semiconductor self-sufficiency initiative, one of President Xi Jinping's highest priorities, but will not pose an immediate commercial threat for Dutch supplier ASML.

DUV is a key chipmaking tool long dominated by ASML.

The Information, a tech industry news outlet, first reported on China's development of the tool on



Chip play: Workers at "High NA EUV" lithography system at an Intel facility in U.S. REUTERS

Monday, noting that an unidentified state-backed company in Shanghai had begun manufacturing the machines and planned to produce about five this year and roughly 20 in 2027. Reuters is the first to report the identity of the company.

Needs more testing

Aishengna's DUV machine is expected to need further testing and remains far from matching the Dutch firm's competing models, the source said.

Successful deployment would, however, give Chinese chipmakers an alternative source of equipment if Western governments further restrict exports or servicing of foreign lithography tools.



Even as Beijing pushes for self-sufficiency, China remains a crucial revenue pillar for ASML, accounting for roughly 16% of the Dutch giant's net sales in the first half of the year

The Chinese-made DUV machines are expected to be delivered this year to leading Chinese chipmakers including Semiconductor Manufacturing International Corp (SMIC), Hua Hong Semiconductor and memory-chip maker ChangXin Memory Technologies (CXMT), the Information said, citing two people familiar with the

matter. Immersion DUV machines use a layer of water between the projection lens and a silicon wafer to print smaller circuit patterns than conventional dry systems.

Advanced chips

They are used to produce a broad range of chips and can also be pushed to manufacture more advanced semiconductors through multiple patterning, which requires repeated exposures of the same layer.

ASML did not immediately respond to a request for comment. SMIC, Hua Hong and CXMT also did not respond to requests for comment.

After dropping 8% on the report by The Information on Monday, ASML

shares were down 1.6% at 0906 GMT, in line with other European chip sector stocks but underperforming the broader pan-European STOXX 600 index.

Shanghai Capital tech

Aishengna was established in August 2023 with registered capital of 7 billion yuan (\$1.0 billion), backed by just two state-owned shareholders – Shanghai Electric Holding and a subsidiary of Shanghai International Trust, according to corporate records.

Little is known about the firm, which does not have a website and has disclosed nothing publicly about its operations.

The source said the company has incorporated teams from lithography startup Yuliangsheng, which had begun testing a DUV prototype last year, and Shanghai Micro Electronics Equipment (SMEE).

SMEE and Yuliangsheng, which is an affiliate of Huawei-backed equipment maker SiCarrier, are deeply involved in Beijing's semiconductor self-sufficiency efforts.

Corporate and recruitment records show Aishengna and Yuliangsheng share an address in Shanghai.

Aishengna, its shareholders, SMEE, and Yuliangsheng did not respond to requests for comment.

Chasing ASML

China has been barred by the U.S. from buying ASML's most advanced extreme-ultraviolet (EUV) lithography systems, while Dutch export controls have also restricted its access to some advanced DUV machines.

Even as Beijing pushes for self-sufficiency, China remains a crucial revenue pillar for ASML, accounting for roughly 16% of the Dutch giant's net sales in the first half of the year.

While barred from advanced EUV systems, Chinese chipmakers continue to heavily procure less advanced DUV tools. Reuters reported in December, citing sources, that China had succeeded in building a prototype of an EUV system, a tool key to building the world's most advanced chips, though it remains years from production

No earnings impact

Despite the market reaction, analysts say the news is unlikely to impact ASML's earnings trajectory in the mid-term.

"Producing a handful of immersion DUV tools is not the same as producing tools that can be used for high-volume manufacturing, where yield, overlay, throughput and reliability over thousands of wafer runs are what matter," JP Morgan Chase analysts wrote in a note on Tuesday.

29J7. 'China starts making home-grown immersion DUV chipmaking tools'

‘चीन ने स्वदेशी इमर्शन DUV चिप निर्माण उपकरणों का उत्पादन शुरू किया’

- China has begun mass producing domestically developed immersion deep-ultraviolet (DUV) lithography machines, a technology crucial to advanced chipmaking, a person familiar with the matter said, marking a key step forward in Beijing's drive to reduce its reliance on foreign technologies.

मामले से परिचित एक व्यक्ति के अनुसार, चीन ने स्वदेशी रूप से विकसित इमर्शन डीप-अल्ट्रावायलेट (DUV) लिथोग्राफी मशीनों का बड़े पैमाने पर उत्पादन शुरू कर दिया है। यह उन्नत चिप निर्माण के लिए अत्यंत महत्वपूर्ण तकनीक है और बीजिंग द्वारा विदेशी प्रौद्योगिकियों पर अपनी निर्भरता कम करने की दिशा में एक महत्वपूर्ण कदम माना जा रहा है।

- Shanghai Aishengna Electronic Technology Group, a little-known Chinese state-owned company, is leading the production effort after incorporating teams from top Chinese lithography startups, the source said, declining to be named due to the sensitivity of the

subject.

स्रोत ने, विषय की संवेदनशीलता के कारण अपना नाम उजागर न करते हुए, बताया कि कम चर्चित चीनी सरकारी स्वामित्व वाली कंपनी शंघाई ऐशेंगना इलेक्ट्रॉनिक टेक्नोलॉजी ग्रुप शीर्ष चीनी लिथोग्राफी स्टार्टअप्स की टीमों को शामिल करने के बाद इस उत्पादन प्रयास का नेतृत्व कर रही है।

Self-sufficiency boost

आत्मनिर्भरता को बढ़ावा

- The development represents a win for **Beijing's** nationwide **semiconductor self-sufficiency initiative**, one of **President Xi Jinping's** highest priorities, but will not pose an immediate commercial threat for Dutch supplier **ASML**.
यह विकास बीजिंग की देशव्यापी सेमीकंडक्टर आत्मनिर्भरता पहल, जो राष्ट्रपति शी जिनपिंग की सर्वोच्च प्राथमिकताओं में से एक है, के लिए एक महत्वपूर्ण उपलब्धि है। हालांकि, इससे डच आपूर्तिकर्ता **ASML** को तत्काल कोई व्यावसायिक खतरा नहीं होगा।
- DUV** is a key **chipmaking tool** long dominated by **ASML**.
DUV एक प्रमुख चिप निर्माण उपकरण है, जिस पर लंबे समय से **ASML** का प्रभुत्व रहा है।
- The Information**, a **technology industry news outlet**, first reported on **China's** development of the tool on **Monday**, noting that an unidentified **state-backed company** in **Shanghai** had begun manufacturing the machines and planned to produce about **five** this year and roughly **20** in **2027**.
प्रौद्योगिकी उद्योग के समाचार मंच **The Information** ने सोमवार को सबसे पहले चीन द्वारा इस उपकरण के विकास की सूचना दी। रिपोर्ट के अनुसार, शंघाई स्थित एक अज्ञात राज्य-समर्थित कंपनी ने इन मशीनों का निर्माण शुरू कर दिया है और इस वर्ष लगभग पाँच तथा 2027 में लगभग 20 मशीनें बनाने की योजना है।
- Reuters** is the first to report the identity of the company.
रॉयटर्स इस कंपनी की पहचान सार्वजनिक करने वाला पहला समाचार माध्यम है।

Needs more testing

अभी और परीक्षण की आवश्यकता

- Aishengna's DUV machine** is expected to need further **testing** and remains far from matching the Dutch firm's competing models, the source said.
स्रोत के अनुसार, ऐशेंगना की **DUV मशीन** को अभी और परीक्षण की आवश्यकता है तथा यह अभी भी डच कंपनी के प्रतिस्पर्धी मॉडलों की क्षमता के बराबर पहुँचने से काफी दूर है।
- Successful deployment would, however, give **Chinese chipmakers** an alternative source of equipment if **Western governments** further restrict exports or servicing of foreign **lithography tools**.
हालाँकि, यदि इसका सफलतापूर्वक उपयोग हो जाता है, तो पश्चिमी सरकारों द्वारा विदेशी लिथोग्राफी उपकरणों के निर्यात या उनकी सेवा पर और अधिक प्रतिबंध लगाए जाने की स्थिति में चीनी चिप निर्माताओं को उपकरणों का एक वैकल्पिक स्रोत उपलब्ध हो जाएगा।
- The **Chinese-made DUV machines** are expected to be delivered this year to leading Chinese **chipmakers** including **Semiconductor Manufacturing International Corp (SMIC)**, **Hua Hong Semiconductor**, and memory-chip maker **ChangXin Memory Technologies (CXMT)**, **The Information** said, citing two people familiar with the matter.
The Information ने मामले से परिचित दो व्यक्तियों के हवाले से बताया कि चीन में निर्मित **DUV मशीनें** इस वर्ष प्रमुख चीनी चिप निर्माताओं — सेमीकंडक्टर मैनुफैक्चरिंग इंटरनेशनल कॉर्प (SMIC), हुआ होंग सेमीकंडक्टर, तथा चांगशिन मेमोरी टेक्नोलॉजीज़ (CXMT) — को उपलब्ध कराई जाएंगी।
- Immersion DUV machines** use a layer of **water** between the **projection lens** and a **silicon wafer** to print smaller **circuit patterns** than conventional **dry systems**.

इमर्शन DUV मशीनें प्रोजेक्शन लेंस और सिलिकॉन वेफर के बीच पानी की एक परत का उपयोग करती हैं, जिससे पारंपरिक ड्राई सिस्टम की तुलना में अधिक छोटे सर्किट पैटर्न मुद्रित किए जा सकते हैं।

Advanced chips

उन्नत चिप्स

- They are used to produce a broad range of **chips** and can also be pushed to manufacture more advanced **semiconductors** through **multiple patterning**, which requires repeated exposures of the same layer.
इनका उपयोग विभिन्न प्रकार की चिप्स के निर्माण के लिए किया जाता है और मल्टीपल पैटर्निंग तकनीक के माध्यम से अधिक उन्नत सेमीकंडक्टरों का निर्माण भी किया जा सकता है, जिसके लिए एक ही परत को बार-बार एक्सपोज करना पड़ता है।
- ASML** did not immediately respond to a request for comment.
एसएमएल (ASML) ने टिप्पणी के अनुरोध पर तत्काल कोई प्रतिक्रिया नहीं दी।
- SMIC, Hua Hong, and CXMT** also did not respond to requests for comment.
एसएमआईसी (SMIC), हुआ होंग (Hua Hong) तथा सीएक्सएमटी (CXMT) ने भी टिप्पणी के अनुरोधों का कोई उत्तर नहीं दिया।
- After dropping 8% on the report by **The Information** on Monday, **ASML** shares were down 1.6% at 0906 GMT, in line with other **European chip sector** stocks but underperforming the broader **pan-European STOXX 600 Index**.
सोमवार को द इन्फॉर्मेशन (The Information) की रिपोर्ट के बाद 8% गिरने के पश्चात 0906 GMT पर एसएमएल के शेयर 1.6% और नीचे थे। यह गिरावट अन्य यूरोपीय चिप क्षेत्र के शेयरों के अनुरूप थी, किन्तु व्यापक पैन-यूरोपीय STOXX 600 सूचकांक की तुलना में कमजोर प्रदर्शन था।
- Shanghai Capital Tech Aishengna** was established in **August 2023** with registered capital of **7 billion yuan (\$1.0 billion)**, backed by just two **state-owned shareholders** — **Shanghai Electric Holding** and a subsidiary of **Shanghai International Trust**, according to corporate records.
कॉर्पोरेट अभिलेखों के अनुसार शंघाई कैपिटल टेक ऐशेंगना (Shanghai Capital Tech Aishengna) की स्थापना अगस्त 2023 में 7 अरब युआन (1.0 अरब अमेरिकी डॉलर) की पंजीकृत पूंजी के साथ हुई थी। इसे केवल दो सरकारी स्वामित्व वाले शेयरधारकों — शंघाई इलेक्ट्रिक होल्डिंग तथा शंघाई इंटरनेशनल ट्रस्ट की एक सहायक कंपनी — का समर्थन प्राप्त है।
- Little is known about the firm, which does not have a **website** and has disclosed nothing publicly about its operations.
इस कंपनी के बारे में बहुत कम जानकारी उपलब्ध है। इसकी कोई वेबसाइट नहीं है और इसने अपने परिचालन के बारे में सार्वजनिक रूप से कोई जानकारी साझा नहीं की है।
- The source said the company has incorporated teams from **lithography startup Yuliangsheng**, which had begun testing a **DUV prototype** last year, and **Shanghai Micro Electronics Equipment (SMEE)**.
सूत्र के अनुसार, कंपनी ने लिथोग्राफी स्टार्टअप यूलियांगशेंग (Yuliangsheng), जिसने पिछले वर्ष DUV प्रोटोटाइप का परीक्षण प्रारंभ किया था, तथा शंघाई माइक्रो इलेक्ट्रॉनिक्स इक्विपमेंट (SMEE) की टीमों को अपने साथ शामिल किया है।
- SMEE and Yuliangsheng**, which is an affiliate of **Huawei-backed** equipment maker **SiCarrier**, are deeply involved in **Beijing's semiconductor self-sufficiency efforts**.
एसएमईई (SMEE) और यूलियांगशेंग (Yuliangsheng), जो हुआवेई समर्थित उपकरण निर्माता SiCarrier से संबद्ध है, बीजिंग के सेमीकंडक्टर आत्मनिर्भरता प्रयासों में गहराई से जुड़े हुए हैं।
- Corporate and recruitment records show **Aishengna and Yuliangsheng** share an address in **Shanghai**.

कॉर्पोरेट और भर्ती संबंधी अभिलेखों से पता चलता है कि ऐशेंगना और यूलियांगशेंग का शंघाई में एक ही पता है।

- Aishengna, its shareholders, SMEE, and Yuliangsheng did not respond to requests for comment.
ऐशेंगना, उसके शेयरधारकों, एसएमईई तथा यूलियांगशेंग ने टिप्पणी के अनुरोधों का कोई उत्तर नहीं दिया।

Chasing ASML

एसएमएल की बराबरी की कोशिश

- China has been barred by the U.S. from buying ASML's most advanced Extreme Ultraviolet (EUV) lithography systems, while Dutch export controls have also restricted its access to some advanced DUV machines.
अमेरिका ने चीन को एसएमएल की सबसे उन्नत एक्सट्रीम अल्ट्रावायलेट (EUV) लिथोग्राफी प्रणालियों की खरीद से प्रतिबंधित कर रखा है, जबकि नीदरलैंड के निर्यात नियंत्रण ने भी उसकी कुछ उन्नत DUV मशीनों तक पहुँच सीमित कर दी है।
- Even as Beijing pushes for self-sufficiency, China remains a crucial revenue pillar for ASML, accounting for roughly 16% of the Dutch giant's net sales in the first half of the year. यद्यपि बीजिंग आत्मनिर्भरता पर बल दे रहा है, फिर भी चीन एसएमएल के लिए एक महत्वपूर्ण राजस्व स्रोत बना हुआ है और वर्ष की पहली छमाही में डच कंपनी की कुल शुद्ध बिक्री का लगभग 16% इसी से प्राप्त हुआ।
- While barred from advanced EUV systems, Chinese chipmakers continue to heavily procure less advanced DUV tools.
उन्नत EUV प्रणालियों पर प्रतिबंध होने के बावजूद चीनी चिप निर्माता कम उन्नत DUV उपकरणों की बड़े पैमाने पर खरीद जारी रखे हुए हैं।
- Reuters reported in December, citing sources, that China had succeeded in building a prototype of an EUV system, a tool key to building the world's most advanced chips, though it remains years from production.
रॉयटर्स ने दिसंबर में सूत्रों के हवाले से बताया था कि चीन ने EUV प्रणाली का एक प्रोटोटाइप विकसित करने में सफलता प्राप्त कर ली है। यह उपकरण दुनिया की सबसे उन्नत चिप्स के निर्माण के लिए अत्यंत महत्वपूर्ण है, हालांकि इसके व्यावसायिक उत्पादन में अभी कई वर्ष लगेंगे।

No earnings impact

आय पर कोई प्रभाव नहीं

- Despite the market reaction, analysts say the news is unlikely to impact ASML's earnings trajectory in the mid-term.
बाज़ार की प्रतिक्रिया के बावजूद विश्लेषकों का कहना है कि इस समाचार का मध्यम अवधि में एसएमएल की आय की दिशा पर प्रभाव पड़ने की संभावना नहीं है।
- "Producing a handful of immersion DUV tools is not the same as producing tools that can be used for high-volume manufacturing, where yield, overlay, throughput, and reliability over thousands of wafer runs are what matter," JP Morgan Chase analysts wrote in a note on Tuesday.
जेपी मॉर्गन चेस (JP Morgan Chase) के विश्लेषकों ने मंगलवार को एक टिप्पणी में लिखा, "कुछ इमर्शन DUV उपकरण बनाना और ऐसे उपकरण तैयार करना जिन्हें बड़े पैमाने के विनिर्माण में उपयोग किया जा सके, दोनों अलग-अलग बातें हैं। बड़े पैमाने के उत्पादन में यील्ड, ओवरले, थ्रूपुट तथा हजारों वेफर रन के दौरान विश्वसनीयता सबसे अधिक महत्व रखती है।"



Seoul uses AI-powered cameras to detect suicide risk and help save lives

AP/Siti S&T
SEOUL

When AI-powered cameras on bridges over Seoul's Han River raise the alarm that someone may be about to jump, acting quickly is vital. The waterway is a landmark of the glittering South Korean capital, but also a frequent scene of despair in a country with one of the world's highest suicide rates.

The artificial intelligence-driven surveillance system alerts first responders if someone lingers in certain locations, enters an area deemed unsafe or picks up one of the bridges' dedicated suicide-prevention phones.

It has been strikingly effective, said Kim Jun-young, chief of the Hangang Bridge CCTV Integrated Control Centre, with the

rescue rate over the river rising to more than 99% from 56% in 2012.

Emergency crews can reach most bridges within five minutes – the critical window to intervene and save a life, he said. “We see our role as giving them one more chance to think it over, because it may not be the decision you want”.

From a height of about 30 metres, striking the water is akin to crashing a car at 60 kilometres per hour, he said.

Persuading people who have made up their minds is not easy, Mr. Kim said, as they often struggle with rescuers or sprint away “as if running a 100-metre race”.

Others can make a final, split-second decision when they hear approaching sirens, before help arrives.

Last year, nearly 900

cameras on 17 bridges identified more than 1,200 incidents, he said, but “about eight people” could not be saved.

Broader crisis

The Han River AI system has been operating since 2021, but South Korea remains gripped by a broader suicide crisis called “a disgrace on the world stage” by President Lee Jae Myung. The suicide rate in 2024 climbed above 29 deaths per 100,000 people, the highest since 2011. It is the leading cause of death among people aged 10 to 49, government figures show.

Relentless academic pressure, heavy workloads and a culture that holds individuals responsible for failure can leave people ill-equipped to cope with life's setbacks or seek help,



Vital cues: Kim Jun-young of Hangang Bridge CCTV Integrated Control Centre explains how the system alerts first responders. AFP

said Yoo Jae-hyun, director of suicide prevention at Seoul St. Mary's Hospital.

Many who have tried to end their lives told him “they feel they have become a burden to those around them, and that everyone else would be better off if they were gone”, Mr. Yoo said.

Koreans in their twen-

ties account for the largest share of people treated in emergency rooms after suicide attempts, according to Mr. Yoo.

33-year-old cartoonist Smiling Stone Hwang now lives what she describes as a resilient life, after she was saved by first responders. After losing her father to suicide in 2014, Ms.

Hwang inherited his debts and endured years of lawsuits and asset seizures – leaving her unable to hold a bank account in her own name. Throughout her 20s, she juggled multiple cash-paying jobs, often working gruelling hours.

Suicide “didn't feel like a particularly tragic choice. It felt like a rational one”, Ms. Hwang said.

'Blink of an eye'

Many CCTV systems worldwide use some form of AI to help spot danger.

Japanese company Asilla says its AI surveillance system can detect unusual behaviour, such as falls, or someone who might be preparing to jump from a height.

Its AI tool has been learning behaviour patterns from cameras in public facilities such as shop-

ping centres and stations.

In two separate incidents, it alerted guards to men standing on rooftops who were able to be talked down, chief product officer Yuka Suzuki said.

It is not meant to replace humans and cannot bring down Japan's suicide rate – the highest in the G7 – alone, she stressed.

“It's still often difficult to provide proper mental health support,” Ms. Suzuki said. But it is significant “if we can reduce the number of incidents, even by a little, where people lose their lives in the blink of an eye”.

In Seoul, CCTV Control Centre's Kim recalled one case in which a young man was intercepted by the AI system and rescue workers, only to return later that day and suddenly make another attempt

while smoking with a friend.

Despite rescuers and a boat already being on the water, they were unable to save him.

Cartoonist Hwang's late father, who had long struggled with alcohol addiction, was once a successful film producer. Shortly before his death, he visited Ms. Hwang at the cafe where she worked, according to her cartoon-based memoir, “I Am a Suicide Loss Survivor”.

He brought her a gift, but the usually empty cafe was packed, and she never got to buy him a coffee. For a time after his death, Ms. Hwang returned daily to leave a cup of coffee “at the cramped table where he never got to sit”.

(If you are in distress, please reach out on the helpline Tele MANAS at 14416)

29J7. Seoul uses AI-powered cameras to detect suicide risk and help save lives

सियोल आत्महत्या के जोखिम का पता लगाने और जीवन बचाने के लिए एआई-संचालित कैमरों का उपयोग कर रहा है

- The waterway is a landmark of the glittering **South Korean** capital, but also a frequent scene of despair in **a country with one of the world's highest suicide rates**.

यह जलमार्ग दक्षिण कोरिया की चमकदार राजधानी का एक प्रमुख प्रतीक है, किन्तु यह ऐसे देश में निराशा का भी एक सामान्य स्थल है, जहाँ आत्महत्या की दर विश्व में सबसे अधिक है।

- The **artificial intelligence-driven surveillance system** alerts **first responders** if someone lingers in certain locations, enters an area deemed unsafe, or picks up one of the bridges' dedicated **suicide-prevention phones**.

कृत्रिम बुद्धिमत्ता आधारित निगरानी प्रणाली आपातकालीन बचावकर्मियों को सतर्क कर देती है यदि कोई व्यक्ति किसी विशेष स्थान पर अधिक देर तक ठहरता है, असुरक्षित माने गए क्षेत्र में प्रवेश करता है या पुलों पर लगाए गए आत्महत्या-निवारण टेलीफोन का उपयोग करता है।

'Blink of an eye'

'पल भर में'

- Many **CCTV systems** worldwide use some form of **Artificial Intelligence (AI)** to help spot danger.

विश्वभर में अनेक सीसीटीवी प्रणालियाँ (CCTV Systems) संभावित खतरे की पहचान करने के लिए किसी न किसी रूप में कृत्रिम बुद्धिमत्ता (AI) का उपयोग करती हैं।

- Japanese company Asilla** says its **AI surveillance system** can detect unusual behaviour, such as **falls**, or someone who might be preparing to **jump from a height**.

जापानी कंपनी असिल्ला (Asilla) का कहना है कि उसकी एआई निगरानी प्रणाली असामान्य गतिविधियों, जैसे गिरना, अथवा किसी व्यक्ति द्वारा ऊँचाई से कूदने की तैयारी किए जाने जैसी स्थितियों का पता लगा सकती है।

- Its **AI tool** has been learning **behaviour patterns** from cameras in **public facilities** such as **shopping centres** and **railway stations**.

इसका एआई उपकरण शॉपिंग सेंटर्स और रेलवे स्टेशनों जैसी सार्वजनिक सुविधाओं में लगे कैमरों से व्यवहार संबंधी पैटर्न सीख रहा है।



- It is not meant to replace **humans** and cannot bring down **Japan's suicide rate** — the highest in the **G7** — alone, she stressed.
 उन्होंने इस बात पर बल दिया कि यह प्रणाली **मनुष्यों** का स्थान लेने के लिए नहीं बनाई गई है और अकेले **जापान की आत्महत्या दर**, जो जी-7 देशों में सबसे अधिक है, को कम नहीं कर सकती।

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TOPICS COVERED		
29J7	Centre reissues draft on Western Ghats eco-zone केंद्र ने पश्चिमी घाट पारिस्थितिक-संवेदनशील क्षेत्र के मसौदे को पुनः जारी किया	
29J7	Urban Indian private schools at risk of proximity to toxic lead sites: report विषाक्त सीसा-प्रदूषित स्थलों की निकटता के जोखिम में भारत के शहरी निजी विद्यालय: रिपोर्ट	
29J7	Co-existing with tigers outside reserves आरक्षित क्षेत्रों के बाहर बाघों के साथ सह-अस्तित्व	
	India curtailed 8,133 GWh solar power to maintain grid security ग्रिड सुरक्षा बनाए रखने के लिए भारत ने 8,133 GWh सौर ऊर्जा का उत्पादन सीमित किया	



Centre reissues draft on Western Ghats eco-zone

Move comes amid the continuing differences with six States over the areas to be included in the ecologically sensitive area; States worried about notification's impact on farming, infrastructure

GS III: Environment

Jacob Koshy
NEW DELHI

The Union Environment Ministry has reissued, for the seventh time in over a decade, its draft notification proposing an ecologically sensitive area (ESA) across the Western Ghats, after the previous draft lapsed on July 27 without being finalised.

The latest draft, issued on July 27, 2026, will remain open for public objections for 60 days before the Centre considers issuing a final notification. The notification reiterates that once finalised, it would prohibit mining, quarrying, sand mining, new thermal power plants, certain industries and large construction projects within the ESA, while regulating activities such as hydel power generation.

The fresh notification underscores the Centre's inability to resolve longstanding differences with the six Western Ghats States — Gujarat, Maharashtra, Goa, Karnataka, Kerala, and Tamil Nadu — over the precise villages



The latest notification retains the proposed ecologically sensitive area at 56,825.7 sq. km, spread across the six States. FILE PHOTO

and regions that should be included within the eco-sensitive zone. The States had raised concerns over the impact of the ESA declaration on agriculture, plantations, infrastructure, and development.

The notification itself notes that an expert committee constituted in 2022 is continuing to examine objections from the States regarding "the correct names and area of villages to be included in the ecologically sensitive area" as well as other suggestions submitted by the State governments.

The latest notification

retains the proposed ESA at 56,825.7 sq. km, spread across the six States, with Karnataka accounting for 20,668 sq. km, Maharashtra 17,340 sq. km, Kerala 9,993.7 sq. km, Tamil Nadu 6,914 sq. km, Goa 1,461 sq. km and Gujarat 449 sq. km.

No changes

A comparison of the latest draft with the previous notification issued in July 2024 shows no substantive changes in the notified area, State-wise extent or regulatory provisions. The list of villages proposed for inclusion also remains un-

changed in places highlighted during earlier consultations. For instance, the 13 villages in Kerala's Wayanad district across Mananthavady, Sulthan Bathery and Vythiri taluks that figured in the previous draft continue to be included in the 2026 notification.

The dispute over protecting the Western Ghats dates back to 2011, when a panel chaired by late ecologist Madhav Gadgil recommended that the entire 1,29,000 sq. km mountain chain be treated as ecologically sensitive, with graded levels of protection. Following objections from the States, a high-level working group chaired by K. Kasturirangan reviewed the proposal and recommended that about 37% of the Western Ghats, covering 59,940 sq. km of natural landscape, be designated an ESA. The notification records that Kerala subsequently carried out its own field verification exercise, reducing the proposed ESA within the State from 13,108 sq. km recommended by the high-level working group to 9,993.7 sq. km.

29J7. Centre reissues draft on Western Ghats eco-zone

केंद्र ने पश्चिमी घाट पारिस्थितिक-संवेदनशील क्षेत्र के मसौदे को पुनः जारी किया

- The fresh notification underscores the Centre's inability to resolve longstanding differences with the **six Western Ghats States — Gujarat, Maharashtra, Goa, Karnataka, Kerala, and Tamil Nadu** — over the precise villages and regions that should be included within the **eco-sensitive zone**.

नई अधिसूचना इस तथ्य को रेखांकित करती है कि पश्चिमी घाट से जुड़े छह राज्यों — गुजरात, महाराष्ट्र, गोवा, कर्नाटक, केरल और तमिलनाडु — के साथ पारिस्थितिक-संवेदनशील क्षेत्र में शामिल किए जाने वाले सटीक गाँवों और क्षेत्रों को लेकर लंबे समय से चले आ रहे मतभेदों का समाधान केंद्र अब तक नहीं कर सका है।

- The **States** had raised concerns over the impact of the **ESA declaration on agriculture, plantations, infrastructure, and development**.

राज्यों ने ESA घोषित किए जाने के कृषि, बागानों, अवसंरचना तथा विकास पर पड़ने वाले प्रभाव को लेकर चिंता व्यक्त की थी।

- The dispute over protecting the **Western Ghats** dates back to **2011**, when a panel chaired by the late ecologist **Madhav Gadgil** recommended that the entire **1,29,000 sq. km** mountain chain be treated as **ecologically sensitive**, with graded levels of protection.

पश्चिमी घाट के संरक्षण को लेकर विवाद **2011** से चला आ रहा है, जब दिवंगत पर्यावरणविद् **माधव गाडगिल** की अध्यक्षता वाले पैनल ने पूरे **1,29,000 वर्ग किलोमीटर** के पर्वतीय क्षेत्र को विभिन्न स्तरों की सुरक्षा के साथ **पारिस्थितिक रूप से संवेदनशील** घोषित करने की सिफारिश की थी।

- Following objections from the **States**, a **High-Level Working Group** chaired by **K. Kasturirangan** reviewed the proposal and recommended that about **37%** of the **Western Ghats**, covering **59,940 sq. km** of natural landscape, be designated an **ESA**.

राज्यों की आपत्तियों के बाद **के. कस्तूरीरंगन** की अध्यक्षता वाले **उच्च स्तरीय कार्य समूह** ने इस प्रस्ताव की समीक्षा की और **पश्चिमी घाट** के लगभग **37%** प्राकृतिक भू-भाग, अर्थात् **59,940 वर्ग किलोमीटर**, को **पारिस्थितिक रूप से संवेदनशील क्षेत्र (ESA)** घोषित करने की अनुशंसा की।

Urban Indian private schools at risk of proximity to toxic lead sites: report

A study has found that 90% of private schools in New Delhi are located near a site contaminated with lead, mercury, arsenic, and/or pesticides: as opposed to developed countries, the study found that in low- and middle-income countries, urban schools are 4- to 28-times more likely than rural schools to be near a toxic site

ES Environment
Mother's Environment
NEW DELHI

In high-income countries like the U.S. and the U.K., it is well-established that people who live in poorer and marginalised localities are more exposed to pollution than those in wealthier neighbourhoods. According to a recent report, that pattern seems to be reversed in low and middle income countries (LMIC) like India.

A report, titled 'Schools in the Shadow of Toxic Sites: Pollution Proximity in Low- and Middle-Income Countries', by the Center for Global Development (CGD) looked at how close 2,840 schools were to toxic sites in 17 countries. It concluded that 10% of schools in LMICs lie within 5 km of a documented toxic site, especially in urban areas.

And of all the world's capital cities, New Delhi topped the list, with more than 90% of its private schools located near a site contaminated with lead, mercury, cadmium, arsenic, and/or pesticides.

When exposed to such contaminants, children in particular develop higher risk of heart and kidney diseases as well as of irreversible learning and cognitive disabilities. According to the World Bank, lead exposure during childhood alone costs LMICs \$1 trillion a year.

'Equally exposed to contamination'

While lead exists naturally in the deep layers of the earth, no amount of lead exposure is safe for humans. Once it enters the body, it can stay silently stuck to the bones, mimicking calcium. When mixed with blood, it can lead to severe kidney and heart problems. In individuals showing no acute symptoms, it can spike blood pressure and lead to sudden heart attacks.

Among children, lead can be a powerful neurotoxin that degrades myelin, the protective outer layer of the brain, and hampers brain cell connections.

In the last few decades, more and more studies from both developed and developing countries have linked lead exposure to shortened attention spans, heightened aggression, behavioural disorders, and a permanent drop in IQ.

"But we did not know where exactly the problem was," Lee Crawford, the report's author and a researcher at the CGD, London.

For the analysis, Mr. Crawford mapped 2.6 million schools to 11,301 documented toxic sites across Mexico, India, Ghana, Kenya, Armenia, and 12 other countries. While the contamination was severe within a few metres of a site, pollutants do not remain there forever. People living as far as 5 km from a toxic site have shown to have elevated blood lead levels as well. "If you look at household lead



Stripping scrapped laptops and air conditioners for metal frequently involves burning away rubber wire casings, releasing lead, mercury, and cadmium into the air. When exposed to such contaminants, children develop higher risk of heart and kidney diseases as well as of cognitive disabilities. AFP

exposure, the poorest are slightly more likely to be exposed than the richest, but since lead exposure can be impactful within 5 km of radius, everyone who lives and breathes in the same air is equally exposed to the contamination," Mr. Crawford said.

The study found 9.7% of schools in the sample were within 5 km of a contaminated site. As a result, "Nearly a billion children have some lead exposure globally. And we know that a big share of that comes from polluted sites, many of them lead-battery recycling," Mr. Crawford said.

As opposed to developed countries, where polluting sites lie where public opposition is weakest, the study found that in LMICs, urban schools are 4- to 28-times more likely than rural schools to be near a toxic site. "The results are a bit surprising," Mr. Crawford said. "But it makes sense with the urban clustering. If you don't have good regulation of where recycling can happen, then it happens in the most convenient places, which is where people are."

Paradox of development, recycling
Lead-acid batteries are used to start most petrol and diesel motor engines; lead is also present in smaller quantities in the electrical components of photovoltaic

cells, wind turbines, and as part of back-up power supply systems. These batteries alone contribute to 86% of global lead consumption.

Lead acid batteries are also popular because they are cheap, rechargeable, and easy to recycle. The metal melts at 327°C, a temperature that can be achieved using a blowtorch in a backyard. Thus, numerous informal enterprises have erupted in India that simply break open old batteries, isolate the lead-containing parts, and toss them in a furnace. The liquid lead is then filtered out and recast into ingots for new batteries.

But without a safe, closed-loop management system, the lead leaches into the soil and can enter human bodies through food, water, and the air.

In developed countries, lead is generally recycled under strict guidelines and with restrictions, and costs tens of millions of dollars. But in LMICs, where enforcement is weak and labour is cheap, a large proportion of recycling happens in backyards.

Thus, in India, even though there are more than 350 well-equipped recycling units, some 90% of the waste ends up in the informal network, where profits are also higher.

As per the report, this network is now

estimated to be responsible for around 33% of the world's lead poisoning burden. In LMICs, this burden is equivalent to 80 lakh disability-adjusted life years or 8 lakh annual deaths.

'An invisible problem'

Mr. Crawford said variables like a school being private, secondary or single-sex all correlated to some degree with higher pollution exposure simply because they were clustered in cities. New Delhi had 91.2% of schools within 5 km of a toxic site; it was followed by Manila (86%), Nairobi (71%), Accra (67%), and Jakarta (51%). This clustering is not inevitable, however: Mr. Crawford's analysis also found that Mexico City, despite its large size and high population density, had almost no toxic-site contamination because its industrial manufacturing zones were successfully regulated and separated from the urban core.

"Lead is an invisible problem that's easy to ignore," Mr. Crawford said. "But badly polluted sites can be regulated, closed down or moved out of city/populated areas. It's something that the Indian government has done and they can do it, with more public pressure."

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THE GIST

While lead exists naturally in the deep layers of the earth, no amount of lead exposure is safe for humans

When mixed with blood, it can lead to severe kidney and heart problems. In individuals showing no acute symptoms, it can spike blood pressure and lead to sudden heart attacks

In children, lead can be a powerful neurotoxin that degrades myelin, the protective outer layer of the brain, and hampers brain cell connections



29J7. Urban Indian private schools at risk of proximity to toxic lead sites: report

विषाक्त सीसा-प्रदूषित स्थलों की निकटता के जोखिम में भारत के शहरी निजी विद्यालय: रिपोर्ट

- And of all the world's **capital cities**, New Delhi topped the list, with **more than 90% of its private schools** located near a site contaminated with **lead, mercury, cadmium, arsenic, and/or pesticides**.
विश्व की सभी राजधानियों में नई दिल्ली इस सूची में शीर्ष पर रही, जहाँ 90% से अधिक निजी विद्यालय ऐसे स्थलों के निकट स्थित हैं जो सीसा, पारा, कैडमियम, आर्सेनिक तथा/अथवा कीटनाशकों से प्रदूषित हैं।
- While **lead** exists naturally in the deep layers of the earth, **no amount of lead exposure is safe for humans**.
यद्यपि सीसा पृथ्वी की गहरी परतों में प्राकृतिक रूप से पाया जाता है, फिर भी सीसे का कोई भी स्तर मनुष्यों के लिए सुरक्षित नहीं है।
- **Once it enters the body, it can stay silently stuck to the bones, mimicking calcium**.
एक बार शरीर में प्रवेश करने के बाद यह हड्डियों से चुपचाप चिपक जाता है और कैल्शियम की तरह व्यवहार करता है।
- **When mixed with blood, it can lead to severe kidney and heart problems**.
रक्त में मिल जाने पर यह गंभीर गुर्दा तथा हृदय संबंधी समस्याएँ उत्पन्न कर सकता है।
- **Among children, lead can be a powerful neurotoxin that degrades myelin, the protective outer layer of the brain, and hampers brain cell connections**.
बच्चों में सीसा एक शक्तिशाली तंत्रिका-विष (न्यूरोटॉक्सिन) के रूप में कार्य करता है, जो मस्तिष्क की सुरक्षात्मक बाहरी परत मायलिन को क्षति पहुँचाता है तथा मस्तिष्क कोशिकाओं के परस्पर संबंधों को बाधित करता है।
- In the last few decades, more and more studies from both **developed and developing countries** have linked **lead exposure to shortened attention spans, heightened aggression, behavioural disorders, and a permanent drop in IQ**.
पिछले कुछ दशकों में विकसित तथा विकासशील देशों के अनेक अध्ययनों ने सीसा संपर्क को कम ध्यान अवधि, बढ़ी हुई आक्रामकता, व्यवहार संबंधी विकारों तथा बौद्धिक क्षमता (IQ) में स्थायी कमी से जोड़ा है।

Paradox of development, recycling विकास और पुनर्चक्रण का विरोधाभास

- **Lead-acid batteries** are used to start most **petrol and diesel** motor engines; **lead is also present in smaller quantities in the electrical components of photovoltaic cells, wind turbines, and as part of back-up power supply systems**.
लेड-एसिड बैटरियों का उपयोग अधिकांश पेट्रोल और डीज़ल मोटर इंजनों को चालू करने के लिए किया जाता है; सीसा फोटोवोल्टिक कोशिकाओं, पवन टर्बाइनों के विद्युत घटकों तथा बैक-अप विद्युत आपूर्ति प्रणालियों के एक भाग के रूप में भी कम मात्रा में उपस्थित रहता है।
- **These batteries alone contribute to 86% of global lead consumption**.
केवल ये बैटरियाँ ही वैश्विक सीसा उपभोग का 86% योगदान करती हैं।
- **Lead acid batteries are also popular because they are cheap, rechargeable, and easy to recycle**.
लेड-एसिड बैटरियाँ इसलिए भी लोकप्रिय हैं क्योंकि वे सस्ती, पुनर्भरणीय तथा पुनर्चक्रण में सरल होती हैं।
- **The metal melts at 327° C, a temperature that can be achieved using a blowtorch in a backyard**.
यह धातु 327° सेल्सियस पर पिघलती है, जो ऐसा तापमान है जिसे किसी पिछवाड़े में ब्लोटॉर्च का उपयोग करके प्राप्त किया जा सकता है।



- Thus, in **India**, even though there are more than **350 well-equipped recycling units**, some **90% of the waste ends up in the informal network**, where **profits** are also higher.

इस प्रकार, भारत में, यद्यपि 350 से अधिक सुसज्जित पुनर्चक्रण इकाइयाँ हैं, फिर भी लगभग 90% अपशिष्ट अनौपचारिक नेटवर्क में पहुँच जाता है, जहाँ लाभ भी अधिक होता है।

Co-existing with tigers outside reserves

GS III: Environment

India's tiger conservation story is widely regarded as one of the world's most extraordinary wildlife recoveries – a species brought back from near extinction through sustained political commitment, scientific management, and decades of on-ground protection. Since the launch of Project Tiger in 1973, the country's network of protected areas has expanded from nine reserves covering 18,278 sq km to 58 reserves spanning 84,488 sq km, accounting for nearly 2.6% of India's landmass. India's tiger population has risen from 1,411 in 2006 to 3,682 in 2022, firmly establishing the country as home to over 70% of the world's wild tigers. This success has now created a new conservation frontier – the growing proportion of tigers living outside protected areas.

Although national datasets do not conclusively link rising tiger numbers with increasing human-tiger conflict, forest departments across several landscapes report a steady escalation in such incidents. As territorial carnivores require extensive home ranges, tigers disperse naturally when core habitats reach saturation. Consequently, more tigers are moving beyond protected boundaries into human-dominated fringes. According to the National Tiger Conservation Authority, 35-40% of India's tiger population now lives outside designated Tiger Reserves. This reality has prompted the Ministry of Environment, Forest and Climate Change to launch the Tigers Outside Tiger Reserves (TOTR) initiative.

Beyond protected boundaries

The growing tiger population reflects healthy breeding groups, functional habitats, and well-connected forest corridors. However, when tigers move beyond protected areas into landscapes interwoven with villages, farms, roads and other human infrastructure, interactions



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The objective of the Tigers Outside Tiger Reserves initiative is to establish a scientifically grounded, landscape-based framework for conserving tigers outside protected areas while safeguarding human lives

with people become inevitable, leading to human fatalities, livestock depredation, accidental encounters, prolonged rescue operations, and heightened public anxiety. Each incident carries ecological, social, and political consequences, placing enormous pressure on forest departments and district administrations.

The objective of the TOTR is to establish a scientifically grounded, landscape-based framework for conserving tigers outside protected areas while safeguarding human lives and livelihoods. Rather than responding to conflict only after it occurs, the initiative seeks to shift the approach from reactive crisis management to proactive, science-driven governance built on technology, preparedness, and community participation.

The TOTR is being launched as a targeted pilot rather than a nationwide rollout, recognising that long-term policy must be anchored in evidence generated under real field conditions.

The All-India Tiger Estimation (2022) recorded tiger presence across 212 forest divisions. Based on this assessment, 40 forest divisions across nine States have been selected for the first phase of the TOTR implementation. The participating States include Uttarakhand, Uttar Pradesh, Rajasthan, Madhya Pradesh, Maharashtra, Karnataka, Tamil Nadu, Telangana and Assam.

The TOTR rests on two complementary pillars. The first focuses on reducing human-tiger conflict and strengthening field protection. This includes upgrading communication systems, deploying rapid response teams, improving rescue infrastructure, and ensuring coordinated action during emergencies. The second pillar emphasises long-term coexistence. Conservation outside protected areas cannot succeed without the trust and participation of local communities. Awareness programmes, community engagement, timely compensation

and treating villagers as partners are central to the initiative. Tigers and people now co-occur across vast shared landscapes, making structured coexistence essential for long-term stability.

Among these, streamlined and timely compensation mechanisms are critical. Although States have their own frameworks, delays often erode public trust and fuel resentment. States must simplify procedures and invest in sustained outreach to build confidence among rural families living alongside tigers.

The role of States

Participating States will also need to invest strategically in both technology and institutional capacity. The programme rightly emphasises the use of modern conservation tools such as camera traps, GPS-enabled monitoring systems, drones and AI to strengthen surveillance, improve early warning systems and enable evidence-based decision-making. However, technology alone cannot resolve human-tiger conflict. Its effectiveness will ultimately depend on the strength of the institutions that support it. Building public confidence requires well-trained forest staff, veterinarians, and rescue teams capable of responding rapidly in conflict situations.

The TOTR underscores a broader national imperative: strengthening the governance of shared landscapes where ecological processes and human livelihoods intersect daily. The initiative signals a shift from viewing tiger conservation solely through the lens of protected areas to recognising the wider mosaic of reserve forests and other lands that now support dispersing tigers.

If executed with the same determination that made Project Tiger a global benchmark, the TOTR could become India's defining conservation initiative of the century proving that people and large carnivores can share space safely.

29J7. Co-existing with tigers outside reserves

आरक्षित क्षेत्रों के बाहर बाघों के साथ सह-अस्तित्व

- Since the launch of **Project Tiger in 1973**, the country's network of **protected areas** has expanded from **nine reserves** covering **18,278 sq km** to **58 reserves** spanning **84,488 sq km**, accounting for nearly **2.6% of India's landmass**.
1973 में प्रोजेक्ट टाइगर की शुरुआत के बाद से देश के संरक्षित क्षेत्रों का नेटवर्क 18,278 वर्ग किमी में फैले 9 अभयारण्यों से बढ़कर 84,488 वर्ग किमी में विस्तृत 58 अभयारण्यों तक पहुँच गया है, जो भारत के कुल भू-भाग का लगभग 2.6% है।
- India's tiger population** has risen from **1,411 in 2006** to **3,682 in 2022**, firmly establishing the country as home to over **70% of the world's wild tigers**.
भारत में बाघों की संख्या 2006 में 1,411 से बढ़कर 2022 में 3,682 हो गई है, जिससे भारत विश्व के 70% से अधिक जंगली बाघों का निवास-स्थल बन गया है।
- According to the **National Tiger Conservation Authority**, **35-40% of India's tiger population** now lives outside designated **Tiger Reserves**.
राष्ट्रीय बाघ संरक्षण प्राधिकरण (NTCA) के अनुसार, भारत के बाघों में से लगभग 35-40% अब अधिसूचित टाइगर रिज़र्व के बाहर रहते हैं।
- This reality has prompted the **Ministry of Environment, Forest and Climate Change** to launch the **Tigers Outside Tiger Reserves (TOTR) initiative**.
इस स्थिति को देखते हुए पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय ने टाइगर्स आउटसाइड टाइगर रिज़र्व्स (TOTR) पहल प्रारंभ की है।
- The objective of the **TOTR** is to establish a **scientifically grounded, landscape-based framework** for conserving **tigers** outside **protected areas** while safeguarding **human lives and livelihoods**.
टीओटीआर (TOTR) का उद्देश्य संरक्षित क्षेत्रों के बाहर बाघों के संरक्षण के लिए वैज्ञानिक आधार पर निर्मित, भूदृश्य-आधारित रूपरेखा स्थापित करना है, साथ ही मानव जीवन और आजीविका की सुरक्षा सुनिश्चित करना है।
- Rather than responding to **conflict** only after it occurs, the initiative seeks to shift the approach from **reactive crisis management** to **proactive, science-driven governance** built on **technology, preparedness, and community participation**.
केवल संघर्ष उत्पन्न होने के बाद प्रतिक्रिया देने के बजाय, यह पहल प्रतिक्रियात्मक संकट प्रबंधन से हटकर सक्रिय, विज्ञान-आधारित शासन की ओर परिवर्तन करना चाहती है, जो प्रौद्योगिकी, तैयारी और सामुदायिक सहभागिता पर आधारित हो।
- The **TOTR** rests on **two complementary pillars**.
टीओटीआर दो परस्पर पूरक स्तंभों पर आधारित है।
- The **first** focuses on reducing **human-tiger conflict** and strengthening **field protection**.
पहला स्तंभ मानव-बाघ संघर्ष को कम करने तथा मैदानी संरक्षण को सुदृढ़ करने पर केंद्रित है।
- This includes upgrading **communication systems**, deploying **rapid response teams**, improving **rescue infrastructure**, and ensuring coordinated action during **emergencies**.
इसके अंतर्गत संचार प्रणालियों का उन्नयन, त्वरित प्रतिक्रिया दलों की तैनाती, बचाव अवसंरचना का सुदृढ़ीकरण तथा आपातकालीन परिस्थितियों में समन्वित कार्रवाई सुनिश्चित करना शामिल है।

- The **second pillar** emphasises **long-term coexistence**.
दूसरा स्तंभ दीर्घकालिक सह-अस्तित्व पर बल देता है।
- Conservation outside protected areas** cannot succeed without the trust and participation of **local communities**.
संरक्षित क्षेत्रों के बाहर संरक्षण स्थानीय समुदायों के विश्वास और सहभागिता के बिना सफल नहीं हो सकता।
- Awareness programmes, community engagement, timely compensation** and treating **villagers as partners** are central to the initiative.
जागरूकता कार्यक्रम, सामुदायिक सहभागिता, समय पर मुआवज़ा तथा ग्रामीणों को भागीदार के रूप में स्वीकार करना इस पहल के प्रमुख तत्व हैं।

India curtailed 8,133 GWh solar power to maintain grid security

As on June 30, India's installed solar power capacity stood at 162.15 GW, which included 30.11 GW of rooftop projects, 6.43 GW of off-grid project

GS III: Environment

The Hindu Bureau
NEW DELHI

India curtailed 8,133 gigawatt-hour (GWh) of solar power during the April-June quarter this year, according to Minister of State for New and Renewable Energy Shripad Yesso Naik.

The curtailment and restriction were instituted to "maintain grid security" and "due to mismatch between commissioning of transmission lines and renewable energy projects, he informed Parliament, quoting figures from the Grid Controller of India.

Curtailment is when power-grid operators limit the power output from generating sources to maintain grid stability.

A total of 2,417 GWh of solar energy curtailment was carried out in April this year, 3,235 GWh in

Wasted energy

Restriction due to mismatch between commissioning of transmission lines and renewable energy projects, MoS tells House



■ Curtailment is when power-grid operators limit output from generating sources

■ 2,417 GWh of solar energy curtailment was carried out in April this year

■ 3,235 GWh of solar energy was restricted in May and 2,481 GWh in June

May and 2,481 GWh in June. As on June 30, India has installed solar capacity of up to 162.15 GW, which is inclusive of 125.6 GW of utility scale projects, 30.11 GW of rooftop projects and 6.43 GW of off-grid projects.

PM Surya Ghar

Separately, Mr. Naik also told the upper house that since its implementation in February 2024, the PM Su-

rya Ghar scheme has received more than 75 lakh applications, as on July 22.

More than 39.7 lakh rooftop solar (RTS) systems with a cumulative installed capacity of 14,180.90 MW have been installed, he added. Mr. Naik also said the scheme has reached out to more than 48 lakh households having released ₹27,343.9 crore as Central Financial Assistance (CFA) until June 27.

29J7. India curtailed 8,133 GWh solar power to maintain grid security
ग्रिड सुरक्षा बनाए रखने के लिए भारत ने 8,133 GWh सौर ऊर्जा का उत्पादन सीमित किया

As on **June 30**, India has installed **solar capacity** of up to **162.15 GW**, which is inclusive of **125.6 GW** of **utility-scale projects**, **30.11 GW** of **rooftop projects**, and **6.43 GW** of **off-grid projects**.

30 जून तक भारत में कुल 162.15 गीगावाट (GW) की सौर ऊर्जा क्षमता स्थापित की जा चुकी है, जिसमें **125.6 GW** की यूटिलिटी-स्केल परियोजनाएँ, **30.11 GW** की रूफटॉप परियोजनाएँ, तथा **6.43 GW** की ऑफ-ग्रिड परियोजनाएँ शामिल हैं।

PM Surya Ghar पीएम सूर्य घर योजना

Separately, Mr. Naik also told the **Rajya Sabha** that since its **implementation in February 2024**, the **PM Surya Ghar scheme** has received more than **75 lakh applications**, as on **July 22**.

अलग से, श्री नाइक ने राज्यसभा को

बताया कि **फरवरी 2024** में लागू होने के बाद से **22 जुलाई** तक पीएम सूर्य घर योजना के अंतर्गत **75 लाख** से अधिक आवेदन प्राप्त हुए हैं।

- More than 39.7 lakh rooftop solar (RTS) systems** with a cumulative installed capacity of **14,180.90 MW** have been installed, he added.
उन्होंने आगे बताया कि **14,180.90 मेगावाट (MW)** की कुल स्थापित क्षमता वाले **39.7 लाख** से अधिक रूफटॉप सौर (RTS) सिस्टम स्थापित किए जा चुके हैं।



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29J7	Protecting protest विरोध-प्रदर्शन की सुरक्षा

GS III: Internal Security

Protecting protest

Protests that inconvenience people must not be confused with violence

A defining feature of the recent Cockroach Janta Party agitation related to its underestimation by the government, which hoped to quell the protests by force. The net result was widespread student anger, which served to entrench the agitation. The Supreme Court has just commenced hearing petitions on the police's alleged use of disproportionate force, especially on July 20 in Delhi and a constable's aerial firing of an assault rifle allegedly to disperse crowds on July 25 in Bihar's Siwan. The Court has also agreed to hear petitions from the families of police personnel claiming that they were assaulted and "lynched". The ferocity of the July 20 police crackdown against protesters is not in doubt; in addition to tear gas, videos also purported to show the police using lathis studded with nails. But as Justice Joymalya Bagchi observed, the state should also answer why some police officers allegedly lacked protective gear. Under-equipped police are more likely to escalate force out of fear, and this is why international best practices in crowd control involve graduated responses. There is also merit in pleas that the same police force accused of using excess force also investigating it could potentially undermine credibility.

However, the Chief Justice of India's remark that protests are permissible "with due permission and at designated places" could come at odds with the right to protest. The democratic purpose of a protest is to inconvenience the state and thus should not be limited to its happening at the state's convenience. At the same time, not every inconvenience is constitutionally protected. The answer lies in proportionality. If the CJI's insistence on 'discipline' comes to mean protests must be orderly and predictable, it risks imposing administrative preferences on a constitutional right. The state is responsible for preventing violence, protecting life, and maintaining essential services. But modern cities are also dense and even a peaceful blockade could deprive thousands of uninvolved citizens of their liberties. The judiciary should thus resist conflating disruption that results in inconveniencing the public – which is one of the mechanisms by which a protest acquires its political force – and violence, which infringes on the rights of others. A unified set of procedures will also be welcome since policing is a State subject under the Seventh Schedule, and States have different training, equipment, escalation, and documentation rules. A national protocol could standardise the thresholds at which the use of high-impact crowd-control measures can be authorised and mandatory documentation of lathi charges, medical assistance after use of force, preservation of evidence, and independent inquiries into serious injuries.

29J7. Protecting protest विरोध-प्रदर्शन की सुरक्षा

- But as **Justice Joymalya Bagchi** observed, the **State** should also answer why some **police officers** allegedly lacked **protective gear**.

किन्तु जैसा कि **न्यायमूर्ति जॉयमाल्य बागची** ने टिप्पणी की, **राज्य** को यह भी स्पष्ट करना चाहिए कि कुछ **पुलिस अधिकारियों** के पास कथित रूप से **सुरक्षात्मक उपकरण** क्यों नहीं थे।

- Under-equipped police** are more likely to escalate force out of fear, and this is why **international best practices in crowd control** involve graduated responses.

पर्याप्त संसाधनों से वंचित **पुलिस** भयवश बल प्रयोग की तीव्रता बढ़ाने की अधिक संभावना रखती है, और यही कारण है कि **भीड़ नियंत्रण** से संबंधित **अंतरराष्ट्रीय सर्वोत्तम प्रथाओं** में चरणबद्ध प्रतिक्रिया अपनाई जाती है।

- The democratic purpose of a **protest** is to inconvenience the **State** and thus should not be limited to its happening at the **State's** convenience.

विरोध-प्रदर्शन का लोकतांत्रिक उद्देश्य **राज्य** को असुविधा पहुँचाना है, अतः इसे केवल **राज्य** की सुविधा के अनुसार सीमित नहीं किया जाना चाहिए।

- At the same time, not every inconvenience is constitutionally protected.

साथ ही, प्रत्येक प्रकार की असुविधा को संवैधानिक संरक्षण प्राप्त नहीं है।

- The answer lies in **proportionality**.

इसका समाधान **अनुपातिकता के सिद्धांत** में निहित है।

- If the **CJI's** insistence on "**discipline**" comes to mean protests must be orderly and predictable, it risks imposing administrative preferences on a **constitutional right**.

यदि **मुख्य न्यायाधीश** द्वारा "**अनुशासन**" पर दिया गया बल इस अर्थ में लिया जाए कि प्रत्येक **विरोध-प्रदर्शन** पूर्णतः व्यवस्थित और पूर्वानुमेय होना चाहिए, तो इससे **संवैधानिक अधिकार** पर प्रशासनिक प्राथमिकताओं को आरोपित करने का जोखिम उत्पन्न हो सकता है।

- The **State** is responsible for preventing **violence**, protecting **life**, and maintaining **essential services**.



राज्य की जिम्मेदारी हिंसा को रोकना, जीवन की रक्षा करना तथा आवश्यक सेवाओं को बनाए रखना है।

- But modern cities are also dense and even a peaceful blockade could deprive thousands of uninvolved citizens of their liberties.

किन्तु आधुनिक शहर अत्यधिक घनी आबादी वाले होते हैं, और यहाँ तक कि एक शांतिपूर्ण अवरोध भी हजारों असंबद्ध नागरिकों को उनकी स्वतंत्रताओं से वंचित कर सकता है।

- The **judiciary** should thus resist conflating disruption that results in inconveniencing the public — which is one of the mechanisms by which a protest acquires its political force — and **violence**, which infringes on the rights of others.

अतः **न्यायपालिका** को उस व्यवधान, जिससे जनता को असुविधा होती है—जो किसी विरोध-प्रदर्शन को उसकी राजनीतिक शक्ति प्रदान करने का एक माध्यम है—और **हिंसा**, जो दूसरों के अधिकारों का उल्लंघन करती है, दोनों को एक समान मानने से बचना चाहिए।

- A unified set of **procedures** will also be welcome since **policing is a State subject under the Seventh Schedule**, and States have different training, equipment, escalation, and documentation rules.

एक समान प्रक्रियाओं का निर्धारण भी स्वागतयोग्य होगा, क्योंकि पुलिस व्यवस्था सातवीं अनुसूची के अंतर्गत राज्य विषय है, और विभिन्न राज्यों में प्रशिक्षण, उपकरण, बल प्रयोग की वृद्धि तथा प्रलेखन संबंधी नियम अलग-अलग हैं।

- A **national protocol** could standardise the thresholds at which the use of **high-impact crowd-control measures** can be authorised and mandatory documentation of **lathi charges, medical assistance** after use of force, preservation of **evidence**, and **independent inquiries** into serious injuries.

एक राष्ट्रीय प्रोटोकॉल उन मानकों का एकरूपीकरण कर सकता है जिनके आधार पर उच्च-प्रभाव वाले भीड़-नियंत्रण उपायों के उपयोग की अनुमति दी जाए, तथा लाठीचार्ज, बल प्रयोग के बाद चिकित्सीय सहायता, साक्ष्यों के संरक्षण और गंभीर चोटों की स्वतंत्र जाँच का अनिवार्य प्रलेखन सुनिश्चित किया जा सके।

Diminishing relevance

घटती प्रासंगिकता

- As Olympic and World Championships medallist **Mirabai Chanu** stood atop the podium in Glasgow on Sunday, tears rolling down her cheeks after **becoming the first woman weightlifter to secure her third consecutive Commonwealth Games gold medal**, she provided much-needed succour to a Games that had risked fading into oblivion a few years ago.

रविवार को ग्लासगो में ओलंपिक और विश्व चैंपियनशिप पदक विजेता मीराबाई चानू जब तीसरा लगातार राष्ट्रमंडल खेलों का स्वर्ण पदक जीतने वाली प्रथम महिला भारोत्तोलक बनने के बाद पोटियम के शीर्ष पर खड़ी थीं और उनकी आँखों से आँसू बह रहे थे, तब उन्होंने उन खेलों को अत्यंत आवश्यक संबल प्रदान किया, जिनके कुछ वर्ष पूर्व अप्रासंगिक हो जाने का जोखिम उत्पन्न हो गया था।

The **Internet** can be broadly divided into **three layers**:

1. **Surface Web**
2. **Deep Web**
3. **Dark Web**

The **Deep Web** and the **Dark Web** are often confused, but they are fundamentally different.

Feature	Deep Web	Dark Web
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Feature	Deep Web	Dark Web
Definition	The part of the internet that is not indexed by search engines but is accessible with proper authorization.	A small, hidden portion of the Deep Web that requires special software (e.g., Tor Browser) to access and provides a high degree of anonymity.
Accessibility	Accessible through normal web browsers after logging in or with permission.	Requires specialised browsers such as Tor (The Onion Router) or I2P .
Indexed by Search Engines	☐ No	☐ No
Purpose	Protects private, confidential, or restricted information.	Designed primarily for anonymous communication and hidden services.
Legality	Entirely legal and used every day by individuals and organisations.	Accessing it is not illegal in itself in most countries, but many activities carried out on it may be illegal.
Size	Around 90–95% of all web content.	A very small fraction of the Deep Web (well below 1% of the total web).
Examples	Online banking, email inboxes, hospital records, university portals, government databases, cloud storage, subscription services.	Anonymous forums, whistle-blower platforms, secure journalism portals, encrypted marketplaces, hidden websites ending in .onion .

What is the Deep Web?

The **Deep Web** consists of all internet content that **cannot be found through search engines like Google, Bing, or Yahoo** because it is protected by passwords, subscriptions, permissions, or technical restrictions.

Examples

- Internet banking accounts
- Gmail inbox
- Hospital medical records
- Government databases
- University student portals
- Company intranets
- Cloud storage (Google Drive, OneDrive)
- Paid academic journals

Why is it useful?

The Deep Web protects:

- Privacy



- Financial information
- Medical records
- Educational records
- Government documents
- Business data

Thus, the Deep Web is an **essential and legitimate part of the Internet**.

What is the Dark Web?

The **Dark Web** is a **hidden subset of the Deep Web** that intentionally conceals the identity and location of users and websites through encryption and anonymous routing.

It is commonly accessed using the **Tor Browser**, which routes internet traffic through multiple volunteer-operated servers, making it difficult to identify the user's IP address.

Legitimate Uses of the Dark Web

The Dark Web is **not inherently illegal**. It has several lawful applications, such as:

- Secure communication by journalists.
- Protection of whistle-blowers.
- Anonymous communication by human rights activists.
- Circumventing censorship in countries with restricted internet access.
- Privacy-conscious browsing.

Illegal Uses of the Dark Web

Unfortunately, the anonymity offered by the Dark Web also attracts criminal activity, including:

- Illegal drug marketplaces.
- Sale of stolen personal or financial data.
- Distribution of malware and ransomware.
- Illegal firearms trafficking.
- Counterfeit documents.
- Financial fraud and cybercrime.