



August - 20

TNPSC BITS

- ❖ SLINEX-25, a bilateral naval exercise between India and Sri Lanka, was held in Colombo, Sri Lanka.
- ❖ India's defence production reached a record ₹1.51 lakh crore in FY 2024-25, marking an 18% growth from ₹1.27 lakh crore in the previous year.
- ❖ The U.S. national debt hit \$37 trillion, surpassing the 2030 projection years early due to pandemic-era borrowing.
- ❖ The Football Team Real Madrid's brand value rose 14% to EUR 1.9 billion, while Barcelona's increased 11% to EUR 1.7 billion.
 - Both clubs have earned AAA+ brand strength ratings and hold the highest enterprise values of EUR 6 billion and EUR 4.4 billion, respectively.
- ❖ Indian Olympic Association (IOA) officially approved India's bid to host the 2030 Commonwealth Games.
 - India will submit the final proposal before the 31 August deadline, marking 20 years since New Delhi last hosted the Games.

TAMIL NADU NEWS

Microfinance GLP in Q1 FY26

GROSS LOAN PORTFOLIO DROPS

	March 2024	March 2025
Gross loan portfolio (Rs cr)	4,42,700	3,81,200
Active loans (crore)	16.1	14
Loan offtake last 3 months (Rs cr)	1,15,600	71,580
No of loans in last 3 months (Lakh)	240.5	133
PAR 1-30	0.7%	1.4%
PAR 31-180	2.1%	6.2%
PAR 180 plus	1.6%	5.1%

PAR is portfolio at risk; Source: CRIF High Mark

- ❖ Tamil Nadu's microfinance gross loan portfolio (GLP) fell 23.5% to ₹43,700 crore at the end of June 2025.

- ❖ It had stood at ₹57,100 crore in the same period last year.
- ❖ Quarter-on-quarter (QoQ), the GLP declined 6.7% from ₹46,800 crore as of March 30, 2025.
- ❖ The TN Money Lending Entities (Prevention of Coercive Actions) Act, 2025, was notified in June.
- ❖ The provisions of the Act relating to coercive action against borrowers also apply to non-banking financial companies registered with the Reserve Bank of India and co-operative banks and societies.
- ❖ Muthoot Microfin holds a ₹3,200 crore microloan portfolio in Tamil Nadu.
- ❖ All states except West Bengal saw double-digit GLP drops in June 2025.
- ❖ Odisha saw the steepest fall at 24.7%, followed by Tamil Nadu and Karnataka at 22.9%.

NATIONAL NEWS

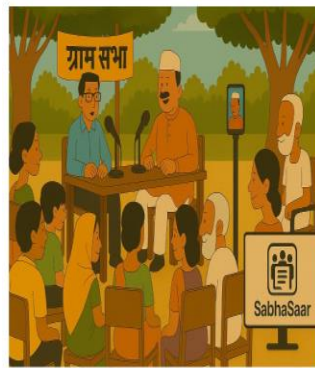
India's Deep-Sea Mission



- ❖ India will launch the National Deep Water Exploration Mission.
- ❖ The mission aims to explore oil and gas reserves in the ocean.
- ❖ PM of India announced it on Independence Day, calling it “Samudra Manthan.”
- ❖ It will run in mission mode to boost energy self-reliance.
- ❖ The mission will promote scientific research, ocean literacy, and underwater engineering.

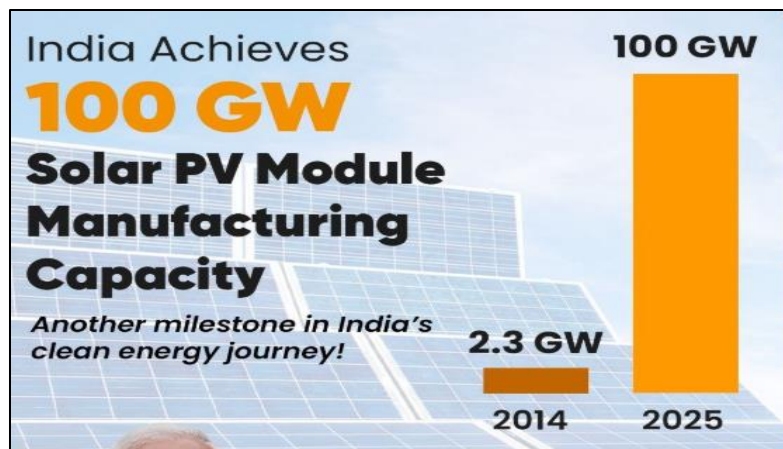
SabhaSaar tool

- ❖ The Centre launched 'SabhaSaar', an AI tool to generate structured minutes of gram sabha meetings.
- ❖ It will be rolled out in Tripura on Independence Day and later extended to other states.
- ❖ 'SabhaSaar' transcribes and summarizes gram Sabha videos and audios in multiple Indian languages.
- ❖ The initiative supports over 2.55 lakh village panchayats across India, enhancing governance and public participation.



Enabling Panchayats to Prioritize
Participation, With SabhaSaar
Managing the Minutes.

100 GW Solar PV Module



- ❖ India reached 100 GW solar PV module manufacturing capacity under the Approved List of Models and Manufacturers (ALMM).
- ❖ This marks a rise from just 2.3 GW in 2014.
- ❖ The ALMM was issued by the Ministry of New and Renewable Energy (MNRE) in 2019.
- ❖ The first list published in 2021 showing 8.2 GW capacity.

- ❖ India is on track to achieve its 500 GW non-fossil fuel capacity target by 2030.

SCIENCE AND TECHNOLOGY NEWS

Biodegradable bedroll bags

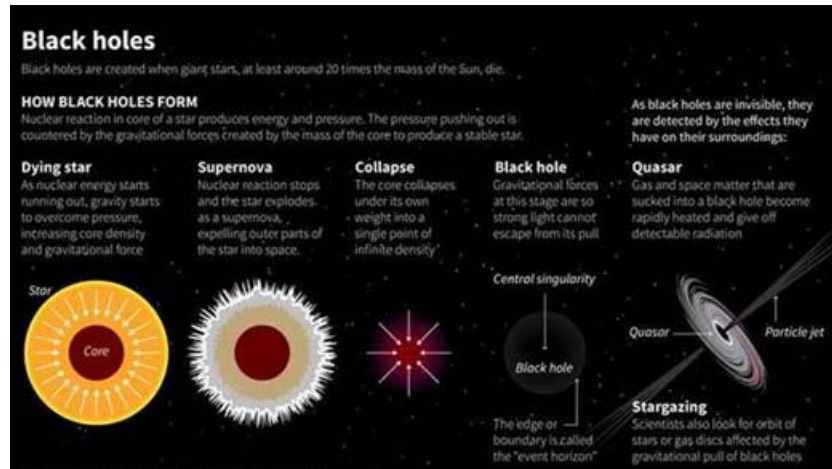
- ❖ Northeast Frontier Railway (NFR) became India's first railway zone to use compostable bioplastic bags on trains.
- ❖ The initiative began on August 15, 2025, with the distribution of linen in biodegradable bags.
- ❖ The ISO17088-compliant bioplastic was developed at Indian Institute of Technology Guwahati (IIT-G).
- ❖ The pilot project covers 25 trains and includes 40,000 bags across Assam, Bihar, Bengal, Tripura, and Arunachal Pradesh.



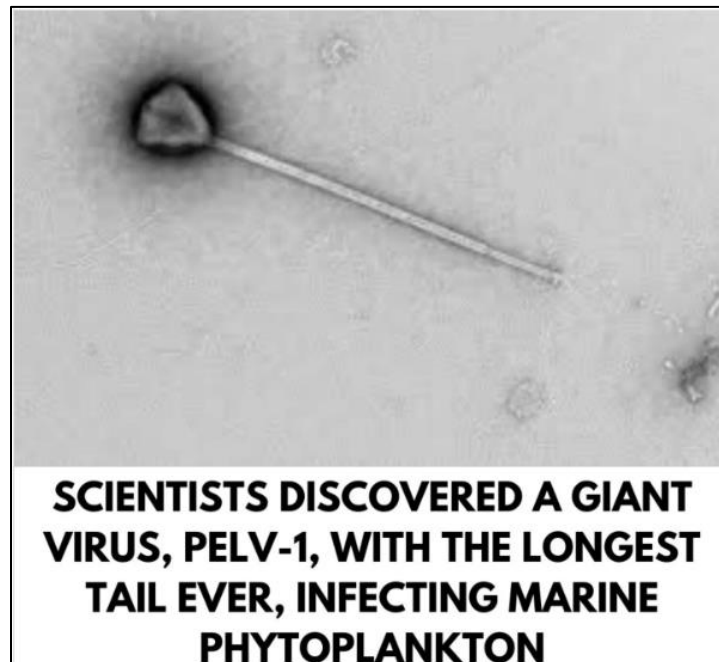
New supernova 2025

- ❖ Astronomers detected a new type of supernova caused by a black hole interacting with a massive star.
- ❖ It is located about 700 million light-years away.
- ❖ The star and black hole, each around 10 times the mass of the sun, formed a binary system before the explosion.
- ❖ The black hole siphoned off material from the star during a years-long spiral, distorting its shape and possibly triggering its collapse.

- ❖ This event released more energy in one second than the sun emits in its entire lifetime, according to researchers.



PelV-1 - Giant Virus



- ❖ Scientists discovered a giant virus with the longest known tail near Hawaii.
- ❖ The virus, named PelV-1, was found at Station ALOHA in the North Pacific.
- ❖ PelV-1 infects dinoflagellates, a rare viral host group.
- ❖ Its tail reaches up to 2.3 microns, longer than many bacteria.
- ❖ The tail is 30 nanometers wide and over 10 times longer than the capsid.
- ❖ PelV-1's tail forms after the host cell bursts, not during replication.

- ❖ It belongs to the Mesomimiviridae family.
- ❖ PelV-1's genome has 459,000 base pairs and 467 genes.
- ❖ It carries rhodopsin, suggesting it may use sunlight for energy.

India's EO Satellite Constellation

- ❖ Pixxel Space India-led consortium will build India's first commercial earth observation (EO) satellite constellation.
- ❖ The private consortium will launch 12 advanced EO satellites in the next five years.
- ❖ The constellation will support climate monitoring, disaster management, agriculture, security, and urban planning.
- ❖ This initiative will reduce India's reliance on foreign data and boost the domestic space industry under a public-private partnership (PPP).



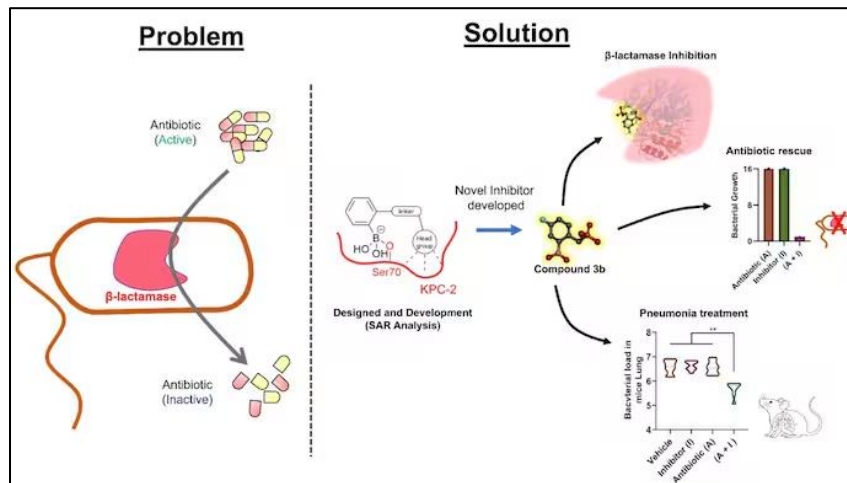
ISRO's space lab

- ❖ ISRO and Muskaan Foundation inaugurated a space lab at Government Higher Secondary School in Mechukha, Arunachal Pradesh.
- ❖ The lab is named Pasang Wangchuk Sona ISRO Space Laboratory, honouring the late father of Education Minister Pasang Dorjee Sona.
- ❖ It aims to inspire students in the remote Shi-Yomi district with hands-on training in space science and technology.
- ❖ The lab offers tools to explore satellite systems, rocket science, and space innovation.

- ❖ This initiative follows Arunachal's first space lab set up in Yazali in November 2024.



Compound 3b

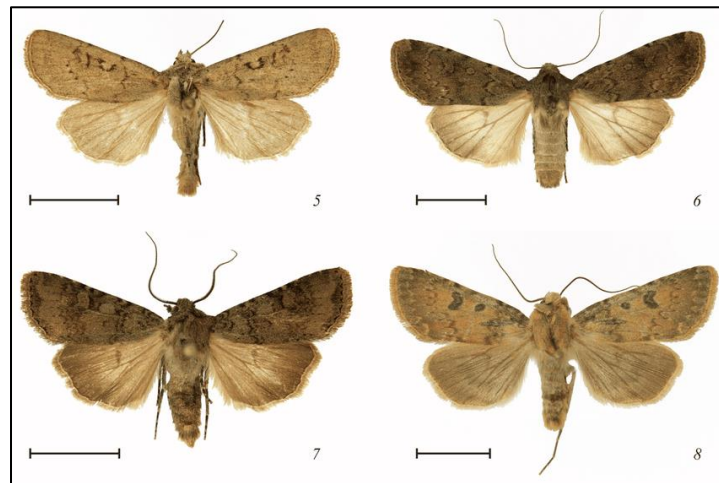


- ❖ Researchers at IIT-Roorkee discovered Compound 3b to fight drug-resistant bacteria.
- ❖ Compound 3b works with Meropenem to treat KPC-2 Klebsiella pneumoniae infections.
- ❖ It acts as a β -lactamase inhibitor, blocking enzymes that degrade antibiotics.
- ❖ KPC-2 is a superbug listed among the WHO's top-priority health threats.
- ❖ The discovery targets antimicrobial resistance (AMR), a growing global threat.

ENVIRONMENT NEWS

Antitrisuloides Catocalina

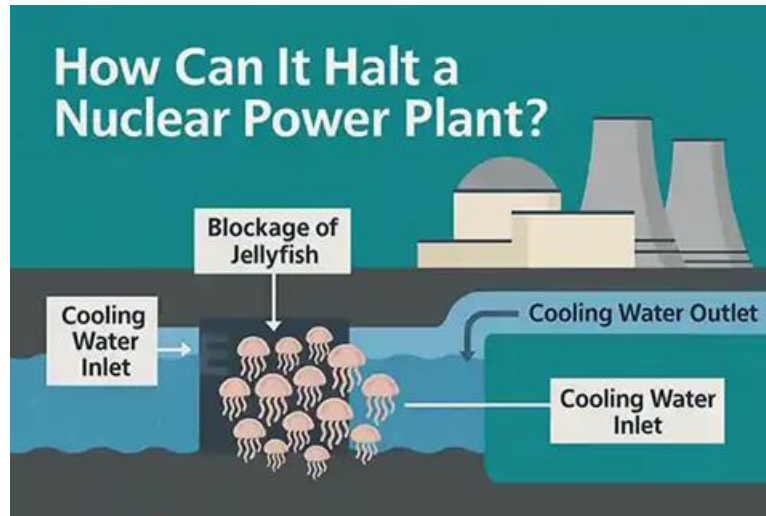
- ❖ A rare nocturnal moth from the genus *Antitrisuloides* was recorded for the first time in the Western Ghats.
- ❖ The discovery was made at Choolannur Peafowl Sanctuary in Palakkad district, Kerala.
- ❖ The moth was identified as *Antitrisuloides catocalina*, a species earlier known only from North-East India.
- ❖ Researchers confirmed it as the subspecies *Antitrisuloides catocalina cyclica*.
- ❖ The moth belongs to the Noctuidae family, which includes only two known species worldwide.



Jellyfish disrupt Nuclear Plants

- ❖ Jellyfish swarms blocked the cooling water intake pipes, leading to a temporary shutdown of one of France's major nuclear power plants.
- ❖ These plants rely on a continuous flow of seawater to cool their reactors and turbines.
- ❖ Jellyfish blooms can quickly block by clustering in massive numbers.
- ❖ Dead jellyfish can turn into a gel-like substance that passes through screens and damages internal systems.
- ❖ Cleaning jellyfish from intake pipes is a difficult and risky process that can take up to two days.
- ❖ Since the 1990s, jellyfish have increasingly disrupted nuclear plants worldwide.

- ❖ Climate change has warmed ocean waters, accelerating jellyfish reproduction and increasing their food supply.
- ❖ Overfishing and plastic pollution have further boosted jellyfish populations by removing predators and providing breeding grounds near coastlines.



Biodegradable packaging material



- ❖ IIT-M researchers develop eco-packaging from farm waste and fungi.
- ❖ They created biodegradable packaging using agricultural and paper waste.
- ❖ Fungal strains like *Ganoderma lucidum* and *Pleurotus ostreatus* were cultivated on waste substrates.
- ❖ *Ganoderma* grown on cardboard showed compressive strength higher than EPS (expanded polystyrene).

- ❖ India produces over 350 million tonnes of agri-waste annually, much of which remains unused.
- ❖ The packaging material is a plastic-free, eco-friendly alternative to conventional foam.

REPORTS AND INDICES

Top 500 Global Brands list

TopBrand 2025 TOP 500 Global Brands —TOP 25—					 01 \$1062.50B	 02 \$1046.76B	 03 \$997.68B	 04 \$917.68B	 05 \$724.86B
					 06 \$638.51B	 07 \$518.79B	 08 \$517.68B	 09 \$448.75B	 10 \$351.02B
					 11 \$302.86B	 12 \$289.49B	 13 \$290.01B	 14 \$285.07B	 15 \$275.01B
					 16 \$272.70B	 17 \$263.07B	 18 \$243.83B	 19 \$231.89B	 20 \$223.09B
					 21 \$215.43B	 22 \$209.79B	 23 \$209.23B	 24 \$206.98B	 25 \$205.34B

- ❖ The Top Brand Union released the Top Brand 2025 "Top 500 Global Brands list."
- ❖ Microsoft leads with a brand value of USD 1,062.505 billion.
- ❖ NVIDIA ranks second with a brand value of USD 1,046.760 billion.
- ❖ Apple comes next with USD 997.685 billion.
- ❖ Other top brands include Amazon, Alphabet (Google), Saudi Aramco, Walmart, Meta (Facebook), Berkshire Hathaway, and Broadcom.
- ❖ PetroChina is the highest-valued Chinese brand at 14th place.

STATES' NEWS

Anti-Drug campaign initiatives

- ❖ Punjab launched a first-time reward policy was launched to support police efforts in the Yudh Nasheyan Virudh (War Against Drugs).
- ❖ Police officers recovering over one kg of heroin will receive a reward of ₹1.20 lakh for outstanding performance.
- ❖ An anti-drug syllabus was introduced in schools and 20 lakh people participated in mega PTMs to raise awareness.

- ❖ Punjab deployed an anti-drone system along its 553-km border with Pakistan to curb cross-border drug trafficking.



CM Kisan Kalyan Yojana

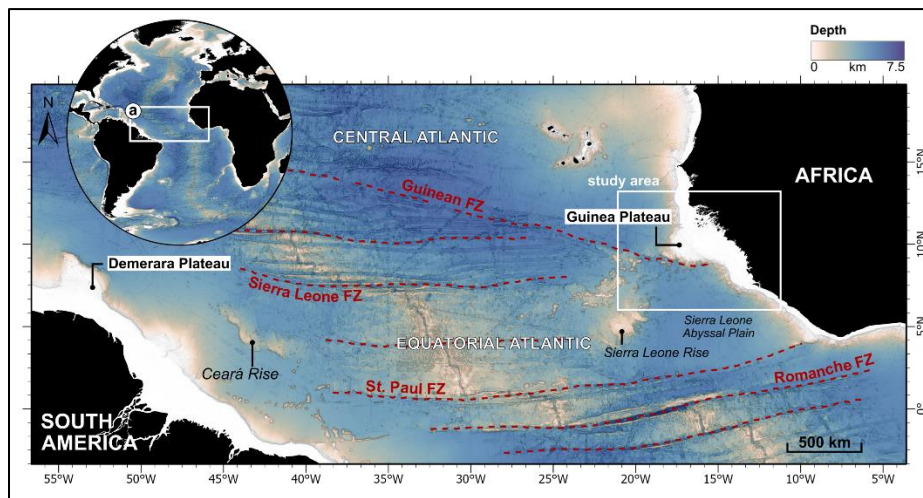


- ❖ Madhya Pradesh Governor announced that by March 2025, over 83 lakh farmers had received ₹17,500 crore was transferred to farmers under the CM Kisan Kalyan Yojana.
- ❖ The scheme was launched in September 2020 to support small and marginal farmers with ₹6,000 annually.
- ❖ This benefit was provided in addition to ₹6,000 received under the central PM Kisan Samman Nidhi (PM-KISAN) scheme.

- ❖ The financial aid was given in three equal instalments of ₹2,000 each through Direct Benefit Transfer (DBT).
- ❖ Farmers who paid income tax, held government jobs, or were elected representatives were excluded from the scheme.

MISCELLANEOUS NEWS

Ancient mud waves



- ❖ 117-million-year-old mud waves were found under the Atlantic west of Guinea-Bissau.
- ❖ They were shaped by underwater avalanches from early Atlantic water flows.
- ❖ This event disrupted deep-sea carbon layers, influencing global climate patterns.
- ❖ This may reshape our understanding of tectonics, ocean currents, and Cretaceous warming.

