MAHITHI MONTHLY SNIPPETS

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NEWS IN SHORT

- Rohan Bopanna and Matthew Ebden defeated Ivan Dodig and Austin Krajicek in the ATP Masters tennis tournament final in Miami, USA.
- EVI, the world's first conversational AI with emotional intelligence from Hume
- Karnataka has witnessed 618 deaths in human-animal conflicts from 2010-11 to 2023-24, with elephants being the major cause, prompting a budget allocation of Rs 151 crore in 2024-25 for wildlife management, including Rs 60 crore for railway barricades. Wildlife habitats are disturbed, leading to animals leaving forests, necessitating habitat improvement measures.
- The birth anniversary of Dr. Shivakumara Swamiji, known for his philanthropic activities and leadership at Sree Siddaganga Mutt, was celebrated. He provided free education, food, and shelter to thousands of children and promoted harmony among people of all backgrounds.
- A METOC seminar named 'Meghayan-24' was conducted by SNOM and INMAC at the Southern Naval Command on World Meteorological Day, focusing on climate action. During the event, an indigenous mobile app called INDRA (Indian Naval Dynamic Resource for Weather Analysis) was launched to provide weather-related information and forecasts for efficient decision-making, especially in naval operations
- Namma Metro partnered with Sakriya Charitable Trust to display menstrual hygiene messages at Majestic station, a first for the metro system, promoting women's health awareness
- Karnataka electrified over 3,400 km of its 3,836 km railway network in the 2023-24 financial year, with recent electrifications including Guledgudda-Bagalkot-Wandal and Holenarasipura-Hassan lines. The completion of these projects brings significant advancements, with plans for electrification extending to various other crucial sections of the railway network across the state
- Ms Sheyphali Sharan takes charge as Principal Director General, Press Information Bureau
- IICA partners with HP India for 'HP Future Impact Leaders IICA Certified ESG
 Professional Programme' to empower CSR professionals and promote
 sustainability. HP India offers 100% scholarships to 75 candidates for advanced ESG
 education, emphasizing inclusivity. The programme includes a six-month course on
 ESG principles with self-paced learning and interactive sessions by ESG experts. It
 targets professionals in various ESG-related fields for a comprehensive
 understanding of national and international frameworks.IICA is an autonomous
 institute under the Ministry of Corporate Affairs, focusing on capacity-building and
 governance
- The India Meteorological Department (IMD) has warned of "above-normal" heatwave conditions in April and May, affecting states like Gujarat, Maharashtra, Andhra Pradesh, north Karnataka, Odisha, and western Madhya Pradesh. These heatwaves are attributed to global warming, urbanization, sparse pre-monsoon



showers, and the El Nino effect, leading to health, water resource, and energy-related impacts.

 REC Limited, a Maharatna PSU under the Ministry of Power, was awarded the SKOCH ESG Award 2024 for Renewable Energy Financing, highlighting its contributions to India's clean energy transition and sustainable projects. The SKOCH ESG Awards recognize exceptional Environmental, Social, and Governance (ESG) practices in organizations, serving as a benchmark for sustainable

investments. REC Limited. established in 1969. provides long-term loans for infrastructure, with a loan book of ₹4.97 Lakh Cr and a strategic role government schemes like SAUBHAGAYA and DDUGJY. It enjoys high domestic and international ratings for its financial strength.

 The International Energy Agency (IEA) published its Clean Energy



Transitions Programme (CETP) annual report for 2023, highlighting achievements in advancing global clean energy transitions. CETP, launched in 2017, supports emerging markets and developing economies through analysis, technical assistance, and capacity building. IEA, founded in 1974 post-oil crisis, is an autonomous inter-governmental organization focusing on shaping a secure, sustainable global energy future through activities like analysis, policy advice, and collaboration with governments, industry, and international organizations

• Indian physicists, along with an international team, used 5,000 robotic "eyes" on a telescope in Arizona to create the largest 3D map of the universe, covering 11 billion years of cosmic evolution. This map reveals galaxy distribution and movements, showing a "cosmic web" and providing insights into dark energy, although dark matter remains a mystery. Discoveries include potential dark energy evolution and insights into the universe's state three billion years after the Big Bang. Indian physicists from TIFR played a crucial role in developing models and



- using supercomputers for mapping precision. Multiple research papers were published online to share the findings
- Recently, the Centre for Cellular and Molecular Platforms (C-CAMP) in Bengaluru
 has developed a new platform called OptiDrop. It is an innovative microfluidic chipbased platform that simplifies and reduces the cost of studying single cells. It
 employs a novel approach that enables precise and cost-effective analysis of single
 cells encapsulated in droplets
- Punnett squares are a way to predict the possible genetic outcomes of the offspring when two individuals with known genotypes are crossed
- Recently, an international team of astronomers and astrophysicists has confirmed the first known observance of a tidally locked super-Earth exoplanet. A tidallylocked planet in its orbit around a star keeps the same face towards the star. This happens when the rotation period of the planet around its own axis becomes equal to its revolution period around the star
- Kodaikanal Solar Observatory celebrates 125 years of studying the Sun. Established on 1 April 1899 by the British, the Observatory has one of the longest continuous daily records of the Sun in the world, and this unique database has been digitised and is publicly available for astronomers from across the globe
- In 2024, Karnataka faced deficient rainfall (-34%) with severe shortages in South-interior areas (-68%), impacting groundwater and escalating temperatures. The Karnataka State Natural Disaster Monitoring Centre (KSNDMC) monitors disasters and emphasizes sustainable water management amid changing weather conditions. The Karnataka State Natural Disaster Monitoring Centre (KSNDMC), established in 1988, expanded its role in 2007 to monitor all natural disasters and focuses on hazard mapping, real-time monitoring, and early warning systems using advanced technology and community engagement strategies to support agriculture and disaster management
- The RBI plans to establish DIGITA to combat cyber fraud and regulate illegal lending apps, verifying and maintaining a public register of approved apps. DIGITA's role in law enforcement will aid in curbing financial crimes in digital lending. Collaboration with the IT Ministry and Google aims to ensure transparency and accountability by vetting apps and enforcing updated policies on Google PlayStore for RBI-regulated entities or their partners.
- SEBI introduced SCORES 2.0, enhancing the securities market's complaint redress system with features like auto-routing, reduced timelines (21 days), and two-level reviews. This online platform integrates with the KYC Registration Agency for seamless investor registration and builds on SCORES 1.0, launched in 2011 for online grievance redressal. Investors can now easily lodge complaints and track their resolution status through SCORES 2.0.
- RBI has maintained its policy rates, keeping the repo rate at 6.5% with a stance of 'withdrawal of accommodation.' The decision was reached by a 5:1 majority in the MPC, considering a positive economic outlook but with lingering concerns about food inflation. RBI Governor Shaktikanta Das emphasized vigilance on inflation,

- expecting moderation in headline inflation supported by upcoming harvests and a normal monsoon. This cautious approach aims to balance inflation targets while supporting economic growth, with the GDP growth forecast retained at 7% for fiscal 2024-25.
- CERN launched the White Rabbit Collaboration, focusing on open-source technology for precise device synchronization, initially designed for accelerators. It now spans industries like finance and research, aiming to advance timing technologies and possibly impact global time dissemination via optical fiber. The collaboration offers support, training, and R&D facilitation, serving as a platform for innovation and industry collaboration.
- The Union Health Ministry launched the myCGHS iOS app to provide CGHS beneficiaries with easy access to healthcare resources and electronic records. Developed by NIC teams, it offers services like appointment booking, lab reports, and security features like 2-factor authentication. The app's launch marks a digital healthcare milestone and is available for free download on iOS and Android platforms.
- India successfully test-fired the Agni-Prime ballistic missile at Abdul Kalam Island in Odisha, meeting all objectives and confirming its reliability and accuracy. Agni-Prime is a two-stage canisterized missile with a range of 1,000 to 2,000 km, featuring new guidance and propulsion systems for enhanced performance. Its transportable and storage-friendly design, along with cold launch mechanisms, adds flexibility and strategic significance, showcasing India's commitment to bolstering defence capabilities in the region
- WHO introduced S.A.R.A.H., a cutting-edge digital health promoter utilizing generative AI for personalized health information delivery, including mental health and disease risks, in 8 languages, prioritizing ethical considerations and ongoing improvements
- The Indian government introduced an Experimental Licence module for 100 5G Labs, accessible through the National Single Window System (NSWS), simplifying the application process, pre-filling technical details, and enabling instant download of licenses via "Self-declaration Mode," aimed at promoting innovation and facilitating testing of 5G use cases in educational and startup environments.
- NATO celebrated its 75th anniversary, highlighting its role as a political-military alliance since 1949, focusing on collective defense, partnerships with nonmembers like India, and its evolving challenges including military spending disparities, Russian aggression, membership issues, intra-alliance coordination, conflict area funding, and political dynamics within member countries
- A 25-year-old woman with placenta previa and severe bleeding was saved by doctors at Vani Vilas hospital using a temporary aortic cross-clamping method, a first in Karnataka's government facilities. This innovative approach, typically used in cardiac surgeries, prevented complications and showcased advancements in maternal healthcare. Placenta previa, often linked to previous C-section scars,



- requires specialized interventions to avoid severe hemorrhage and maternal morbidity
- Dr. Sankara Rao, a Visiting Professor at IISc, launched India Flora Online and other plant databases, post-retirement from biochemistry. His efforts focus on conserving biodiversity and sharing plant knowledge
- Integrating NTEP with Karnataka's Ayushman Bharat Arogya Karnataka scheme positively impacted TB patient management. Conducted by The Lancet Regional Health—Southeast Asia journal and officials from Karnataka's health department, ESIC Medical College, Suvarna Arogya Suraksha Trust, and Basaveshwara Medical College. India has the highest global TB burden and aims to end TB by 2025 per WHO's 2030 goal. 80.4% of expected TB patients were notified, per India TB Report 2023. Hospitalization costs are significant; government intervention is crucial for affordability, especially for BPL families. AB-PMJAY-ArK scheme provides financial coverage for TB patients, easing their out-of-pocket expenses
- Union Ministry introduced rules for Green Credit Programme (GCP), aiming for afforestation. Ten states, including Chhattisgarh and Madhya Pradesh, earmarked 3,853 hectares for GCP, with these states contributing 40%. Registered entities fund afforestation in degraded areas, earning 'green credits' for companies. Industries must provide non-forest land and fund afforestation, but challenges exist in finding suitable areas. GCP aims for private investment in afforestation but faces concerns regarding land use and implementation challenges
- On April 8, a total solar eclipse crossed North America, passing over Mexico, the United States, and Canada
- The Karnataka High Court became the first high court to hear arguments of a speech and hearing impaired advocate through sign language. The bench presided over by Justice M Nagaprasanna recorded submissions made by advocate Sarah Sunny, who had argued before the Apex Court in October 2023, through a certified sign language interpreter
- Mamta G. Sagar, a Bengaluru-based Kannada poet, writer, academic and activist, has recently won the World Literary Prize from the World Organization of Writers (WOW) for her contributions to the world of literature
- A rare butterfly species named Neptis philyra has been recently discovered for the first time in India in Tale Valley Wildlife Sanctuary
- Bengaluru's new property tax system categorizes properties into six heads, eliminates the zonal classification system, and introduces online tax calculation based on current guidance values. The system's objective is to simplify taxation, with a maximum yearly tax increase of 10%, contrasting with the old system's reliance on zonal classifications and the Self Assessment Scheme (SAS). This shift aims to ensure fairness, accuracy, and efficiency in tax collection, addressing leaks and securing a sustainable revenue stream for city governance.
- Maharashtra, Karnataka, and Gujarat are forecasted to achieve a \$1 trillion economy by FY39, with Tamil Nadu following by FY41. Karnataka needs 8.4% annual GSDP growth, Maharashtra targets \$1 trillion by FY28 with 5.5% growth,



Gujarat aims for \$1 trillion by FY31 with 8.3% growth, and Tamil Nadu targets \$1 trillion by FY31 with 7.2% growth. Uttar Pradesh targets FY28 with a growth requirement of 29.0%, while Madhya Pradesh, Telangana, and Andhra Pradesh aim for trillion-dollar economies by FY47. The top five economies in FY23 are Maharashtra, Tamil Nadu, Karnataka, Gujarat, and Uttar Pradesh, with Karnataka surpassing UP to become the third-largest economy. States are classified based on per capita income, with Goa and Sikkim in the upper middle-income category and UP and Bihar in the low-income group, reflecting diverse economic dynamics across India.

- India invoking the peace clause (Signed at Bali 2013) at the WTO for breaching the
 rice subsidy limit reflects ongoing challenges in trade regulations. The peace clause,
 providing temporary immunity, shields India from immediate repercussions as it
 seeks amendments to the subsidy calculation formula. The issue underscores the
 importance of finding a permanent solution to ensure compliance with WTO norms
 and address concerns regarding India's minimum support price program, crucial
 for domestic food security
- A Karnataka hospital demonstrated successful drone transport of soft tissues to a
 medical college for cancer testing, saving time for surgeons. The drone flew from
 Dr TMA PAI Rotary Hospital to Kasturba Medical College, covering 37 km in 15
 minutes. Samples were swiftly tested at KMC, allowing prompt surgical decisions.
 This achievement highlights drones' potential in healthcare, aiding remote
 medicine delivery and streamlining procedures, particularly in rural areas
- Israel for the first time deployed its ship-mounted defence system, called the C-Dome. It is a naval version of Israel's Iron Dome air defence system, used to shield against rocket and missile attacks. The C-Dome, which was first unveiled in 2014, declared operational in 2022, works similarly to the Iron Dome, using some of the same technology, except that it's mounted on ships
- US White House officially directed the National Aeronautics and Space Administration (NASA) to create a time standard for the Moon, which different international bodies and private companies can use to coordinate their activities on the lunar surface
- Command Hospital in Pune achieves a significant milestone by being the first government hospital nationwide to procure and successfully conduct piezoelectric bone conduction hearing implants
- BBMP's referral hospitals in Bengaluru now offer newborn screening for Inborn Errors of Metabolism (IEM) for the first time. Inborn Errors of Metabolism (IEM) can lead to developmental delays, mental retardation, and poor growth in children. Early screening is crucial for detecting IEM caused by mutations, enzyme deficiencies, or over-secretion. The screening process involves urine and blood samples sent to a private laboratory, followed by referrals for specialized treatment if needed. The pilot project aims to benefit 15,000 newborns annually and will expand to all BBMP-run hospitals soon.



- The Government of India introduced CDP-SURAKSHA, a digital platform, to provide subsidies to horticulture farmers instantly. It utilizes e-RUPI vouchers for subsidy disbursal and ensures transparency in the process.
- India has eliminated visceral leishmaniasis (kala-azar) as per NCVBDC data, initially targeted for 2010 but achieved by 2023 due to challenges. Kala-azar, transmitted by sandflies, saw only 520 cases in 2023, meeting WHO's elimination criteria. Government efforts such as indoor spraying and treatment completion aided in this success, though challenges persist in states like Bihar and Jharkhand. The WHO will assess India's post-elimination situation, emphasizing sustained surveillance and community engagement for disease prevention.
- India's educational landscape shines in the QS World University Rankings by Subject 2024. IIM Ahmedabad ranks in the global top 25 for business and management studies, with IIM Bangalore and Calcutta in the top 50. JNU is 20th globally for development studies, while Saveetha Institute in Chennai is 24th for dentistry. India ranks second in Asia for universities featured (69) and fifth for top 200 entries, reflecting growth in educational quality despite challenges
- Peter Higgs' passing marks the end of an era in physics. His contributions, including
 the prediction of the Higgs boson, reshaped our understanding of fundamental
 particles and forces. The discovery of the Higgs boson at the Large Hadron Collider
 was a monumental achievement, completing the Standard Model of Particle
 Physics. Higgs' modest lifestyle and aversion to fame contrasted with his profound
 impact on science, earning him the Nobel Prize alongside other physicists. The term
 'God particle' for the Higgs boson, although controversial, reflects its significance
 in explaining mass in the universe
- Bengaluru Metropolitan Transport Corporation (BMTC) is preparing to introduce air-conditioned electric buses to its fleet. OHM Global Mobility, a subsidiary of Ashok Leyland, will supply 320 such buses to the BMTC. In addition, BMTC plans to replace old Volvo buses operating on Vajra and Vayu Vajra airport routes with airconditioned electric buses. Officials said that BMTC recently awarded OHM Global Mobility the contract to operate air-conditioned electric buses on a Gross Cost Contract (lease model)
- India Emerges as Fourth Largest Exporter of Digitally Delivered Services: WTO Report
- India's Chandrayaan-3 mission team given 2024 John L. 'Jack' Swigert Jr. Award
- Justice Aniruddha Bose has been appointed as the Head of the National Judicial Academy. The National Judicial Academy (NJA), established in 1993 in Bhopal under the Supreme Court's guidance, trains judges across all courts for effective justice administration, conducts programs on legal topics, supports research, and contributes significantly to the professional development of judges, thereby strengthening India's judicial framework
- The Asian Development Bank (ADB) has raised India's economic growth projection for FY25 to 7% from 6.7%, citing drivers like infrastructure spending, private investment, service sector growth, and consumer confidence. ADB predicts FY26

- GDP growth at 7.2%, expecting momentum from exports and increased productivity. India remains the fastest growing major economy, supported by domestic demand and policy measures. Inflation is projected at 4.6% for FY25, easing to 4.5% in FY26, potentially leading to a less restrictive monetary policy. Key risks to India's economic outlook include global shocks like supply disruptions in oil markets and adverse weather affecting agriculture output.
- The AUKUS alliance, comprising the UK, US, and Australia, plans to expand its membership, focusing on bolstering security and defense capabilities without nuclear weapons transfer. AUKUS' pillars include assisting Australia in acquiring nuclear-powered submarines (SSNs) and emphasizing cooperation in advanced military capabilities like AI, quantum technologies, and cyber capabilities. The submarine component of AUKUS aims to equip Australia with eight nuclear-powered attack submarines (SSNs), enhancing its undersea capabilities in the Indo-Pacific region. Despite the nuclear-powered nature of the submarines, AUKUS countries clarify that the objective does not involve arming them with nuclear weapons, in line with Australia's NPT commitments. This initiative positions Australia as the seventh nation globally with nuclear-powered submarines, reflecting AUKUS' strategic focus on security cooperation and technological advancement
- The World Health Organisation (WHO) released the Global Hepatitis Report 2024, highlighting India's substantial burden of viral hepatitis, including Hepatitis B and C infections with low diagnosis and treatment rates. Hepatitis, defined as liver inflammation, is transmitted through various means, including viruses and non-infectious sources. Hepatitis B primarily spreads from mother to child, while Hepatitis C is mainly through blood contact. Prevention includes vaccination for Hepatitis B, and treatment is available for Hepatitis C, but access remains limited despite government programs
- Recently, the pharma standards body Indian Pharmacopoeia Commission (IPC) has issued a drug safety alert over nimesulide, saying the pill can trigger rashes on the skin
- The Supreme Court recently outlined eight principles for harmonious construction under the Limitation Act, 1963. This doctrine aims to resolve conflicts within statutes and provisions, ensuring their cohesive interpretation and implementation. Rooted in legal principles, it emphasizes the holistic understanding of statutory intent and purpose, preventing contradictions and maintaining statutory effectiveness.
- India Flora Online (IFO) has been recently launched by the Centre for Ecological Sciences (CES) at the Indian Institute of Science. This database compiles data on 15,349 species of India's flora, aiming to make this diverse floristic data digitally accessible across various ecological patterns. Led by Prof K Sankara Rao, the project integrates extensive fieldwork data and information from the CES herbarium. IFO offers scientifically robust data on individual species, including distribution patterns and conservation status, with an advanced search option for users

- Researchers at the Indian Institute of Science (IISc) have developed a novel hydrogel to combat the threat of microplastics in water. Microplastics, which pose a significant health risk, have been challenging to remove using existing methods due to clogging issues. The newly designed hydrogel features a 3D architecture comprising chitosan, polyvinyl alcohol, and polyaniline layers, along with catalytic nanoclusters of a copper substitute polyoxometalate (Cu-POM) material. This combination allows for efficient adsorption and degradation of microplastics, with removal rates exceeding 90%. The study, including tracking methods using fluorescent dye, has been published in the journal Nanoscale.
- The University of Oxford and UNSW Canberra jointly released the World Cybercrime Index, shedding light on the global landscape of cyber threats. India secured the 10th position in cybercrime rankings, with advance fee payment frauds emerging as the most prevalent type. This index, encompassing about 100 nations, evaluated cybercrime across categories such as ransomware, credit card theft, and scams
- Researchers discovered a new species of garden balsam in Kerala and named it as Impatiens neo-uncinata
- China National Space Administration (CNSA) recently said its launch of the Quegiao-2 satellite was a "complete success"
- Adani Green Energy Ltd (AGEL) has established the world's largest renewable energy park in Gujarat's Khavda region with a 45 GW capacity, mainly from solar energy, benefiting from ideal location and significant investment, projecting to generate 81 billion units of electricity.
- The Global Forest Watch monitoring project revealed India's loss of 2.33 million hectares of tree cover since 2000, representing a 6% decrease, with data sourced from satellite monitoring
- Rare volcanic vortex rings, akin to perfect smoke rings, have been observed at Mount Etna, fascinating scientists due to their formation and longevity.
- India has successfully conducted the final developmental trials of third generation Man Portable Anti-Tank Guided Missile (MPATGM) paving the way for its early induction in the armed forces.
- The IMD predicts above-normal rainfall for the June-September monsoon season, offering relief, especially to agriculture. The expected 106% of long-period average rainfall is vital for farmers and policymakers, given that 52% of India's cultivated area depends on the monsoon. La nina conditions to set by June
- The Indian Super League is the men's highest level of the Indian football league system. Mohun Bagan SG weathered a late resurgence from Mumbai City FC to win 2-1 in the final league fixture of ISL-10 and claim its maiden League Winner's Shield in Kolkata
- The Supreme Court, in a dispute of easementary rights over a road, reiterated that the power of attorney holder can only depose about the facts within his personal knowledge. The concept of easement has been defined under The Indian Easements Act, 1882. According to it, an easementary right is a right possessed by



- the owner or occupier of the land on some other land, not his own, the purpose of which is to provide the beneficial enjoyment of the land.
- As input prices turn inflationary, the spectre of shrinkflation looms large within the Fast-Moving Consumer Goods (FMCG) segment. Shrinkflation occurs when goods shrink in size but consumers pay the same price. It occurs when manufacturers downsize products to offset higher production costs but keep retail prices same
- The Indian Army contingent departed today for the 5th edition of India- Uzbekistan
 joint military Exercise DUSTLIK. The Exercise is scheduled to be conducted from
 15th to 28th April 2024 at Termez, the Republic of Uzbekistan. Exercise DUSTLIK is
 a yearly event conducted alternatively in India and Uzbekistan. Last edition was
 conducted at Pithoragarh (India) in February 2023
- Mumbai is witnessing the installation of 210 artificial reefs near Worli Koliwada, funded by the RPG Foundation for Rs 62 lakh. The reefs, made of recycled cement and steel, aim to increase sea surface area and attract diverse marine life. Installation near Worli Koliwada's Cleveland Bunder will start transformation after three months, with benefits including improved fishing opportunities and carbon sink capabilities. The project aligns with environmental conservation and economic development goals, promising increased biodiversity and better air quality in Mumbai. The collaboration between RPG Foundation and Kuddle Life Foundation showcases a win-win solution for marine conservation and coastal community livelihoods.
- Entrepreneur and pilot Gopi Thotakura is set to become the first Indian to venture into space as a tourist on the NS-25 mission of Blue Origin — a company founded by Jeff Bezos, who is also the founder of Amazon. Space tourism refers to a segment within aviation that offers individuals the chance to experience space travel for recreational, leisure, or business purposes
- The Bangalore Water Supply and Sewerage Board (BWSSB) plans to introduce cutting-edge Japanese technology in the form of a Mobile Effluent Treatment Plant (ETP) to tackle the issue of chemical wastewater in the Peenya Industrial Area. This move aims to combat environmental concerns stemming from untreated wastewater, particularly from small and micro-industries lacking proper treatment facilities, by treating the wastewater on-site and promoting sustainable practices.
- Recent discoveries in the Laccadive Sea have revealed three fish species—Jansen's
 wrasse, checkerboard wrasse, and moon wrasse—using tools, specifically coral
 structures, to crack open sea urchin shells for food. This accidental finding during
 a sea urchin study highlights the unique behaviors of these fish and their
 adaptation to overcome challenges without specialized tool-manipulating features
 like primates or birds, contributing to broader discussions on animal intelligence
 and adaptation
- Nigeria has made history by being the first country to introduce the Men5CV vaccine, recommended by the WHO to safeguard against five strains of meningococcus bacteria. Developed in a 13-year collaboration between PATH, the Serum Institute of India, and funded by the UK government, the vaccine builds on



the success of MenAfriVac® and targets major meningococcal strains with a single shot, receiving WHO prequalification in 2023 and global adoption approval later that year

 ISRO's Vikram Sarabhai Space Centre (VSSC) in Thiruvananthapuram has achieved a notable milestone in rocket engine technology by developing a lightweight Carbon-Carbon (C-C) nozzle divergent. Utilizing advanced Carbon-Carbon composites, the innovative nozzle offers exceptional properties like high specific strength and mechanical resilience at elevated temperatures, achieved through

processes like carbonization and chemical vapour infiltration. This technology is expected to enhance rocket engines' vital parameters, increasing payload capacity for launch vehicles, notably benefiting ISRO's Polar Satellite Launch Vehicle (PSLV) used for various space missions.

 A 65-year-old patient from France underwent a high cervical spinal cord stimulation in Bengaluru for Parkinson's plus



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syndrome, a neurodegenerative disorder with limited surgical options. Doctors at Fortis Hospital claimed it as the first such surgery in India. Led by Dr. Raghuram G. and Dr. Guruprasad Hosurkar, the patient was discharged within 10 days with improved mobility and reduced symptoms after enduring four years of distress and being wheelchair-bound. The innovative approach involved precise placement of electrodes along the spinal cord to modulate neural activity and alleviate symptoms associated with the condition, offering hope in managing challenging symptoms.

- The water storage in Veeranam Lake plummeted to zero million cubic feet (mcft) in April 2024, a stark contrast to the 687.40 mcft recorded on the same date last year. This lake, spanning 14 km and located in Cuddalore district, Tamil Nadu, is vital for Chennai's drinking water supply, despite its total capacity of 1,465 mcft
- The government has amended the FDI policy in the space sector to attract offshore investors in satellite manufacturing and launch vehicles. The amendments cover FDI regulations for satellites, launch vehicles, spaceports, and space-related component manufacturing. Liberalised entry routes aim to encourage potential

- HEBALI VUMMAMAAR SEERING GARRIERS TO CREAT
- investors in Indian space companies, approved by the Union Cabinet earlier. FDI limits allow up to 74% without government approval for certain activities like satellite manufacturing & operation, satellite data products, ground segment & user segment under the automatic route, with higher limits requiring government route approval. 100% FDI is permitted for manufacturing components and systems for satellites without government permission.
- The Centre has modified the Green Credit Programme (GCP) to prioritize ecosystem restoration over mere tree planting for financial gains. Forest departments of 13 States have offered degraded forest land for restoration, totaling 10,983 hectares, under the GCP. Each tree planted and evaluated by ICFRE could earn one 'green credit' after two years, which can be utilized for compliance or reporting purposes. The Environment Ministry's updated guidelines remove the minimum tree requirement and allow States to specify criteria for ecosystem restoration. The changes aim to ensure that the GCP significantly contributes to ecological rejuvenation and sustainable environmental practices.
- Inauguration of Submersible Platform for Acoustic Characterisation and Evaluation (SPACE) at Underwater Acoustic Research Facility, Kerala, by DRDO's Naval Physical & Oceanographic Laboratory; serves as a testing hub for Indian Navy's sonar systems across ships, submarines, and helicopters.
- The Indian Institute of Astrophysics (IIA) collaborated on the Surya Tilak Project in Ayodhya, involving astronomical calculations, opto-mechanical design for directing sunlight to Sri Ram Lalla's forehead during Sri Ram Navami, and adapting the system for the current temple structure
- The World Crafts Council International (WCCI), a Kuwait-based organisation working on recognition and preservation of traditional crafts, has picked Srinagar for mapping its craft clusters before its final nomination as the World Craft City (WCC) from India this year. A three-member team of the WCCI is in the city to inspect craft clusters, processes involved, and the status of artisans
- Former England men's Test cricketer and international referee Raman Subba Row has passed away
- Kempegowda International Airport (KIA) received top honors as the Best Regional Airport in India and South Asia at the 2024 Skytrax World Airport Awards. Terminal 2 also secured the second spot as the World's Best New Airport Terminal. These accolades are a testament to KIA's commitment to providing exceptional customer experiences, with Terminal 2 receiving additional recognition for its beautiful design and sustainable features
- The Indian Institute of Science (IISc) has launched the 'Longevity India' Initiative to address ageing-related challenges. The initiative includes a large-scale clinical study involving researchers, clinicians, industry representatives, and philanthropists. Prashanth Prakash, Founding Partner at Accel India, has provided initial grant funding for the initiative. Partnerships with MS Ramaiah Hospital and Bangalore Medical College & Research Institute have been established for a clinical study on ageing biomarkers. Leading industry partners like Beckman Coulter,



Healthians, Valerian Proteomics, and DecodeAge are supporting the initiative with advanced technologies.

- Female great Indian hornbills are abandoning nesting sites in the Western Ghats, posing concerns for their reproduction and forest ecology due to potential longterm impacts. Researchers cite various factors like climate change, fruit scarcity, and environmental changes as possible causes, emphasizing the need for collaboration and monitoring for conservation
- The WHO has updated its terminology to describe airborne viruses as "pathogens that transmit through the air," aiming to clarify transmission methods and improve infection control measures. This change comes after initial misunderstandings during Covid-19, emphasizing the importance of precise terminology in public health policies and interventions
- A man in Hong Kong is in intensive care after being wounded by a wild monkey, infected with B virus. This virus is typically asymptomatic in macaques but can cause severe neurological complications in humans, transmitted through bites, scratches, or contact with infected bodily fluids. Treatment is focused on managing symptoms as there are no vaccines available
- Walmart Global Tech partnered with IISc to establish the Walmart Centre for Tech Excellence, focusing on Computer Science research, including AI/ML, Computer Systems, and Theoretical CS. It aims to support top Indian researchers and mentor students from tier 2 and 3 institutes, with plans for international collaborations. This follows a similar initiative launched at IIT Madras in February 2024
- Researchers at IIT Roorkee discovered fossils of Vasuki Indicus, one of the largest snakes from 47 million years ago. Found in Kutch, Gujarat, it belonged to the extinct Madtsoiidae family, showcasing a unique Indian lineage. This discovery, detailed in Nature Scientific Reports, sheds light on prehistoric climate influences on snake evolution, particularly their large size likely influenced by high temperatures
- Dr. Reddy's Laboratories Ltd. (DRL) introduced a condition-management programme for irritable bowel syndrome (IBS). DailyBloom IBS is based on research and enabled by a mobile application developed in-house. It focuses on comprehensive care plan, including diet, psychological and physical wellness support for patients, the firm said. IBS is a functional gastrointestinal disorder characterised by abdominal pain, bloating and altered bowel habits
- DURGA-2 (Directionally Unrestricted Ray Gun Array) is an advanced weapons system utilizing focused energy like lasers, microwaves, or particle beams to damage or destroy targets. Its advantages include speed-of-light lethality, immunity to gravity and atmospheric drag, precision, and customizable effects based on energy type and intensity. Its significance lies in transforming warfare and enabling the development of cutting-edge aerospace technologies crucial for future conflicts. Countries with similar systems include Russia, France, Germany, the United Kingdom, Israel, and China

- DRDO recently conducted a successful flight test of the Indigenous
 Technology Cruise Missile (ITCM) off the Odisha coast. The missile,
 developed by Aeronautical Development Establishment (ADE) in Bengaluru,
 showcased excellent performance in navigation, low-altitude sea-skimming flight,
 and propulsion by Gas Turbine Research Establishment (GTRE). The test was
 monitored using advanced sensors and witnessed by senior DRDO scientists and
 production partners
- Vice Admiral Dinesh Kumar Tripathi appointed as the next Chief of the Naval Staff
- Llama or Large Language Model Meta AI is a family of LLMs introduced by Meta AI
- DRDO's Aeronautical Development Agency (ADA) has delivered the first batch of indigenous Leading Edge Actuators and Airbrake Control Module to HAL, advancing India's self-reliance in aeronautical technologies for the LCA Tejas Mk1A. This achievement, achieved through collaborations with RCI, CMTI, and industry partners like Godrej Aerospace, reflects ADA's dedication to indigenous technological prowess
- The Ministry of Women and Child Development introduced 'Aadharshila,' a 48week curriculum for children aged three to six years in anganwadis, aligning with the National Education Policy 2020 and focusing on fundamental skills development through play-based learning.
- A new species, the clouded tiger cat, was discovered in Brazil's rainforests, posing significant implications for biodiversity conservation due to its unique features and threats to survival
- The US NOAA declared the start of the fourth global mass coral bleaching event due to high ocean temperatures, threatening coral reefs worldwide. Corals are vital for biodiversity, coastal protection, and economic value, but they face risks from bleaching caused by environmental stressors like heat. Urgent climate action is needed to protect coral reefs and prevent further ecosystem degradation.
- India's BrahMos supersonic cruise missiles were delivered to the Philippines, showcasing the missile's strategic importance and versatility across land, sea, and air deployments. Originating from India's missile development program in the 1980s and collaboration with Russia, BrahMos features dual-stage propulsion, stealth capabilities, and "fire and forget" capability. Future upgrades aim for increased range, hypersonic speeds, and reduced signatures, highlighting ongoing technological advancements
- Karnataka Milk Federation to sponsor Scotland and Ireland cricket teams during T20 World Cup
- World Health Organization (WHO) has prequalified a new oral vaccine for Cholera called Euvichol-S.
- Indian Navy conducted Exercise Poorvi Lehar on East Coast under the Operational Control of The Flag Officer Commanding-in-Chief, Eastern Naval Command. The exercise aimed at validation of procedures towards assessment of Indian Navy's preparedness to meet Maritime Security challenges in the region.



- Senior IPS officer Nalin Prabhat has been appointed as the Director-General of National Security Guard (NSG), the country's counter-terrorism force
- Salas y Gómez: It is an underwater mountain chain in the Southeastern Pacific Ocean. It lies in a west-east orientation. Its western end intersects the East Pacific Rise inside the Chilean Exclusive Economic Zone (EEZ) of the Easter Islands and its eastern end adjoins the western end of Nazca ridge. Ecosystems in this region are isolated by the Atacama Trench, the Humboldt Current System, and an extreme oxygen minimum zone
- Bengaluru Traffic Police collaborates with Mappls MapmyIndia to launch a navigation app focusing on traffic management, real-time updates, and user engagement for efficient commuting.
- The Union government mandates the generation of a Unique ID (NOTTO-ID) for organ donation cases, ensuring transparency, regulatory compliance, and eliminating commercial dealings, especially with foreign citizens. The process involves hospitals generating the ID through the NOTTO website, with strict monitoring and investigation protocols in place
- Honeywell Hometown Solutions India Foundation (HHSIF) partners with FSID and IISc to support 37 Indian start-ups with financial aid and research. They focus on sectors like agri-tech, clean-tech, health-tech, and green-tech, promoting deep science research to address critical challenges and foster innovation.
- The IMF's global financial stability report highlights risks like inflation, geopolitical tensions, and unregulated credit markets, affecting financial stability. It assesses market conditions and systemic issues, emphasizing emerging market financing and addressing economic imbalances. The IMF, formed in 1944, fosters global monetary cooperation, financial stability, and economic growth, with headquarters in Washington, D.C.
- The IISc research has introduced a novel approach to developing vaccine candidates for various cancers by designing a synthetic compound (antigen) that can enhance antibody production against cancer cells. Carbohydrate-based antigens play a crucial role in cancer vaccine development because both normal and cancerous cells have large amounts of carbohydrates on their surfaces. Abnormal cells, such as cancer cells, carry heavily truncated carbohydrates.
- Naima Khatoon has been appointed as the Vice Chancellor of the Aligarh Muslim University (AMU), making her the first woman to hold the top post in over 100 years
- Gukesh, aged 17, made history by becoming the youngest winner of the FIDE Candidates Chess Championship. This victory earned him the right to challenge World Champion Ding Liren. He's only the second Indian after Viswanathan Anand to achieve this feat and will receive Euros 111,000 in prize money. His final round draw against Nakamura, coupled with a non-decisive result in another match, secured his win in a finale in Toronto

- INSV Tarini, an Indian Naval Sailing Vessel, completed a groundbreaking transoceanic expedition led by Lieutenant Commanders Dilna K. and Roopa A., marking the first Indian women to achieve this feat. Flagged off from Goa on February 28 by Commander Abhilash Tomy (Retd), the expedition lasted nearly two months, navigating the Indian Ocean for 22 days before reaching Port Louis, Mauritius, on March 21. Their journey underscores the Indian Navy's commitment to gender equality and empowering women in maritime roles, despite facing challenges like heavy winds and rough seas during their return
- Israel recently used the Rampage, an efficient air-to-surface missile, in an attack on an Iranian military base
- C-CAMP has partnered with the Blockchain for Impact (BFI) Biome Virtual Network Program to accelerate healthcare innovations. The BFI program focuses on advancing biomedical science, fostering collaborations, and supporting startups in critical healthcare areas like diagnostics, antimicrobial resistance, and digital health. With a budget of over \$200,000, the program aims to leverage C-CAMP's expertise to drive impactful solutions. C-CAMP, supported by the Department of Biotechnology, has been pivotal in promoting entrepreneurship and fostering innovation in life sciences since 2009
- Department of Administrative Reforms and Public Grievances (DARPG) signs Memorandum of Understanding with Ministry of Civil Service, Cambodia on cooperation in the field of Human Resource Development in Civil Service
- The Bangalore Water Supply and Sewerage Board (BWSSB) has collaborated with IISc, CGWA, and KGWA to implement an Al-based groundwater monitoring system, addressing challenges like data deficiency and borewell failures with targeted monitoring and a dedicated task force.
- CSIR implements its in-house 'Accounts Manager Software' across Headquarters and National Labs, featuring an intuitive interface, comprehensive reporting, data security, real-time monitoring, streamlining financial transactions, ensuring transparency, and setting an example for timely reporting.
- ISRO's satellite imagery spanning 40 years reveals significant expansion of glacial lakes in the Indian Himalayan river basins, posing flood threats downstream due to Glacial Lake Outburst Floods (GLOFs). This expansion, especially in morainedammed lakes, reflects glacier retreat, elevating flood risks and highlighting the importance of satellite remote sensing for monitoring and mitigating such environmental hazards
- Mount Erebus, the southernmost active volcano in Antarctica, known for its
 distinctive features like a persistent lava lake and Strombolian eruptions, is
 currently garnering attention for its daily eruptions of gold dust, as noted by NASA's
 Earth Observatory. This unique occurrence has an estimated daily extraction value
 of \$6000, adding to the volcano's geological and scientific significance.
- Sweden joins NASA's Artemis Accords, a set of non-binding principles for civil space exploration and use aimed at ensuring safety, transparency, cooperation, and responsible utilization of space resources. This addition expands the Accords' reach



to 38 signatory nations, promoting peaceful and sustainable practices in outer space activities.

- The report by 'Spaceport Sarabhai' highlights the heightened risks in India's commercial space launch industry, emphasizing the need for insurance and reinsurance capabilities to manage financial risks effectively. It discusses the challenges posed by space debris and crowded low Earth orbit, advocates for clear legislative frameworks, and recommends a regulatory approach to address liability issues and ensure industry sustainability.
- MakeMyTrip's report highlights a surge in domestic pilgrimage tourism, with a 97% increase in searches for religious sites over two years. The inauguration of the Ram Mandir saw significant spikes in searches for Ayodhya, Ujjain, and Badrinath. The report also delves into evolving travel behaviors, including increased holiday frequency, family-centric trips, solo travel, preferred payment methods, popular destinations, and booking patterns in both domestic and international travel
- Researchers of Institute of Molecular Virology at Ulm University Medical Centre
 discovered a defense mechanism against Zika and dengue through extracellular
 vesicles competing with viruses. The discovery addresses viral transmission puzzles
 and challenges posed by the phosphatidyl serine (PS) receptor. It has potential
 therapeutic applications and implications for viruses like dengue. Speculation also
 surrounds its evolutionary impact on mosquito-borne viruses, promising insights
 into combating infections and understanding host-virus dynamics.

• DRDO's Defence Materials and Stores Research and Development Establishment in Kanpur developed India's lightest Bullet Proof Jacket to withstand 7.62 x 54 R API ammunition. The jacket passed tests at TBRL in Chandigarh per BIS 17051-2018. Its

design uses novel materials and processes, with the front Hard Armour Panel (HAP) capable of withstanding multiple hits from sniper rounds. The HAP is made monolithic ceramic plate with polymer backing for enhanced wearability and comfort. The areal density of the ICW HAP is less than 40 kg/m2, while standalone HAP is under 43 kg/m2.

 The Bengaluru Karaga Festival, with historical roots dating back 300



years to the Mahabharata, celebrates Draupadi's symbolic return as Adishakti.



Devotees gather for rituals and a procession starting from Shri Dharma Raya Swamy temple, symbolizing unity among communities.

- Karsiri, the online portal by Karnataka State Mango Development and Marketing Corporation Limited, has relaunched after a technology update. It allows customers to order mangoes directly from farmers, promoting quality production, direct marketing, and consumer benefits.
- NABARD unveiled its Climate Strategy 2030 on Earth Day, focusing on mobilizing substantial green financing for India's sustainable development. The strategy addresses challenges in current green finance inflows, emphasizing the need for increased funding towards climate-resilient projects. Additionally, DLF, a prominent real estate developer, has prioritized sustainable practices, including zero-discharge water systems and sewage treatment plants, showcasing its commitment to environmental excellence.
- SIPRI's 2023 report on military expenditure highlighted India as the fourth-largest spender globally, with a focus on regional and global trends. Global military spending reached \$2443 billion, attributing the rise to conflicts like the Ukraine war. India's increased spending reflects a focus on operational readiness, with a significant portion directed towards domestic procurement, aligning with selfreliance goals in arms development.
- The 2023 Laureus World Sports Awards in Paris recognized Novak Djokovic as World Sportsman of the Year and Aitana Bonmati as Sportswoman of the Year, marking significant achievements in tennis and football. Spain's Women's World Cup victory and Jude Bellingham's breakthrough were also celebrated, highlighting excellence in sports. The awards, established by the Laureus Sport for Good Foundation, aim to honor outstanding athletes and teams while promoting the power of sports worldwide
- Hindustan Aeronautics Ltd. (HAL) has been conferred with the 'Outstanding Public Sector Undertaking (PSU) of the Year' award at the All-India Management Association Managing India Awards ceremony
- Researchers at the ICAR-Central Marine Fisheries Research Institute (CMFRI) have successfully achieved captive breeding of golden trevally (Gnathanodon speciosus), a high-value marine fish also known as golden kingfish. This reefassociated species, often found in the company of larger fishes like skates, sharks, and groupers, has become an ideal candidate for mariculture due to its rapid growth rates, excellent meat quality, and substantial market demand for both consumption and ornamental purposes. Observations from fish landing data in India indicate that golden trevally are predominantly landed at reef area fishing grounds in Tamil Nadu, Puducherry, Kerala, Karnataka, and Gujarat
- Article 244(A) of the Indian Constitution, introduced via the Constitution (Twenty-second Amendment) Act, 1969, empowers Parliament to establish an autonomous state within Assam. This autonomous entity, covering specific tribal areas such as Karbi Anglong, would have its own Legislature and Council of Ministers, surpassing the decentralization measures outlined in the Sixth Schedule. While autonomous

- councils under the Sixth Schedule provide some governance, they have limited legislative, law enforcement, and financial powers. Article 244(A) seeks to bolster the autonomy and self-governance of these tribal regions within the constitutional framework.
- Bengaluru marked its first Zero Shadow Day (ZSD) of the year on April 24, celebrating a phenomenon where the sun's position causes vertical object shadows to vanish. ZSD occurs when the sun is directly overhead, a result of Earth's 23.5-degree tilt, influencing seasonal changes and the sun's path. ZSD in Bengaluru, Mangaluru, and Chennai happened at local noon (12.17 pm) due to their shared latitude, showcasing this unique astronomical event. The Indian Institute of Astrophysics (IIA) explained ZSD's scientific basis, collaborating with the Aryabhat Foundation to study shadow lengths during the event
- India successfully tested the air-launched medium-range ballistic missile ROCKS (also known as Crystal Maze 2), originating from Israel and launched from a Su-30 MKI fighter jet in the Andaman and Nicobar Islands. ROCKS boasts a strike range of over 250 km, categorizing it as a medium-range ballistic missile designed to target long-range radar and air defense systems, thus bolstering India's defensive capabilities. The missile offers versatile warhead options, including penetration or blast fragmentation warheads, enabling it to effectively neutralize various types of targets, including heavily protected underground installations. ROCKS' capability to target surface-to-air defense systems provides a strategic advantage by neutralizing enemy defenses before engaging in aerial or ground operations, enhancing India's overall military preparedness.
- The World Meteorological Organisation's 2023 report on Asia's climate highlighted floods, storms, and glacial loss affecting millions, with temperatures rising faster than before, varied precipitation patterns, and record-high sea surface temperatures in certain areas.
- Researchers recently found microbes thriving 13 feet beneath the scorched surface of Chile's Atacama Desert, marking the deepest discovery of microbial life in the region to date
- REC Limited, a leading NBFC under the Ministry of Power, availed a Green Loan of Japanese Yen (JPY) 60.536 billion. The loan is the first Yen-denominated loan and the first Green Loan Transaction in India facilitated by Italian Export Credit Agency, SACE. The Green Loan aims to finance eligible green projects in India, promoting renewable energy and reducing carbon emissions.
- Microsoft unveiled the latest version of its 'lightweight' AI model the Phi-3-Mini.
- RBI released draft rules for Payment Aggregators (PAs), focusing on regulatory shifts and limited data storage. Non-bank PAs require separate authorization, learning from past crises like Paytm Payments Bank. Mandatory registration and compliance timelines are set for both existing and new entities. Sustainability provisions include net worth requirements and closure timelines for non-compliant entities. KYC requirements are nuanced for small and medium merchants, with

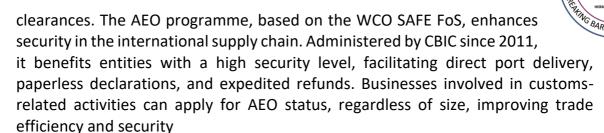


restrictions on card data storage but permissible limited data storage for transaction tracking.

- The fourth session of the INC in Ottawa aims to finalize an international legally binding instrument on plastic pollution. Key objectives include eliminating problematic plastic uses and addressing urgent environmental concerns. INC-5 in Busan and a Diplomatic Conference will conclude the process, emphasizing multilateral cooperation and scientific evidence. Canada's leadership and host country alliance are pivotal in driving global ambitions. The INC process, mandated by a UN Environment Assembly resolution, seeks consensus and a comprehensive approach to plastic pollution.
- The 6th International Conference on Disaster Resilient Infrastructure (ICDRI) organized by the Coalition for Disaster Resilient Infrastructure (CDRI) focuses on building resilience into infrastructure systems.
- CDRI, a multi-stakeholder partnership, includes national governments, UN agencies, multilateral development banks, the private sector, and academic institutions. Launched in 2019 during the UN Climate Action Summit, CDRI aims to promote infrastructure resilience to climate and disaster risks while supporting sustainable development goals. CDRI assists countries in upgrading capacities and standards, tailoring assistance to each country's risk context and economic needs. With 39 countries and several international organizations as members, CDRI's Secretariat in New Delhi coordinates activities to generate and exchange knowledge on disaster resilience.
- SJVN Limited inaugurated India's first Multi-purpose Green Hydrogen Pilot Project at the Nathpa Jhakri Hydro Power Station in Himachal Pradesh. The project aims to produce green hydrogen for coating facilities and generate electricity through fuel cells. It operates using an alkaline electrolyzer powered by renewable energy from SJVN's Solar Power Plant. The project produces 14 kilograms of Green Hydrogen daily during 8 hours of operation. It demonstrates the successful tandem operation of Rampur HPS and NJHPS, showcasing renewable energy integration and hydrogen production capabilities.
- NASA launched an Advanced Composite Solar Sail System spacecraft from New Zealand, utilizing sunlight for propulsion. The solar sail system aims to orbit 1,000 kilometers above Earth, employing an 80-square-meter solar sail post-deployment. The mission focuses on testing the sail's performance and capabilities, potentially advancing space exploration technology. Solar sailing reduces costs, provides sustainable propulsion, and opens doors for innovative space exploration missions. Solar sails utilize photon momentum from sunlight, offering continuous thrust and potential for interstellar travel.
- The Indian Historical Records Commission (IHRC) adopted a new logo and motto, symbolizing its commitment to preserving historical records. The logo features lotus petals and the Sarnath Pillar, representing resilience and India's rich history. The motto translates to "Where history is preserved for the future," highlighting IHRC's role in safeguarding historical knowledge. IHRC, established in 1919, advises



- the Government of India on record management and historical research. It comprises 134 members and adjunct bodies like the Editorial Committee and Standing Committee for paper review and recommendations.
- India's External Affairs Minister joined the First 'ASEAN Future Forum,' aimed at exchanging ideas and shaping ASEAN's development path. The forum, proposed by Vietnam, focuses on fast and sustainable growth with a people-centered approach. ASEAN, founded in 1967, includes 10 member countries and emphasizes intergovernmental cooperation across sectors. The forum's theme reflects ASEAN's commitment to inclusive development and collaboration. The inaugural forum took place in Hanoi, Vietnam, strengthening ASEAN's partnership with India and other nations.
- The Global Report on Food Crises (GRFC) 2024, released by FSIN, highlights acute food insecurity affecting 282 million people across 59 countries. Conflict, extreme weather events, and economic shocks are major drivers of food crises, impacting millions globally. Displacement exacerbates food insecurity, with over 90 million forcibly displaced individuals facing acute food shortages. Regions like Gaza Strip and Sudan experience severe crises, with imminent famine risks indicated in North Gaza. Urgent action and transformation of food systems are advocated by the UN to address underlying causes of food insecurity globally
- Prof Uma Ramakrishnan, faculty at the National Centre for Biological Sciences (NCBS), has been elected as a member of the American Academy of Arts and Sciences (AAAS). She was one of AAAS' 25 elected International Honorary Members in 2024
- The Climate Technology Centre and Network (CTCN), the operational arm of the UNFCCC's Climate Change Technology Mechanism, recently celebrated its 10-year anniversary. Hosted by UNEP in collaboration with UNIDO and 11 other organizations, CTCN accelerates the development and transfer of environmentally sound technologies for low-carbon and climate resilient development. It provides tailored technology solutions, capacity building, and policy advice upon request from developing countries, utilizing a global network of technology experts
- A "super-sympathetic" solar flare event, featuring four simultaneous eruptions, has recently been observed by astronomers. Solar flares are intense bursts of radiation associated with sunspots, releasing magnetic energy and heating material to millions of degrees. They emit radiation across the spectrum, affecting satellite communications, radio signals, and potentially astronauts in space. These flares can also cause geomagnetic storms, impacting power grids and producing auroras. Sympathetic solar flares occur when sunspots or filaments are connected by magnetic field loops, leading to multiple eruptions in rapid succession, typically during the solar maximum phase
- Palaeontologists from Argentina announced the discovery of a new medium-sized herbivorous dinosaur and named it as Chakisaurus nekul
- The Centre has recently extended the Authorised Economic Operator (AEO) status to the gem and jewellery sector, offering simplified customs procedures and faster



- Indian Railways expanded its affordable meal scheme in 2023, introducing the Economy Meal Scheme through the IRCTC. This scheme offers the Janata Meal at platform counters to address passengers' food challenges in unreserved coaches. Over 150 meal counters operate in nearly 100 stations, with options like Janata Khana and snack meals at affordable prices, along with 200 ml water glasses for ₹3
- The RBI has introduced draft guidelines for web aggregation of loan products to improve transparency and help borrowers make informed decisions. These guidelines focus on the role of Lending Service Providers, ensuring a digital view of loan offers, RBI's regulatory framework, key components of digital views, guidelines for LSPs, and emphasis on unbiased content and consumer protection.
- The Central Board for Indirect Taxes and Customs (CBIC) has issued 18 guidelines for department personnel regarding GST investigations and enforcement. These guidelines empower the Principal Commissioner of GST to conduct investigations and enforce regulations, with a focus on written approval requirements for specific instances like interpreting new tax laws, summoning large corporations, handling sensitive matters, and matters before the GST Council. However, challenges arise due to unclear definitions for terms like "big industrial houses" and "matters with national implications," leading to implementation concerns, particularly regarding sectors like gaming companies.
- Nasscom's Patenting Trends in India report highlights a surge in resident patent filings, doubling from 33.6% to over 50% from 2019 to 2023. Granted patents also doubled during this period, with projections of over 100,000 patents to be granted in FY2023-24. Indian startups, especially in deep tech, filed over 900 patents since 2008, while 32,000 international patent applications were filed in India under the PCT. The healthcare sector leads in patent applications, followed by notable spikes in AI and IoT technologies, and emerging trends in neurotechnology focused on healthcare applications
- Former world number one archer Deepika Kumari, who won a silver medal at the just-concluded World Cup in Shanghai, has been re-inducted into the Target Olympic Podium Scheme (TOPS) core group ahead of the Paris Game
- India won two gold, one silver and a bronze in the World cadet rapid and blitz chess championships held in Durres, Albania. A.S. Sharvaanica bagged a gold (rapid girls' under-10) and silver (blitz girls' under-10) while Divith Reddy won a gold (rapid open under-8) and bronze (blitz open under-8).
- ISRO released the Indian Space Situational Assessment Report (ISSAR) through IS4OM. Growing space object population indicates enhanced access to space tech and diverse applications. More space objects added in 2023 compared to previous

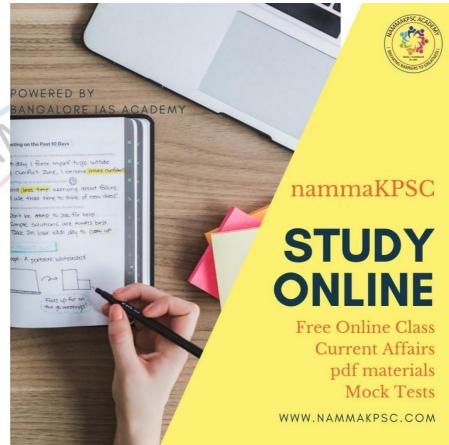


years, with notable on-orbit break-up events. Indian satellites experienced re-entries, and ISRO conducted collision avoidance maneuvers (CAMs) due to increased space congestion.

 Ministry of Mines organized a "Critical Minerals Summit" in New Delhi focusing on enhancing beneficiation and processing capabilities. Summit aimed to promote collaboration, knowledge sharing, and innovation in critical mineral sectors for

renewable and energy electric vehicles. Critical minerals, crucial modern technologies and economies, are essential for advanced tech, low-emission systems, and everyday products

Indian Institute of Tropical Meteorology (IITM) study reveals significant ocean warming trends in the Indian Ocean.



Warming observed from 1950-2020, with further predicted warming from 2020-2100. Impacts include increased marine heatwaves, cyclone formation, coral bleaching, and ecosystem loss. Deeper ocean layers also warming, contributing to overall heat content increase. Ocean heating a major contributor to sea-level rise in the Indian Ocean.