

# Daily Current Affairs

## 25 August 2025

### India's First Removable Solar Panel Project In Varanasi

- **Banaras Locomotive Works (BLW)** has rolled out India's first Removable Solar Panel in a pilot project at its premises in Varanasi. The move is part of Indian Railways' move towards a more sustainable and greener transportation system.
- The **70-metre pilot project features 28 solar panels** generating up to 15 KWs of electricity. These panels are not only durable and efficient but are also removable allowing for maintenance and seasonal adaptation.



- The installation of these panels doesn't require any land acquisition as they are installed between the spaces of the tracks. BLW is moving towards energy-efficient **practices and that 20% of the energy requirement** in BLW is met through solar energy. The panels are expected to offer a lifespan of 25 years and will offer convenience in their removal as well as instalment.

## PM Narendra Modi On Two Day Visit To Gujarat

- Prime Minister Narendra Modi will be on a two-day visit to Gujarat. On the first day of his visit, Mr Modi is scheduled to inaugurate multiple development **projects worth 5 thousand 400 crores rupees in Ahmedabad**. Following the inauguration, he will also address a public gathering.



- On the second day of his visit, the Prime Minister will inaugurate localised production of **hybrid battery electrodes and flag-off Battery electric vehicle** exports to **100 countries at Hansalpur in Ahmedabad**.
- During his visit, the Prime Minister will dedicate multiple railway projects worth **over 1 thousand 400 crore rupees to the Nation**. He will inaugurate the widening of Viramgam-Khudad-Rampura road.
- He will also lay the **foundation stone for the construction of six-lane vehicle** underpasses on the Ahmedabad-Mehsana-Palanpur road, and railway overbridge on the Ahmedabad-Viramgam road, among others.

## ISRO Completes First Integrated Air Drop Test

- ISRO has successfully accomplished first **Integrated Air Drop Test (IADT-01)** for **end to end demonstration** of parachute-based deceleration system for Gaganyaan missions. It was a critical exercise to validate the parachute system that will **bring back astronauts safely under the mission**, from its spaceport in. **This test is a joint effort of ISRO, Indian Air Force, DRDO, Indian Navy and Indian Coast Guard.**



- The Test was designed to **evaluate full suite of parachutes** that will slow down and stabilise the crew module during re-entry and splashdown of the actual human spaceflight mission. This included **two drogue parachutes** which are conical or funnel-shaped devices with open ends, for initial slowing down, followed by pilot chutes and three main parachutes to ensure safe descent.
- Additionally, ISRO is also preparing for upcoming tests such as the second Test Vehicle Demonstration (TV-D2) mission and the first uncrewed Gaganyaan mission (G1),** which will pave the way for India's maiden human spaceflight.

## ISRO's Geo - Portal

- **Agriculture and Farmers Welfare Minister Shivraj Singh Chouhan** said that the Indian Space Research Organisation (ISRO) has developed a **geo-portal that provides accurate information** on droughts, rainfall, weather, and other parameters, helping farmers plan their crops more effectively. Addressing the session of the **National Space Day celebration** virtually in New Delhi, he commended Indian space scientists for their contributions in supporting farmers.



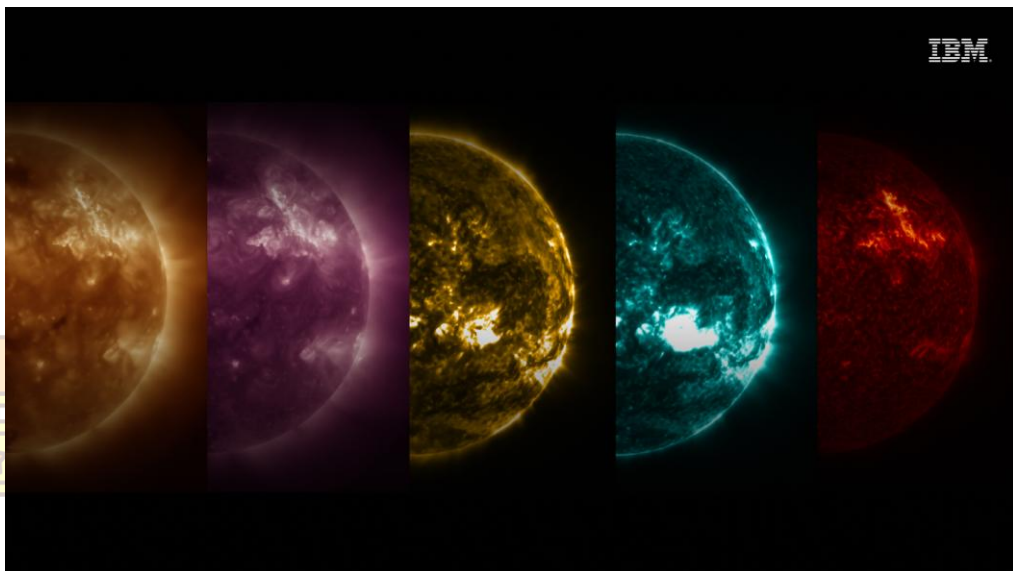
- Highlighting satellite-based remote sensing, the minister added that the government now **receives precise data on crop losses**. Mr Chouhan said that this technology enables accurate compensation to farmers under the Fasal Bima Yojana. He also **mentioned that Indian scientists are working on new technology** that can detect crop pests simply by analysing photographs of the crops. The **Minister also emphasised that space science aids** in timely warnings during rising temperatures, storms, or droughts, helping in disaster management and crop protection.

## NASA's Surya AI

- **NASA launched Surya**, an advanced artificial intelligence model designed to transform space weather prediction. **Developed alongside IBM** and trained on nine years of Solar Dynamics Observatory data, Surya offers early and accurate forecasts of solar flares and eruptions.



- These solar events can disrupt satellites, power grids, aviation, and GPS systems on Earth. By making Surya open-source, NASA aims to encourage global collaboration to enhance protection against space weather hazards.
- **Space weather originates from solar eruptions such as solar flares** and coronal mass ejections (CMEs). These release charged particles and magnetic energy that travel through the solar system. **When they reach Earth, they can damage satellites, cause power outages**, disrupt aviation routes, and endanger astronauts. Predicting these events is vital for safeguarding modern technology and infrastructure.



- **Surya uses machine learning to analyse vast solar data sets.** Unlike traditional models, it detects subtle solar activity patterns and predicts eruptions up to two hours in advance. This **improves forecast accuracy and lead time**, offering better preparedness against space weather threats. Surya's open-source nature encourages researchers worldwide to develop new applications and improve forecasting.
- The **Sun's complexity arises from simultaneous phenomena occurring** at varied scales and durations. Traditional models fragmented the system due to computational limits. **Surya combines spectral block layers** and a long-short transformer backbone to capture broad and fine solar details. Overcoming memory constraints and merging frequency-aware with time-series modelling were key innovations enabling this comprehensive approach.



## NASA ने लॉन्च किया नया AI

- Surya successfully **reproduced the St. Patrick's Day geomagnetic storm of 2015**, accurately capturing its coronal mass ejection. It excelled in four research tasks – forecasting active region emergence, predicting strong solar flares, estimating solar wind speeds up to four days ahead, and forecasting extreme ultraviolet spectra. Surya outperformed existing models by up to 16% in flare prediction, demonstrating its scientific value.
- **The project united experts from NASA centres, universities, industry, and research institutes.** Collaboration was essential for bridging AI and heliophysics expertise. Supported by the National Science Foundation and NVIDIA, Surya represents a pioneering step toward AI-assisted heliophysics. Its open-source framework aims to elevate global research and improve space weather resilience.

## India Elected Chairman Of AIBD

- India achieved a major milestone in August 2025 by being **elected Chairman of the Executive Board of the Asia-Pacific Institute for Broadcasting Development (AIBD)**. The election took place during the 23rd AIBD General Conference held in Phuket, Thailand. **India secured the highest number of votes**, marking its return to the top leadership role after nearly a decade. This development strengthens India's influence in regional and global broadcasting.
- India currently holds the **position of President of the AIBD General Conference until August 2025**. Its election as Chairman of the Executive Board consolidates dual leadership roles. This reflects growing trust in India's capabilities and vision in international media cooperation.



- India's leadership is expected to enhance collaboration among member countries and promote media development across the Asia-Pacific region.
- **About the Asia-Pacific Institute for Broadcasting Development**
- **Founded in 1977 under UNESCO's guidance**, AIBD is a unique inter-governmental organisation.
- It serves as a platform for cooperation among broadcasters and media organisations.



- The institute has 92 member organisations from 45 countries.

- These include 26 government members represented by 48 national broadcasters and 44 affiliate members from Asia-Pacific, Europe, Africa, Arab States, and North America.
- India is a founding member and is represented by Prasar Bharati, the country's public service broadcaster.
- **The 23rd AIBD General Conference 2025**
- The conference was held from 19 to 21 August 2025 in Phuket, Thailand.
- It was **chaired by Gaurav Dwivedi**, CEO of Prasar Bharati and President of the AIBD General Conference.



- **The theme was Media for People, Peace & Prosperity.**
- The event gathered international stakeholders to discuss policy exchange, resource sharing, and content collaboration.
- It aimed to **encourage a cooperative media environment for sustainable** development in the region. India's election as Chairman marks the country's growing prominence in global media governance. It strengthens India's role in shaping policies and initiatives that influence broadcasting standards and practices.
- The position **enables India to lead future AIBD programmes** and bilateral partnerships. It also reflects international confidence in India's public service broadcasting model through Prasar Bharati. The election marks a continuation of India's five-decade-long partnership with AIBD.



## Sharvari Somnath Shende

- **India's Sharvari Somnath Shende won the U18 women's individual recurve gold medal at the 2025 World Youth Archery Championships in Winnipeg, Canada, yesterday. The 16-year-old defeated South Korea's Kim Yewon 6-5 in a tense final. Shende led 4-1 after the first three sets, but Kim came back strong to tie the match and force a shoot-off.**



- In the deciding shot, Kim scored 9, while Shende hit a perfect 10 to clinch the gold. **Shende is the second Indian woman to win gold at the ongoing tournament. Earlier on Saturday, Chikitha Taniparthi won the U21 women's compound individual title. She defeated Korea's Yerin Park by 142-136 in the compound Under 21 women's gold medal match.**



## REVIEW QUESTIONS

**1. Surya AI, Recently Seen In News Is Launched By**

- A. NASA
- B. ISRO
- C. JAXA
- D. ESA

**ANSWER: A**

**2. Who Is Elected As Chairman Of AIBD 2025**

- A. Cambodia
- B. India
- C. Indonesia
- D. Brunei

**ANSWER: B**

**3. Asia Pacific Institute For Broadcasting Development Was Established In**

- A. 1975
- B. 1976
- C. 1977
- D. 1978

**ANSWER: C**

**4. Didayi Tribe Is Primarily Found In Which State**

- A. Odisha
- B. Rajasthan
- C. Gujarat
- D. Karnataka

**ANSWER: A**

**5. Which Two States Are Part Of Exercise Samanvay Shakti 2025**

- A. Assam and Manipur
- B. Tripura and Nagaland
- C. Sikkim and Meghalaya
- D. Mizoram and Arunachal Pradesh

**ANSWER: A**

**6. Globally Important Agricultural Heritage Systems Is An Initiative Of Which Organization**

- A. United Nations Environment Programme (UNEP)
- B. United Nations Development Programme (UNDP)
- C. World Bank
- D. Food and Agriculture Organization (FAO)

**ANSWER: D**

**7. What Is “Pseudomonas Aeruginosa”**

- A. Bacterium
- B. Newly discovered species of Fish
- C. Fungus
- D. Invasive weed

**ANSWER: A**

**8. Agni-5 Is A Nuclear- Capable Land-based Intercontinental Ballistic Missile Developed By Which Organization**

- A. Indian Space Research Organization (ISRO)
- B. Defence Research and Development Organisation (DRDO)
- C. Hindustan Aeronautics Limited (HAL)
- D. Bharat Dynamics Limited

**ANSWER: B**

**9. Which State Has Been Declared India’s First Fully Digitally Literate State**

- A. Kerala
- B. Karnataka
- C. Tamil Nadu
- D. Andhra Pradesh

**ANSWER: A**

**10. Which Country Has Launched Its Military Exercise Titled ‘Sustainable Power 1404’**

- A. Israel
- B. Iran
- C. Russia
- D. China

**ANSWER: B**

**11. Mithi River, Flows Through Which City**

- A. New Delhi
- B. Chennai
- C. Mumbai
- D. Hyderabad

**ANSWER: C**

**12. Where Was 18th International Olympiad On Astronomy And Astrophysics 2025 Held?**

- A. Jaipur
- B. Dehradun
- C. New Delhi
- D. Mumbai

**ANSWER: D**

**13. Which Institution Developed AI- Based Antibiotics To Combat Drug-resistant Infections Like MRSA And Neisseria Gonorrhoeae**

- A. Stanford University
- B. Oxford University
- C. Massachusetts Institute of Technology
- D. Harvard University

**ANSWER: C**

**14. On Which Date Is World Entrepreneurs' Day Observed Every Year**

- A. July 15
- B. September 10
- C. October 5
- D. August 21

**ANSWER: D**

**15. When Is ISRO Scheduled To Conduct The First Gaganyaan Test Flight**

- A. March 2026
- B. December 2025
- C. June 2026
- D. January 2027

**ANSWER: B**



**16. Gabon Which Was Seen In The News, Is Located In Which Region**

- A. Africa
- B. Europe
- C. Australia
- D. Asia

**ANSWER: A**

**17. With Which Regional Bloc Did India Recently Sign The Terms Of Reference To Begin Negotiations For A Free Trade Agreement**

- A. Eurasian Economic Union
- B. European Union
- C. ASEAN
- D. BRICS

**ANSWER: A**

**18. Around Which Planet Did NASA Discover Its 29th Satellite, Named S/2025 U1**

- A. Jupiter
- B. Neptune
- C. Uranus
- D. Saturn

**ANSWER: C**

**19. Which Country Launched Nusuk Umrah Service To Help International Pilgrims Apply For Visas**

- A. United Arab Emirates
- B. Saudi Arabia
- C. Qatar
- D. Oman

**ANSWER: A**

**20. Which Of The Following Are Two Works Of Kalidasa**

- A. Raghuvamsha and Kiratarjuniya
- B. Kumara Sambhav and Raghuvamsha
- C. Malti Madhava and Kumara Sambhava
- D. Malti Madhav and Kumara Sambhava

**ANSWER: B**