

Daily Current Affairs

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Chandrayaan-2 Launch Anniversary

- Today marks the **6th anniversary of the Indian Space Research Organisation's (ISRO) Chandrayaan-2 launch**. The mission aimed to study the Moon's topography, seismography, mineral distribution, and surface composition, with a focus on the lunar south pole.



- India's second lunar exploration mission, which successfully **lifted off on July 22, 2019, from Satish Dhawan Space Centre, Sriharikota**, primarily aimed to explore the lunar surface, particularly the south pole, and consisted of an orbiter, lander (Vikram), and rover (Pragyan).
- **Although the lander faced a setback due to a software glitch**, resulting in a crash landing on September 6, 2019, the orbiter continues to operate, providing valuable insights into lunar science and mapping the minerals and water molecules in polar regions.
- **Equipped with eight experiments, it has been mapping minerals and water molecules in polar regions.** The mission's data has been released to the public, enabling further exploration and discovery. **Chandrayaan-2's legacy serves as a**

testament to ISRO's capabilities and dedication to space exploration, inspiring future lunar endeavours.

ISRO To Launch Earth Observation Satellite NISAR

- **ISRO, will launch the NISAR Earth Observation satellite**, developed jointly with the **American space agency NASA**, on the 30th of this month at 1740 hours from Sriharikota. **GSLV F16 heavy lift rocket will place the satellite** into a 743 km Sun Synchronous orbit.



- The **NISAR satellite will scan the entire globe every 12 days** and provide high-resolution, all-weather, day and night data.
- **NISAR, developed jointly with NAS, will be the sharpest eye in the sky.** It is the first satellite to observe the Earth with a dual-frequency Synthetic Aperture Radar. **NASA's L band and ISRO's S band radar will use NASA's large 12-metre unfurlable mesh reflector antenna** that is integrated into ISRO's modified satellite.
- The **L band radar can penetrate thick forests and dense vegetation**, while the S band provides crystal clear surface details. It will observe Earth using SweepSAR technology for the first time. The radars can detect subtle changes in Earth's surface to monitor sea ice, vegetation, storm tracking, soil moisture changes, surface water mapping and disaster probabilities.



- **SweepSAR (Sweep Synthetic Aperture Radar)** is a radar technique designed by NASA's Jet Propulsion Laboratory (JPL) and the German Space Agency (DLR) for spaceborne Synthetic Aperture Radar (SAR) missions, notably used in the upcoming **NASA-ISRO SAR (NISAR) mission**.
- **This technique utilizes a large deployable antenna** combined with a one-dimensional phased-array feed to achieve wide-area coverage with fine spatial resolution, a significant advancement over conventional SAR systems.

Lading Bill 2025

- Parliament has passed the **Bills of Lading Bill 2025** with the Rajya Sabha approving it today. The Lok Sabha has already passed the legislation in March this year. It aims to update and simplify the legal framework for shipping documents. It will replace the **Indian Bills of Lading Act, 1856**.



- **A bill of lading refers to a document** issued by a freight carrier to a shipper. It contains details including the type, quantity, condition, and destination of goods being carried. Replying to a debate on the **bill in the Rajya Sabha, Union Minister of Ports, Shipping and Waterways Sarbananda Sonowal** said that after Narendra Modi Government came to power in 2014, the vision plan of the Ministry was developed under which Sagarmala programme was undertaken and **more than 805 projects have been identified.**



- He said, more **than 5.5 lakh crore rupees** is being spent in these projects. He said, under the Sagarmala programme, the aim is to make all the ports modernized and enhance their capacities. He said, now all the major ports are well connected with Railways and Roadways. Highlighting the growth in capacity handling of ports, Mr Sonowal said that in 2013-14, the coastal shipping was **limited to only 87 million metric tonnes and following** the modernization the capacity went up to 165 million metric tonnes.
- He said, with respect to waterways, it was limited to only 18 million metric tonnes and now it has **increased to 145 million metric tonnes.** He said, Prime Minister Narendra Modi has set a target of making India among the top five ship **building countries in the world by 2047.**



- Earlier, while introducing the Bill, Mr Sonowal said, the government has set a target to **transform the country into a developed country by 2047** under the visionary leadership of Prime Minister Narendra Modi. He said, this vision is not aspirational but a call for taking action to turn the country a progressive nation. He said, 21st century is destined to be the century of Bharat.

Endangered Plant Conservation Program

- **Uttarakhand**, a Himalayan biodiversity hotspot with **69% forest cover**, has initiated a pioneering programme to revive 14 critically endangered plant species. This effort, led by the **Uttarakhand Forest Department's Research Wing**, aims to reintroduce rare flora to their natural habitats after four years of scientific cultivation and habitat mapping.



- The project began in July 2025, **coinciding with the monsoon**, and is expected to complete its first phase by the end of that month. Uttarakhand hosts **diverse ecosystems from alpine meadows to Terai plains**. It is home to many rare, endemic, and threatened plants with ecological, medicinal, and cultural value. These species face threats from overharvesting, habitat loss, climate change, and low natural regeneration.
- The state's rich plant heritage is vital for ecosystem balance and traditional medicine. **The programme targets 14 species listed as critically endangered, endangered, or vulnerable** by the IUCN Red List and the Uttarakhand State Biodiversity Board.



- **Notable species include Himalayan Gentian, White Himalayan Lily, Indian Spikenard, Doon Cheese Wood, and Kumaon Fan Palm.** Many are prized for medicinal uses, which has led to their overexploitation and drastic population decline.
- **Propagation techniques were developed at high-altitude nurseries across Uttarakhand,** using seeds, bulbs, rhizomes, or stem cuttings. Species-specific methods ensure healthy growth. Simultaneously, historical natural habitats were mapped using primary and secondary data. These sites span various altitudes and ecosystems, including alpine and deciduous forests.



- Before replanting, **habitats were prepared by mitigating threats** such as grazing, deforestation, and human disturbance. GPS coordinates were recorded for monitoring. Protective measures like fencing and patrols were established to safeguard the plants. The first planting phase commenced with the monsoon and will be closely monitored for survival and growth.
- **Each species plays a distinct ecological role and holds medicinal significance.** For example, Himalayan Gentian treats liver and fever ailments, White Himalayan Lily is used in Chyavanprash, and Indian Spikenard produces aromatic oils for traditional medicine. Their restoration supports biodiversity and sustainable medicinal resource use.



- **Restoring endangered plants involves overcoming poor germination**, habitat degradation, and external pressures like infrastructure expansion. The **Uttarakhand Forest Department's research centres** and field teams have been crucial in addressing these challenges. Continuous monitoring and scientific management underpin the programme's commitment to long-term success.
- **This is India's first systematic plant reintroduction programme.** It sets a precedent for other states to prioritise plant conservation alongside wildlife efforts. The **initiative marks the need for protecting medicinal plants** and fragile ecosystems, offering a replicable model for biodiversity preservation nationwide.

Koneru Humpy Creates History

- In FIDE Women's Chess World Cup 2025, **Koneru Humpy created history by becoming the first-ever Indian woman** to reach the semifinals in Batumi, Georgia. **Humpy beat China's Song Yuxin in the quarterfinals.** No Indian before her had managed to make it to the final four of the tournament before this year's edition.



- Earlier, Koneru Humpy struck the first blow, securing the game one in the quarterfinals of the **International Chess Federation (FIDE) Women's World Cup**. **Divya Deshmukh and Harika Dronavalli** will play tiebreaks to decide the winner of the all-Indian quarterfinal clash. The quarterfinal tiebreaks will start from 4:35 PM (IST).

- **Divya Deshmukh and Harika Dronavalli drew both classical games** in the all-Indian last-eight clash. The winner of the contest will join compatriot Koneru Humpy, and **China's Lei Tingjie and Tan Zhongyi in the semifinals.**
- Meanwhile, **Vaishali Rameshbabu's impressive run came to** an end, as she lost to the third seed Tan Zhongyi of China. Top seed Lei Tingjie, on the other hand, continued her strong form and stormed into the semifinals with another victory over Georgia's Nana Dzagnidze.

REVIEW QUESTIONS

1. Chandrayaan-2 Spacecraft Has How Many Modules

- A. 2
- B. 3
- C. 4
- D. 5

ANSWER: B

2. Which Rocket Carried Chandrayaan-2 Into The Space

- A. PSLV
- B. GSLV
- C. GSLV Mk-III
- D. RLV-TD

ANSWER: C

3. First Indian Woman To Enter FIDE Women's World Cup Semifinals

- A. Divya Deshmukh
- B. Harika Dronavalli
- C. Koneru Humpy
- D. Vaishali Rameshbabu

ANSWER: C

4. Which Of The Following Statement Is Or Are Correct About Orbiter?

- A. Orbiter Of Chandrayaan-2 Will Be Installed At 100 Km Above The Moon.
- B. It Consists Of Eight Instruments.
- C. It Will Bring The Command Sent From Isro To The Lander And The Rover.
- D. All The Above

ANSWER: D

5. In Which State In India Endangered Plant Conservation Program Started

- A. Uttarakhand
- B. Kerala
- C. Gujarat
- D. Himachal Pradesh

ANSWER: A

6. In which city did Union Minister Piyush Goyal inaugurate the IIMUN Conference 2025

- A. Noida
- B. Pune
- C. Ahmedabad
- D. Lucknow

ANSWER: A

7. Where Was First Campus Of Indian Institute Of Creative Technology Inaugurated

- A. Bengaluru
- B. Hyderabad
- C. Pune
- D. Mumbai

ANSWER: D

8. Which State Is The Focus Of The Mou Between The Ministry Of Tribal Affairs And Coal India Ltd To Boost Tribal Education

- A. Chhattisgarh
- B. Jharkhand
- C. Odisha
- D. Madhya Pradesh

ANSWER: A

9. In Which State Did PM Modi Launch ₹7,200 Crore Worth Of Infrastructure Projects Under The Viksit Bharat Mission

- A. Bihar
- B. Uttar Pradesh
- C. Jharkhand
- D. West Bengal

ANSWER: A

10. How Many Central Government Schemes Have Been Merged Into The Prime Minister Dhan-dhaanya Krishi Yojana

- A. 24 Schemes
- B. 11 Schemes
- C. 36 Schemes
- D. 18 Schemes

ANSWER: C

11. Who Has Been Appointed As The New Prime Minister Of Ukraine, Replacing Denys Shmyhal

- A. Yuliia Svyrydenko
- B. Olena Zelenska
- C. Ruslan Stefanchuk
- D. Dmytro Kuleba

ANSWER: A

12. Which City From Karnataka Entered The Super Swachh League In The Swachh Survekshan 2024–25 Rankings

- A. Mysuru
- B. Davanagere
- C. Hubballi
- D. Bengaluru

ANSWER: A

13. Which City Received 'Super Swachh League City' Award Ranked 4th In Swachh Survekshan 2024-25 Despite Facing Floods In 2024

- A. Surat
- B. Vijayawada
- C. Navi Mumbai
- D. Indore

ANSWER: B

14. Which State Launched Vidarbha's First Integrated Steel Plant In Gadchiroli

- A. Chhattisgarh
- B. Maharashtra
- C. Madhya Pradesh
- D. Jharkhand

ANSWER: B

15. Which Organisation Emerged As Largest Development Partner For Nepal In The Fiscal Year 2024/25

- A. Asian Development Bank
- B. World Bank
- C. International Monetary Fund
- D. United Nations Development Programme

ANSWER: A

16. By which year does the Indian government plan to implement the CAFE-III and CAFE-IV norms for cleaner vehicles

- A. 2027
- B. 2037
- C. 2030
- D. 2040

ANSWER: B

17. From Where were Prithvi-II and Agni-I ballistic missiles successfully test-fired

- A. Andhra Pradesh
- B. Tamil Nadu
- C. Odisha
- D. Ladakh

ANSWER: C

18. Who Has Been Appointed As The Director (Engineering & R&D) At Hindustan Aeronautics Limited

- A. Ajay Kumar Shrivastava
- B. R. Madhavan
- C. Somanath Nambiar
- D. Arvind Kumar Verma

ANSWER: A

19. Who Received The Kalinga Ratna Award 2024 From President Droupadi Murmu?

- A. Dharmendra Pradhan
- B. Rajnath Singh
- C. Amit Shah
- D. Ashwini Vaishnaw

ANSWER: A

20. Which Of The Following Inscriptions Mentions The Name Of Kalidasa

- A. Allahabad pillar inscription
- B. Aihole inscription
- C. Alapadu grant
- D. Hanumakonda inscription

ANSWER: B