

# Daily Current Affairs

## 08 January 2025

### Earth's Rotation Day 2026

- Earth's Rotation Day is observed globally on January 8 each year to highlight the profound significance of Earth's rotational motion and commemorate French physicist Léon Foucault's historic 1851 pendulum experiment, which first publicly demonstrated conclusive evidence of Earth's rotation.
- On January 8, 2026, the world observes the 175th anniversary of this groundbreaking scientific demonstration—a milestone that celebrates not only a remarkable physical achievement but also humanity's evolving understanding of our planet's motion in space.
- Foucault's pendulum was an engineering marvel for its time. The apparatus consisted of:
  - Brass Bob Weight: 28 kilograms (kg)
  - Bob Diameter: 38 centimeters (cm)
  - Wire Length: 67 meters (m)
  - Location: Panthéon, Paris, France

#### Earth's Rotation Facts

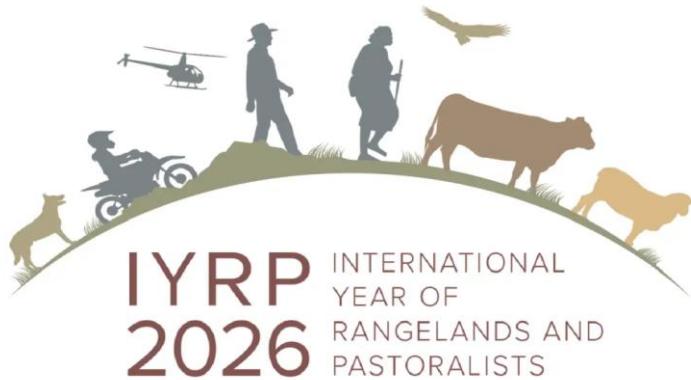
- **Earth doesn't rotate in exactly 24 hours**
- One full rotation takes 23 hours, 56 minutes, and 4 seconds. The extra ~4 minutes make up a solar day.
- **Earth spins faster at the Equator**
- At the Equator, Earth rotates at about 1,670 km/h, but near the poles, the speed drops almost to zero.
- **Earth's rotation is slowly slowing down**

- Due to tidal friction caused by the Moon, Earth's rotation slows by about 1.7 milliseconds per century.
- **Rotation helps protect life**
- Earth's rotation contributes to the generation of the magnetic field, which shields us from harmful solar radiation.
- **Days were shorter in the past**
- Around 400 million years ago, a day on Earth was only about 22 hours long.
- **Earth is not a perfect sphere because of rotation**
- Rotation causes Earth to bulge at the Equator, making it an oblate spheroid.
- **Rotation causes day and night**
- As Earth spins from west to east, different parts of the planet face the Sun, creating day and night.
- **The Coriolis Effect is due to rotation**
- Earth's rotation causes winds and ocean currents to curve—right in the Northern Hemisphere and left in the Southern Hemisphere.
- **Earth wobbles slightly as it rotates**
- This motion is called precession, and it takes about 26,000 years to complete one full wobble.
- **Earth's axis is tilted by 23.5°**
- While rotation causes day and night, this tilt combined with revolution causes seasons.



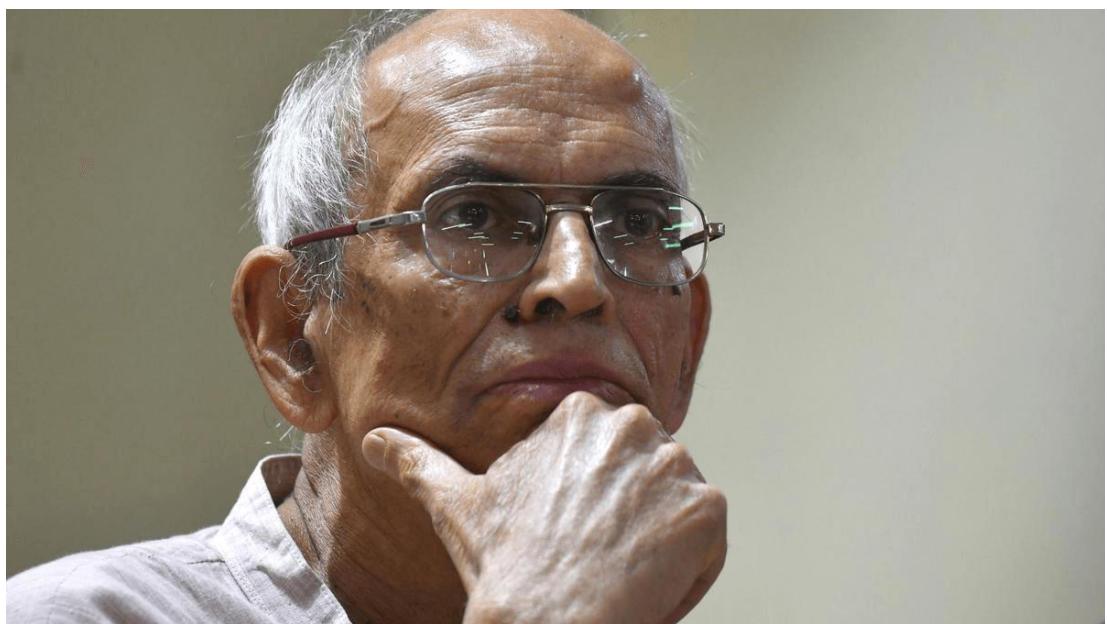
## International Year for Rangelands and Pastoralists

- The United Nations has declared 2026 as the ‘International Year for Rangelands and Pastoralists’, a landmark decision aimed at spotlighting some of the world’s most overlooked yet vital ecosystems.
- The announcement addresses a critical imbalance in global climate action: while forests receive disproportionate attention and funding, grasslands and savannahs—equally critical for carbon sequestration, biodiversity conservation, and climate resilience—remain marginalized in international climate negotiations and national climate strategies.
- In 2022, international scientists published an open letter in “Science” urging parties to the UN Framework Convention on Climate Change (UNFCCC) to broaden climate goals beyond forests to encompass all biomes, particularly grasslands and savannahs.
- The **UNFCCC COP30 climate talks** held in Belém, Brazil, dramatically illustrated this imbalance. With **Brazil hosting** much of the Amazon basin, forests dominated the negotiating agenda.



## Ecologist Madhav Gadgil Passes Away at 82

- Madhav Gadgil, one of India's most renowned and influential ecologists, passed away at his residence in Pune on the night of January 7, 2026, after a brief illness. He was 82 years old.
- Madhav Gadgil is most renowned for his pioneering work on the ecological significance of the **Western Ghats**, one of the world's most biodiverse regions. His systematic scientific research and conservation advocacy transformed public and governmental understanding of the **Western Ghats**' irreplaceable ecological value.
- In his landmark 2011 report, Gadgil's work classified the **Western Ghats** into **zones of high, medium, and low ecological sensitivity**, providing a scientific framework for environmental impact assessment and land-use planning.



## IICDEM 2026

- The Election Commission of India (ECI) will host the inaugural India International Conference on Democracy and Election Management (IICDEM) 2026 from January 21 to 23, 2026, at Bharat Mandapam in New Delhi.
- This three-day international event marks a major step in positioning India as a global hub for dialogue and cooperation on democratic governance and election management.
- IICDEM 2026 is positioned as the largest global conference of its kind hosted by India, representing an unprecedented assembly of electoral expertise and international cooperation.
- India's assumption of the Chairship of the Council of Member States of International IDEA for 2026 provides the institutional framework for IICDEM 2026.
- The conference's overarching theme, "**Democracy for an inclusive, peaceful, resilient and sustainable world**".

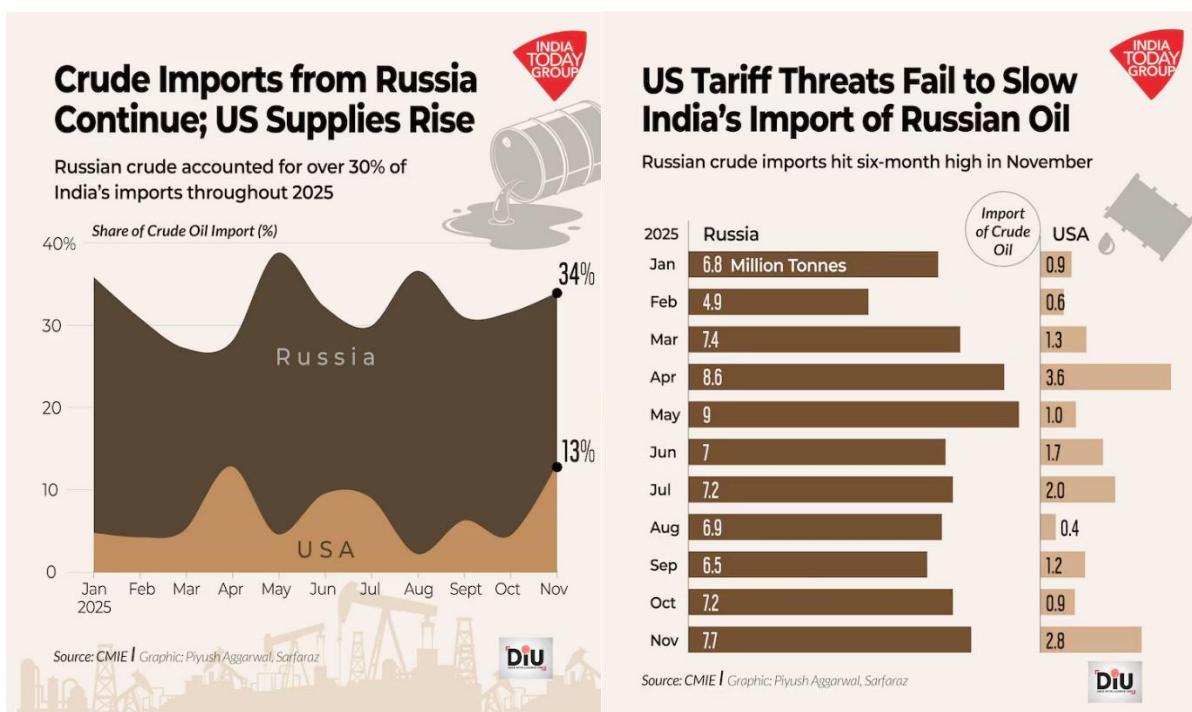


## Bill Threatening 500% Tariff On India

- US President Donald Trump has "greenlit" the bipartisan **Russia Sanctions Bill**, which could be used to penalise Moscow's trading partners, including India, China and Brazil, over their purchase of Russian oil, said Republican Senator Lindsey Graham, a prominent defence hawk.
- If passed, the Graham-Blumenthal sanctions bill would authorise the US President to levy up to 500 per cent tariffs on nations that knowingly purchase

Russian oil or uranium and "fuel Russian President Vladimir Putin's war machine".

- The hard-hitting sanctions package is meant to economically cripple Moscow as the Trump administration continues to negotiate a deal to end the war that began with Russia's invasion of Ukraine.
- Graham said he met with Trump at the White House on Wednesday, during which the **President extended his support to the bill** that has been in the works for months. The development was also confirmed by a White House official.
- According to a latest data, India imported 7.7 million tonnes of oil from Russia in November 2025, 35.1% of India's total oil imports that month.



## REVIEW QUESTIONS

1. Earth's Rotation Day is observed every year on which date?

- A. January 5
- B. January 6
- C. January 8
- D. January 10

 **Answer: C**

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**2. Earth's Rotation Day commemorates which scientist's experiment?**

- A. Isaac Newton
- B. Galileo Galilei
- C. Albert Einstein
- D. Léon Foucault

 **Answer: D**

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**3. The year 2026 marks how many years of Foucault's pendulum experiment?**

- A. 150 years
- B. 160 years
- C. 175 years
- D. 200 years

 **Answer: C**

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**SSBCrack EXAMS**

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**4. Where was Foucault's pendulum installed in 1851?**

- A. Louvre Museum
- B. Eiffel Tower
- C. Sorbonne University
- D. Panthéon, Paris

 **Answer: D**

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**5. How long does Earth take to complete one full rotation on its axis?**

- A. 24 hours exactly
- B. 23 hours 50 minutes
- C. 23 hours 56 minutes 4 seconds
- D. 24 hours 4 minutes

 **Answer: C**

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**6. Earth's rotation slows down mainly due to which factor?**

- A. Solar winds
- B. Earth's magnetic field
- C. Tidal friction caused by the Moon
- D. Volcanic activity

 **Answer: C**

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**7. The Coriolis Effect is a result of Earth's:**

- A. Revolution
- B. Tilt
- C. Gravity
- D. Rotation

 **Answer: D**

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**8. The United Nations has declared 2026 as the International Year of:**

- A. Forests and Wildlife
- B. Climate Action
- C. Rangelands and Pastoralists
- D. Sustainable Agriculture

 **Answer: C**

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**9. Madhav Gadgil is best known for his work related to which region?**

- A. Eastern Himalayas
- B. Indo-Gangetic Plains
- C. Thar Desert
- D. Western Ghats

 **Answer: D**

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**10. The inaugural India International Conference on Democracy and Election Management (IICDEM) 2026 will be held at:**

- A. Vigyan Bhavan
- B. Rashtrapati Bhavan
- C. Bharat Mandapam, New Delhi
- D. India Habitat Centre

 **Answer: C**

