

December 24, 2025 – Dinamani Newspaper – Tit bits

1. The President Draupadi Murmu presented the 'Rashtriya Vigyan Puraskar' (National Science Awards), including 'Vignan Ratna award – 2025', the highest award in the field of science in the country.
 - i. The Vigyan Ratna, Vigyan Shri, Vigyan Yuva and Vigyan Team awards were instituted in 2023 to honour the outstanding contribution of Indian scientists. The first Vigyan Ratna award was given to Tamil Nadu's biochemistry and biotechnology researcher Govinda Rajan Padmanaban in 2024.
 - ii. The second National Science Awards were announced last October. Accordingly, the late Astrophysicist Jayant Narlikar from Maharashtra was awarded the Vigyan Ratna award. He refuted the Big Bang theory of the origin of the Universe and conducted notable research work with British astronomer Fred Hoyle.
 - iii. 8 people were selected for the Vigyan Shri Award and 14 for the Vigyan Yuva Award.
 - iv. The Vigyan Team Award was announced for the Aroma Mission Team of the Council of Scientific and Industrial Research (CSIR) to promote the cultivation of lavender flowers in Jammu and Kashmir.
 - v. The Vigyan Ratna Award was received by R. Sri Anand, Director of the Pune University Research Centre for Astronomy and Astrophysics, founded by Narlikar.
 - vi. Agricultural scientist Gyanendra Pratap, known as the wheat hybrid researcher (Agricultural Science), Yousuf Mohammad Sheikh, Director of Physics Department, Baba Atomic Energy Research Centre (Atomic Energy), K. Thangaraj, Centre for Cell and Molecular Biology (Biology), Pradeep Thalapil, IIT Madras (Chemistry), S. Venkata Mohan, Director, National Environmental Engineering Research Centre (Environmental Science), Mahan Mahahaj, a monk from the Ramakrishna Mission and Professor of Mathematics at the Tata Institute of Fundamental Research (TIFR), among others, received the Vigyan Shri Award.
 - vii. Young scientists Jagadish Gupta Kapuganti (Agricultural Science), Satendra Kumar (Agricultural Science), Waliur Rahman (Earth Science), Sabyasachi Mukherjee (Mathematics and Computer Science), Suresh Kumar (Medicine), and Mohanashankar Sivaprakasam (Technology and Innovation) were among those who received the Vigyan Yuva Award.
2. The President Donald Trump has announced a plan to create a new naval fleet with the largest battleship ever built in the US Navy.
 - i. The first massive battleship to be included in this fleet, called the 'Golden Fleet', will be named 'Trump Class-USS Defiant'. This ship will be longer and larger than the Iowa-class ships of the World War II era.
 - ii. Trump said that these ships would be equipped with hypersonic missiles (capable of traveling at more than five times the speed of sound), nuclear-capable cruise missiles, railguns, and high-powered lasers.
 - iii. However, experts have raised various doubts about the implementation of this plan. The Navy has already failed to develop new designs for Ford-class aircraft carriers and Columbia-class submarines on time and within budget. That situation may continue.
 - iv. The Navy spent billions of dollars for more than 15 years to install railgun technology on ships, but

abandoned the project in 2021.

- v. Experts said that while laser technology is the only aspect of Trump's claims that has seen success in recent years, developing or equipping ships with nuclear-capable cruise missiles would be considered a violation of the nuclear non-proliferation treaties that the US has with Russia.
 - vi. The use of battleships peaked during World War II. After the war, aircraft carriers and long-range missiles gained prominence. In the 1980s, four Iowa-class battleships were modernized and equipped with cruise missiles, anti-ship missiles, and modern radars. However, they were all decommissioned in the 1990s.
 - vii. In these circumstances, Trump's ambitious battleship project could reshape the future of the U.S. Navy. However, experts believe that technological challenges and costs could pose setbacks.
3. A report from the US Department of Defence (Pentagon) warns that China is enhancing its military capabilities with the intention of invading Taiwan by the end of 2027.
- i. For this purpose, China has built three new missile launch sites and deployed more than 100 Inter-Continental Ballistic Missiles (ICBMs) capable of striking targets across Continents.
 - ii. Furthermore, China has significantly increased the number of short, medium, and intermediate-range missiles that could be used to attack Taiwanese military positions.
 - iii. As of 2024, China possessed more than 600 nuclear weapons. It is predicted that China will increase its nuclear arsenal to over 1,000 by 2030, posing a threat to the United States during a potential invasion of Taiwan.
 - iv. Since the end of the Chinese Civil War in 1949, the island of Taiwan has functioned as a self-governing territory. However, China considers the island to be a part of its territory. Taiwan has also not yet declared itself an independent nation.
 - v. China maintains that it has the right to reunify Taiwan with the mainland whenever it deems necessary. China states that it has the right to use military force for this purpose if needed.
4. Indian all-rounder Deepti Sharma has become the first Indian to reach the top spot in the ICC T20I bowlers' rankings.
5. The Congress party condemned the Central Government, questioning the necessity of providing a new definition for the Aravalli hills, which possess immense natural beauty and a long history.
- i. The expert committee appointed by the Union Ministry of Environment submitted a definition of the Aravalli mountain range, which extends across Gujarat, Rajasthan, Haryana, and Delhi, to the Supreme Court.
 - ii. According to this definition, a hill with a minimum height of 100 meters from the local relief is considered an 'Aravalli hill', and two or more 100 metre high hills between 500 meters are referred to as the 'Aravalli mountain range'. The Supreme Court accepted this new definition and issued an order last month.

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- iii. As a result, many, including environmental activists, are warning that mining activities will take place in hilly areas below 100 meters, potentially leading to groundwater depletion and desertification.
 - iv. Union Environment Minister Bhupender Yadav's statement that only 0.19 percent of the total area of the Aravalli mountain range (1.44 lakh square kilometers) has been permitted for mining activities has raised further doubts.
 - v. The claim that the Aravalli mountain range covers an area of 1.44 lakh square kilometers is itself incorrect. The Aravalli mountain range extends across 34 districts in Delhi and the states of Gujarat, Haryana, and Rajasthan. In 15 of these districts, the Aravalli range covers 33 percent of the total area.
 - vi. The new definition provided by the expert committee does not clearly specify which land areas do not fall under the classification of Aravalli hills and mountain ranges, and which areas have been permitted for mining activities.
 - vii. "It is feared that this new clarification will lead to an increase in construction activity in the Aravalli hills of the Delhi-NCR region, further exacerbating environmental damage," he said.
 - viii. The Rajasthan Congress president, Govind Singh, has announced that protests will be held in 19 districts of the state demanding the withdrawal of the new clarification regarding the Aravalli hills.
6. Vijay Hazare Trophy is associated with Cricket.
7. China has filed a complaint with the World Trade Organization (WTO) against the Indian Government's measures to promote domestic manufacturing of solar power generation cells, panels, and Information Technology-related equipment.
- i. Currently, China exports these products to India in large quantities. In this context, the Indian Government is taking measures, including a production-linked incentive scheme and increased import duties, to reduce its heavy reliance on China and promote domestic production. China has filed a complaint against this with the World Trade Organization, stating that India's actions violate the rules of the 1994 General Agreement on Tariffs and Trade (GATT) and constitute discriminatory measures against Chinese products. Therefore, China has requested that the WTO arrange for consultations with the Indian Government on this matter.
 - ii. According to WTO rules, the first step in resolving trade disputes is to request for consultations. If a solution is not reached through these consultations, China can then request the WTO to establish a panel to investigate and resolve the issue.
8. On Wednesday morning (December 24), ISRO scheduled to launch the American company's 'Bluebird-6' Satellite from Sriharikota in Andhra Pradesh. The 24-hour countdown for this began at 8:54 AM on Tuesday.
- i. The Indian Space Research Organisation (ISRO) is also launching Satellites commercially. Accordingly, it was decided to launch the Bluebird-6, a state-of-the-art Communication Satellite of the American company AST SpaceMobile, using ISRO's LVM-3 rocket. A Memorandum of Understanding for this was signed through ISRO's NSIL (NewSpace India Limited).
 - ii. The Bluebird communication satellite weighs approximately 6,100 kilograms spanning an area of 223 square meters. The primary objective of this satellite is to provide high-speed internet service directly to ordinary smartphones from space. Through this, Internet, video calls, and text messaging services at 5G speeds can be accessed even in dense forests and mountainous regions where there are no

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cell phone towers. Furthermore, it is noteworthy that this is the heaviest satellite that ISRO has launched to date.

9. A financial package of US\$450 million (approximately ₹4,032 crore) was announced by India for relief efforts following Cyclone Ditwah in Sri Lanka.
 - i. This financial package includes a concessional loan of US\$350 million (approximately ₹3,135 crore) and a grant of US\$100 million (approximately ₹895 crore).
 - ii. The announcement was made by India's External Affairs Minister S. Jaishankar after meeting with President Anura Kumara Dissanayake and Prime Minister Harini Amarasuriya in Colombo, the capital of Sri Lanka.
 - iii. Last month, Cyclone Ditwah caused severe rain and flood damage in Sri Lanka. More than 600 people lost their lives. Over 6,000 houses were completely destroyed, and 1.12 lakh houses were partially damaged. India, extending a helping hand to Sri Lanka affected by Cyclone Ditwah, has been providing extensive assistance under 'Operation Sagar Bandhu'.

