

MAHITHI MONTHLY SNIPPETS

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NEWS IN SHORT

- Karnataka's Department of Archaeology, Museums, and Heritage (DAMH) is set to declare 210 more heritage structures as state-protected monuments. These structures, including temples, precincts, and forts, have been identified across various divisions in Karnataka, such as Mysuru, Bengaluru, and Belagavi. The selection of these monuments is based on the criteria laid down under The Karnataka Ancient Monuments and Archaeological Sites and Remains Act, 1961. While this move is a step in the right direction, experts emphasize that mere declaration is not enough; the government must provide sufficient funds for restoration, conservation, and maintenance. Currently, 848 heritage structures are state-protected, and 608 are protected by the Archaeological Survey of India
- Indian cricket administrator Jay Shah on Sunday took charge as the chairman of the International Cricket Council (ICC)
- One in seven pilots employed in six major Indian airlines is a woman, with IndiGo having the highest number of women pilots at 791, followed by Alliance Air, which has the highest proportion of women pilots at 17.36%. India has a total of 26,539 licensed pilots, with 1,767 being Indian women pilots, making up 15% of the country's pilots, significantly higher than the global average of 5%.
- Two students from Bengaluru, Arham Nilesh Gada, a Grade 9 student, and Atharva Shastry, a Grade 7 student from National Public School (NPS), Koramangala, recently won the Wild Wisdom Global Challenge (WWGC), an educational initiative organized by WWF-India. The challenge encourages students to explore wildlife, ecosystems, and sustainability through interactive quizzes and activities. Over four lakh students from more than 2,500 schools participated in this year's event, with six teams reaching the national finals, including Arham and Atharva, who represented Karnataka. The national winners will compete at the WWGC international finals on December 12. Atharva, who has a deep fascination for reptiles, credited her success to her interest in the diverse world of wildlife, while Arham, inspired by the movie Jurassic Park, dreams of becoming a paleontologist. Their victory was a result of team efforts, with support from teachers, parents, and peers, along with regular mock quizzes to enhance their problem-solving skills.
- Former Australia batter Ian Redpath passed away on Sunday at the age of 83. He played 66 Tests and five ODIs in an international career that ran from 1964 to 1976.
- The Tamil Nadu Chief Minister recently wrote to the Prime Minister seeking the cancellation of rights granted by the Centre to a private firm to mine tungsten in Nayakkarpatti Tungsten Block in Madurai district.
- The French President recently praised the more than 1,000 craftspeople who helped rebuild Paris' Notre-Dame Cathedral in what he called "the project of the century", five and a-half years after fire gutted the Gothic masterpiece.

- Recently, the 13th edition of Exercise AGNI WARRIOR (XAW-2024) concluded at Field Firing Ranges, Devlali (Maharashtra). It is a joint military exercise between the Indian Army and Singapore Armed Forces.
- Kerala's Revenue department has initiated "Operation Smile" to provide land titles (patta) to the Koraga tribe, a Particularly Vulnerable Tribal Group (PVTG), residing in Kasaragod and Manjeswaram taluks. The Koraga tribe, primarily found in Kerala and Karnataka, has its own distinct language, 17 exogamous clans, and a matrilineal family system. Traditionally, they are agriculturists, relying on forest produce, and are known for their folk songs, dances, and rituals. By providing land titles, the Kerala government aims to secure the Koraga tribe's livelihood, property rights, and overall well-being.
- The 1st edition of Joint Table Top Exercise, CINBAX, between the Indian Army and the Cambodian Army commenced at Foreign Training Node, Pune today. The exercise will be conducted from 1st to 8th December 2024. The Cambodian Army contingent will comprise 20 personnel and the Indian Army contingent is also comprising 20 personnel from an Infantry Brigade.
- The Forest Department is working to clear eucalyptus trees from nearly 800 hectares in the Ranebennur Blackbuck Sanctuary (RBS) in Haveri to help restore the habitat for the critically endangered Great Indian Bustard (GIB). The eucalyptus trees, which cover a significant portion of the sanctuary, have disrupted the natural grassland ecosystem essential for the GIB's survival. Removing these trees will create open spaces for the bird, allowing it to monitor predators and find food. The removal is also beneficial for other species, such as blackbucks and wolves, which have been affected by the eucalyptus plantations. The initiative is part of a broader effort to restore the sanctuary's ecosystem, with plans to clear 1,000 hectares by 2025, funded by the sale of the eucalyptus trees. The project also aims to reduce conflicts between wildlife and local farmers. Reintroducing the GIB to Karnataka is part of a larger conservation effort, with GIBs being bred in captivity to boost their population.
- The Atmanirbhar Clean Plant Programme is a government initiative aimed at enhancing horticulture productivity in India by ensuring access to high-quality, virus-free planting materials. With support from a \$98 million loan from the Asian Development Bank (ADB), the program targets key objectives such as improving crop yields, promoting climate-resilient varieties, and implementing effective virus control measures. Its core components include the establishment of nine world-class Clean Plant Centers (CPCs) equipped with advanced diagnostic and tissue culture labs, a robust certification system for traceability and accountability, and affordable access to clean planting materials, with a focus on involving women farmers. The program, implemented by the Ministry of Agriculture and Farmers Welfare in collaboration with the National Horticulture Board (NHB) and Indian Council of Agricultural Research (ICAR), also emphasizes regional adaptation of technologies for diverse agro-climatic conditions across India.

- Cyclone Fengal made landfall in Puducherry on November 30, 2024. Cyclonic landfall occurs when a cyclone transitions from water to land, with the eye reaching the coast, as per the IMD. A cyclone may cause severe damage depending on its intensity, with potential risks like flying debris, flooding, and infrastructure disruptions. While landfall doesn't necessarily mean a direct hit, the strongest winds can still impact coastal areas. Cyclones lose strength after landfall due to reduced moisture and surface friction. Landfall durations vary depending on wind speed and storm size. Cyclone Fengal, named by Saudi Arabia in Arabic, signifies cultural identity and adheres to international naming standards.
- National Pollution Control Day, observed annually on December 2, commemorates the victims of the Bhopal Gas Tragedy of 1984, one of the world's worst industrial disasters caused by the leak of toxic methyl isocyanate gas in Bhopal, Madhya Pradesh, which claimed over 15,000 lives and left lasting health issues for millions. The day highlights the importance of combating pollution, promoting sustainable living, and enforcing stricter industrial safety measures. The 2024 theme, "Clean Air, Green Earth: A Step Towards Sustainable Living", underlines the urgency of reducing air and environmental pollution to safeguard future generations. Key pollution types, such as air, water, noise, soil, light, and thermal pollution, significantly impact ecosystems and human health, with air pollution alone accounting for 8.9 million annual deaths globally, as recognized by the UN.
- The India Meteorological Department (IMD) is celebrating its 150th anniversary on January 15, 2025, and as part of the festivities, it's hosting a National Meteorological Olympiad (Met-Olympiad) to spark interest in weather and climate sciences among students.
- Chief Minister Siddaramaiah laid the foundation stone for a world-class cricket stadium to be built by the Karnataka State Cricket Association at a cost of Rs 150 crore at P Gollahalli in Tumakuru taluk. The stadium will come up on 50 acres of land, allotted by the state government to KSCA, in about two years.
- The Tekkalakote Police Station in Siruguppa taluk has been selected as the 10th best police station in the country for the year 2024, according to Ballari district police. SP Dr Shobharani V J shared this information in a post on the department's Facebook page. In the post, the SP has lauded the efforts of officers and staff of the Tekkalakote station responsible for bagging the best police station award.
- The Sivagiri Mutt in Kerala, founded by social reformer Sree Narayana Guru, is establishing an all-religion worship centre, promoting unity and harmony among different faiths. This initiative comes amid disputes over places of worship among various religious groups. The proposed centre's model was unveiled at an all-religion conference at the Vatican, commemorating the centenary of a similar conference initiated by Sree Narayana Guru in 1923. The centre will feature worship spaces for Hindus, Muslims, and Christians, along with a meditation area, serving as a memorial to the Vatican conference. The event was attended by heads of all religions, including Catholic church head Pope Francis, who emphasized the relevance of Sree Narayana Guru's teachings in today's world. The Sivagiri Mutt,

managed by the Sree Narayana Dharma Sanghom Trust, aims to spread Guru's principles, including his ideology of 'One caste, one religion and one God for humankind'

- Bengaluru's Aishwarya Pissay claimed the third spot in the 2024 FIM Bajas World Cup.
- Durga Foundation, an NGO, in collaboration with the NLSIU and city police, has launched the 'active bystanders initiative' to combat sexual harassment in public places through a programme called "D.A.R.E. TO CARE: Say no to sexual harassment." The initiative involves creating awareness and sensitizing the public through visits to 112 police stations, street plays, and door-to-door campaigns, aiming to cover 5,600 members, including street vendors, pourakarmikas, and autorickshaw drivers, who will be trained and awarded certificates and medals as "Durga" real heroes, promoting a proactive approach, confidence, and empowerment among volunteers.
- The Forest Department has initiated a 'Trackers dog squad training centre' in Bandipur Tiger Reserve (BTR)
- Hubballi airport is Karnataka's most profitable airport among the four aerodromes controlled by the Airports Authority of India (AAI), with a revenue of ₹19.37 crore in the financial year 2023-24. The state has nine airports, with the AAI operating four: Belagavi, Hubballi, Kalaburagi, and Mysuru. Belagavi followed Hubballi with a revenue of ₹14.99 crore, while Mysuru and Kalaburagi earned ₹9.26 crore and ₹2.26 crore, respectively. Karnataka's other airports include Kempegowda International Airport in Bengaluru, operated under a public-private partnership, and the Mangaluru International Airport, leased by the AAI to Adani Airport Holdings Limited. Notably, Kempegowda International Airport was the most profitable airport in the country in 2022-23, with a profit of ₹528 crore.
- The fourth edition of the Green Literature Festival (GLF), the country's only literary festival dedicated entirely to all things environment, will be held in Bengaluru. The festival, first launched in June 2021 as "a response to the urgent need for literature that helps us comprehend our relationship with the planet, mend the broken bits, promote love and care for the climate through positive climate action," as the event release puts it, "promises to be a fiesta for eco-enthusiasts, nature lovers and readers of all ages and tastes."
- Recently, the Red-Breasted Flycatcher bird which migrates from Eastern Europe to escape the harsh winter was found in the Ameenpur Lake in Hyderabad.
- The National Green Tribunal (NGT) has sought a reply from the Geological Survey of India (GSI) and others over the deteriorating condition of Varkala cliff, a designated national geo-heritage site located in Kerala's Thiruvananthapuram district, which exposes 13 lakh to 2.5 crore-year-old sedimentary rock formations, hosts unique biodiversity, and supports underwater reefs essential for local fishing communities, and is also revered for its natural springs with therapeutic properties
- In a significant conservation step, the National Tiger Conservation Authority has granted in-principle approval for designating **Madhav National Park** in Shivapuri

district, Madhya Pradesh, as a **tiger reserve**. Located on the northern fringe of the Central Highlands, the park is part of the Upper Vindhyan Hills and features a diverse landscape of plateaus and valleys. The park is home to two prominent lakes, **Sakhya Sagar** and **Madhav Sagar**, which support both aquatic biodiversity and terrestrial species. The drainage pattern directs towards the north and northeast, with the park forming the catchment area for the **Sind River** that flows along its eastern boundary. The eastern section of the park contains **sedimentary rocks** of the Vindhyan system, including sandstone, shale, and limestone. The vegetation includes **Northern tropical dry deciduous mixed forests** and **Dry Thorn Forests**, typical of North-Western Madhya Pradesh. The flora features **Kardhai, Salai, Dhaora, and Khair**, while the understory includes **Ber, Makor, and Karonda**, with **Jamun and Mahua** trees near the nullahs. The park supports a rich diversity of wildlife, including species such as **Nilgai, Chinkara, Chowsinga, Chital, Sambar, and Barking Deer**, as well as predators like the **Leopard, Wolf, Jackal, Fox, and Wild Dog**.

- A recent study by Oxford University's Saïd Business School has highlighted the effectiveness of India's PRAGATI system in accelerating infrastructure development, praising its role in fast-tracking projects worth \$205 billion. According to the study, PRAGATI has significantly contributed to India's economic transformation by improving the country's economic landscape. The study also emphasized the system's impact on improving the quality of life for millions of people, particularly through faster implementation of projects in vital sectors such as roads, railways, water, and electricity, and the integration of green technologies for sustainable development. Additionally, the system fosters collaboration between the Central and State governments, encouraging a culture of accountability and efficiency, while supporting inclusive and sustainable development. PRAGATI integrates advanced technologies like Digital Data Management, Video-Conferencing, and Geo-Spatial Technology to ensure timely implementation and effective governance. It operates through a three-tier system, involving the Prime Minister's Office, Union Government Secretaries, and Chief Secretaries of States, allowing real-time data-driven decision-making to address pressing national issues.
- The Urban Infrastructure Development Fund (UIDF) was established to address the urban infrastructure needs of Tier-2 and Tier-3 cities. Funded through the priority sector lending shortfall, UIDF ensures that resources are available for infrastructure development in these underdeveloped urban areas. The primary objective of UIDF is to supplement the efforts of State Governments, Union Territories (UTs), and local bodies in enhancing urban infrastructure, with a focus on essential services like Sewerage and Solid Waste Management, Water Supply and Sanitation, and the construction and improvement of drains/stormwater drains. Managed by the National Housing Bank (NHB), the fund has an initial corpus of ₹10,000 crore and is modeled on the Rural Infrastructure Development Fund (RIDF). It currently covers 459 Tier-2 cities and 580 Tier-3 cities. States are

encouraged to leverage resources from the 15th Finance Commission grants and existing government schemes, while ensuring the adoption of appropriate user charges for the sustainability of the fund. UIDF loans come with an attractive interest rate of Bank Rate minus 1.5%, a repayment period of five equal annual instalments within seven years, and quarterly interest payments.

- The Indian government has announced that the base year for calculating the country's GDP will be updated from 2011-12 to 2022-23. This change, as revealed by the Minister of State for Statistics and Programme Implementation, Rao Inderjit Singh, aims to better reflect the current economic realities, especially considering post-pandemic shifts and the growth of digital platforms. The Advisory Committee on National Accounts Statistics (ACNAS), a 26-member body chaired by Biswanath Goldar, has been formed to oversee this transition. The committee will focus on identifying new data sources, revising the GDP computation methodology, and standardizing data structures to improve accuracy. The revised GDP and Consumer Price Index (CPI), based on the updated base year, are expected to be released by early 2026. This update is crucial as the current base year, 2011-12, no longer captures recent changes in consumption patterns, technology, and other economic dynamics. India's GDP growth has been slowing down, with the growth rate decelerating to 5.4% in the July-September 2024 quarter, attributed to weaker manufacturing, reduced consumption, and a decline in the mining sector. The government is also working to strengthen its statistical systems, including revitalizing statistical coordination between the Centre and states and enhancing the use of administrative data for better accuracy. In addition, a 22-member panel is revising the base year for the Wholesale Price Index (WPI) and other key indices, adjusting commodity weights to reflect producer prices more accurately.
- South Korea's President Yoon Suk Yeol declared martial law, accusing the opposition of being "anti-state forces" and saying he was acting to protect the country from "threats" posed by the North.
- The University of Agricultural Sciences (UAS) in Bengaluru hosted its second 'Agriculture Future Forward: Startup Conclave', bringing together farmers, innovators, and entrepreneurs to promote innovative "agripreneur" ideas. The event featured 45 stalls, including startups, agri-innovation clusters, and incubation centers, and drew over 600 participants. Key attractions included genome-editing and AI-enabled beekeeping innovations, while panel discussions focused on driving innovation through industry-academia collaboration and entrepreneurship opportunities in agriculture.
- The Indian National Space Promotion and Authorization Centre (IN-SPACe) has announced Ananth Technologies Limited (ATL) as the beneficiary of the Announcement of Opportunity (AO), enabling access to Indian orbital resources for non-government entities. ATL will undertake the development, launch, and operation of a multi-beam high-throughput Ka band communication satellite, making it the first private Indian satellite operator to provide state-of-the-art geosynchronous orbit (GSO) communication satellite services to the country. This

move is seen as a transformative step for the Indian space sector, establishing a new benchmark for private sector participation in generating SATCOM capacity through indigenous satellites.

- On International Day of Persons with Disabilities, the Department for Empowerment of Persons with Disabilities (DEPwD) and the Association of People with Disability (APD) launched a nationwide accessibility audit campaign, powered by APD's AI-powered YesToAccess app. This innovative app enables anyone to assess public spaces' accessibility by analyzing features like ramps and accessible toilets through a simple photograph, generating real-time accessibility scores available on an interactive map.
- The Union Ministry of Home Affairs (MHA) has proposed 95% reservation in government jobs for locals in Ladakh, one-third reservation for women in hill councils and has agreed to address concerns regarding land-related matters, according to leaders from the region who attended a high-powered committee (HPC) meeting
- Brig Raj Manchanda('Old Fox' of Indian squash), a six-time National squash champion and Arjuna Awardee, passed away in Delhi at 80. Known for his resilience and coaching, Manchanda had an illustrious career, including a fourth-place finish at the 1984 Asian Championships, and will be remembered for his kindness, singing talent, and dedication to mentoring young squash players.
- The Food Safety and Standards Authority of India (FSSAI) has reclassified packaged drinking water and mineral water as a "High Risk Food Category", subjecting them to stricter safety measures and inspections. This move aims to enhance consumer protection and ensure better quality control in the bottled water industry, following concerns over contamination and poor handling. As a result, manufacturers of packaged drinking water and mineral water will undergo risk-based inspections annually and third-party audits, with all centrally licensed manufacturers required to get their businesses audited annually. Food products that come under the "High Risk" category are subjected to mandatory risk-based inspections.
- The 14th Asia-Oceania Meteorological Satellite Users' Conference (AOMSUC-14) is being held from December 4-6, 2024, in New Delhi, India, hosted by the India Meteorological Department (IMD) and the Ministry of Earth Sciences. Since its inception in 2010, AOMSUC has become a prominent event for meteorologists, earth scientists, satellite operators, and students worldwide. This year's conference includes oral and poster presentations, panel discussions, and a training workshop focused on the application of satellite data for meteorological and climatological purposes. The conference aims to promote satellite observations, advance remote sensing science, foster collaboration between satellite operators and users, update participants on international space programs, encourage the development of new technologies, and engage young scientists in the field.

- The 4th edition of Exercise HARIMAU SHAKTI commenced at Bentong camp, Pahang district, Malaysia.
- Karnataka is making significant strides toward enhancing its public transportation system in Bengaluru by focusing on electric buses. Under the PM E-DRIVE scheme, launched on September 29, 2024, the central government has allocated Rs 10,900 crore to support electric vehicle infrastructure, including Rs 4,391 crore for the procurement of 14,028 electric buses in major cities. The Bengaluru Metropolitan Transport Corporation (BMTC) is seeking 5,000 electric buses to address the city's demand for 10,000-12,000 buses, aiming to replace older buses and improve the efficiency of its public transportation network. BMTC's existing fleet includes 1,231 non-AC electric vehicles, with plans to add 320 AC e-buses, midibuses, and even double-decker buses.
- The Supreme Court of India has mandated the uniform implementation of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 (PoSH Act) across all states and Union Territories. The court identified significant enforcement gaps even a decade after the Act's enactment. Key directives include the appointment of district officers by December 31, 2024, and the establishment of Local Complaints Committees (LCCs) by January 31, 2025. Additionally, the court emphasized the integration of the SheBox portal for centralized complaints and updates on committees, with a deadline for compliance by March 31, 2025.
- Indian team won the junior Asia Cup in Muscat
- The Bengaluru City railway station recorded the highest nitrogen dioxide (NO₂) levels in the city for over 80% of 2023, followed by BTM Layout and Silk Board, as revealed in Greenpeace India's report "Beyond North India: NO₂ Pollution and Health Risks in Seven Major Indian Cities." The NO₂ levels at the station far exceeded the World Health Organisation's (WHO) recommended annual limit of 10 µg/m³, posing severe health risks such as asthma, respiratory inflammation, and increased susceptibility to lung and circulatory diseases. Greenpeace India highlighted the transportation sector as the largest contributor to NO₂ pollution, emphasizing the need for cleaner, sustainable public transport to mitigate the health crisis. The report advocates region-specific strategies, including enhanced public transit systems and fare-free schemes for women, to combat worsening air quality in major Indian cities like Bengaluru, Hyderabad, and Mumbai.
- The International Centre for Integrated Mountain Development (ICIMOD) has launched an Air Quality Dashboard, a public platform providing real-time and forecasted air pollution data using ground sensors and satellite imagery. The dashboard covers local, sub-regional, and regional scales, featuring tools like a dynamic timelapse powered by the WRF-Chem model to track PM_{2.5} plumes across hotspots such as Lahore, New Delhi, and Kolkata. It offers insights into the interaction between weather and pollution, integrating emissions data to show cross-border pollution dynamics and providing two-day forecasts for communities, researchers, and policymakers. ICIMOD, an intergovernmental knowledge hub

established in 1983 and headquartered in Kathmandu, Nepal, serves Hindu Kush Himalaya countries through knowledge sharing, policy engagement, and sustainable mountain development initiatives.

- Bengaluru's nitrogen dioxide levels are a major concern, with the city's annual average concentration in 2023 being nearly double the World Health Organisation's prescribed standards. According to a Greenpeace India report, Bengaluru ranks fourth among seven densely populated Indian cities, with Chennai, Pune, and Hyderabad taking the top three spots. The City Railway Station emerged as the most polluted area, exceeding WHO standards for 295 days in 2023. The report attributes the high NO₂ levels to the transportation sector, particularly the rise in private vehicles, and emphasizes the need for a sustainable and efficient public transportation system to tackle this issue
- Union Tourism Minister Gajendra Singh Shekhawat announced that four historical places in Karnataka have been included in the tentative list of UNESCO World Heritage Sites. These sites include the Monuments and Forts of the Deccan Sultanate, Monuments of Srirangapatna Island Town, Evolution of Temple Architecture: Aihole-Badami Pattadakal and Hire Benkal, and the Megalithic Site. Karnataka already boasts several UNESCO World Heritage Sites, including Hampi, Pattadakal, and the Western Ghats. The Ministry of Tourism has also sanctioned several projects in Karnataka, worth Rs 200 crore, to develop sustainable and responsible tourism destinations.
- Atal Innovation Mission (AIM) and the Office of Science & Innovation, Embassy of Sweden, have successfully concluded SheSTEM 2024, an annual event celebrating women's contributions to STEM and inspiring the next generation of innovators. The SheSTEM 2024 challenge, part of the India-Nordic BEST project, invited students from grades 6-12 to submit innovative ideas on Battery Technology and Energy Storage (BEST) systems, receiving over 1000 submissions showcasing India's youth's creativity and problem-solving skills.
- In a historic moment, the Tikhir tribe of Nagaland conducted its first-ever Log Drum Pulling Ceremony during the 25th Hornbill Festival 2024. The Tikhirs are an indigenous Naga tribe residing in Nagaland, parts of neighboring states, and Myanmar. They speak Naga Yimchungru, a Tibeto-Burman language, and traditionally rely on agriculture and hunting for sustenance. Once headhunters, the practice was outlawed in the 1960s. With the advent of Christian missionaries, most Tikhirs adopted Christianity while retaining elements of their folk religion. Their main festival, "Tsonglaknyi," held annually from October 9-12, celebrates the sanctification of the shield.
- Karnataka will introduce its pioneering Circular Economy Policy in the upcoming budget. Key aspects include mandating 20% sustainable construction materials for government projects, with potential tax incentives and concessional power for private adoption. Solar panel incentives for commercial realty are already in place. The policy focuses on infrastructure and road projects, collaborating with RDPR and the Forest Department to utilize recycled materials and plastics in roads and

other uses. Waste management efforts aim to remove plastic from water bodies through partnerships with fisheries, tourism, and transport departments. Additional sustainability measures include refurbished laptops for rural libraries and mandating glass bottles for government events.

- The UNCCD's Drought Atlas projects that by 2050, 75% of the global population will face drought risks, driven by human activities like unsustainable water use, poor land management, and urbanization. This challenge highlights vulnerabilities, such as India's agricultural sector, where over 25 million workers risk yield losses, particularly in soybeans. Case studies like Chennai's 2019 "Day Zero" and water riots in India (2020–2023) demonstrate mismanagement's societal impacts. Global and local policies, international cooperation, and data-driven early warning systems are crucial to mitigate these effects. Adaptation guidelines from the Drought Atlas recommend governance measures (microinsurance, water pricing), land-use strategies (restoration, agroforestry), and water management practices (reuse, groundwater recharge). The International Drought Resilience Alliance (IDRA), established in 2022, collaborates on innovations and best practices to combat drought's cascading effects on energy, trade, and agriculture. A systemic, whole-of-society approach, as emphasized in the Atlas, is essential to address interconnected risks and promote forward-thinking resilience strategies.
- The Polar Satellite Launch Vehicle (PSLV-C59) successfully launched the PROBA-3 satellite, marking ISRO's 61st commercial mission in collaboration with the European Space Agency (ESA) and NewSpace India Limited (NSIL). PROBA-3, a part of ESA's Project for Onboard Autonomy, is a solar research mission designed to study the Sun's corona with unprecedented precision. The mission utilizes advanced formation flying technology, comprising two spacecraft—the Coronagraph Spacecraft (CSC) and the Occulter Spacecraft (OSC)—which maintain a precise separation of 150 meters in a highly elliptical orbit. This alignment creates a virtual solar coronagraph, enabling autonomous observations of the Sun's corona in the visible, UV, IR, and polarized light spectrums, extending to 1.1 solar radii. In addition to studying the corona's structure and dynamics, PROBA-3 acts as a "space laboratory" for testing navigation and control algorithms, with potential applications in future space missions and orbital debris management.
- Gharcholas, traditional sarees worn during weddings in Gujarat's Hindu and Jain communities, have been awarded the Geographical Indication (GI) tag, recognizing their cultural and handicraft value. Announced at the "GI and Beyond – Virasat Se Vikas Tak" program in New Delhi, this marks Gujarat's 27th GI tag, underscoring its rich textile heritage. These sarees are known for their auspicious colors like red, maroon, green, and yellow, symbolizing sacredness in Hindu customs, and intricate craftsmanship with symbolic patterns. Under the Hastakala Setu Yojana, Gujarat's traditional arts like Surat's 'Saadeli' art, Banaskantha's 'Soof' embroidery, Bharuch's 'Sujni' craft, Ahmedabad's 'Saudagiri Print,' and 'Maata Ni Pacchedi' have also been recognized for their contribution to India's handicraft legacy.

- Tiruppur, India's knitwear hub, may benefit from the ongoing political unrest in Bangladesh, with top apparel brands from the US and Europe showing interest in securing supplies from the region, which could lead to a potential increase in knitwear exports to Rs 40,000 crore in the 2024-2025 fiscal.
- The National Centre for Disease Control (NCDC) and the Department of Animal Husbandry and Dairying conducted Karnataka's first SectorConnect Field Epidemiology Programme in One Health. The three-month training programme aimed to integrate human, animal, and environmental health sectors to streamline disease reporting and enhance preparedness. It brought together 35 officers from various departments, including epidemiologists and veterinary officers. The programme was modelled on the One Health Joint Action Plan by the WHO and focused on a collaborative approach to health crises. Training sessions were facilitated by experts from the Isaac Centre for Public Health and the Bengaluru Science and Technology cluster. The programme covered disease surveillance, laboratory-based outbreak investigations, and strategies to mitigate health crises. Participants applied their learnings in field assignments, enhancing routine surveillance activities and strengthening outbreak response. A 15-point technical framework was introduced to assess multi-agency collaboration. The programme concluded with a final contact session, where participants presented findings from joint investigations into outbreaks of Kyasanur Forest Disease, dengue, and snakebites.
- The 'Champion in Me' initiative by the Bangalore Schools Sports Foundation encourages HIV-positive children to break the stigma through sports. Founded in 2009, it empowers HIV-positive children to embrace inclusivity and joy through athletics. An athletics meet was conducted on Sunday, with over 500 vulnerable children participating. The event aimed to help children integrate into mainstream society without discrimination. Organised ahead of World AIDS Day, it showcased the transformative power of sports. 'Champion in Me' symbolises inclusion, equality, diversity, and accessibility. Children from various organisations participated in the athletics meet, featuring separate races and a mixed relay. The initiative strives to create a stigma-free city through sports. Over 18 support and care centres participated in the event. It promoted inclusivity and joy through athletics.
- The Karnataka State Police (KSP) has made headlines for its innovative use of drone technology, earning the inaugural FICCI Drone Award in training and capacity building. The award, instituted by the Federation of Indian Chambers of Commerce and Industry (FICCI), recognizes groundbreaking applications of drone technology by government and private organizations. The KSP's Remote Pilot Training Institute (RPTI), established in 2023, has trained 270 police personnel in various drone applications, including surveillance, mapping, and disaster management, with 170 personnel receiving drone licenses, complying with the Ministry of Civil Aviation's regulations

- The Private Hospitals and Nursing Homes Association (Phana) Karnataka, elected new office-bearers and executive committee members. Dr Shobha Prakash was elected the first woman president for the 2025-2027 term of the association at annual general body meeting during the summit.
- Foreign direct investment (FDI) inflows into India have crossed the \$1 trillion milestone in the April 2000-September 2024 period, firmly establishing the country's reputation as a safe and key investment destination globally. According to data from the Department for Promotion of Industry and Internal Trade (DPIIT), the cumulative amount of FDI, including equity, reinvested earnings and other capital, stood at \$1,033.40 billion during the said period
- Burkina Faso's ruling military junta appointed a new Prime Minister, a day after dissolving the government without providing any reason. Rimtalba Jean Emmanuel Ouedraogo (in picture), until now communications minister and spokesperson of the government, will be the West African country's new Prime Minister
- Ghana's Vice-President and ruling party candidate, Mahamudu Bawumia, conceded defeat on Sunday to opposition candidate and former President John Dramani Mahama in the West African nation's presidential election seen as a vote of no-confidence in the current government's handling of an ailing economy
- Ghana's Vice-President and ruling party candidate, Mahamudu Bawumia, conceded defeat to opposition candidate and former President John Dramani Mahama in the West African nation's presidential election seen as a vote of no-confidence in the current government's handling of an ailing economy
- New genetic research on Nicobarese revealed a significant ancestral connection with Austro-Asiatic populations across South and Southeast Asia.
- The Indira Gandhi Prize for Peace, Disarmament, and Development for 2024 will be conferred on former Chilean president and prominent human rights voice Michelle Bachelet, a statement issued by the Indira Gandhi Memorial Trust said recently. The Indira Gandhi Peace Prize, also known as the Indira Gandhi Prize for Peace, Disarmament, and Development, was instituted in the memory of the former prime minister by a trust in her name in 1986. It consists of a monetary award of 25 lakh rupees along with a citation. The award is given to individuals or organisations who work towards ensuring international peace and development, ensuring that scientific discoveries are used to further the scope of freedom and better humanity, and creating a new international economic order.
- The Little Gull, a bird native to the Eurasian region, has been spotted for the first time in NCR. It is the smallest species of gull in the world, breeding in northern Europe and migrating to western Europe, the Mediterranean, and the US. The Little Gull has a length of 25-30 cm, a wingspan of 61-78 cm, and weighs 68-162 g. It has a pale grey breeding plumage with a black hood and dark underwings. In winter, its head turns white with a darker cap and eye-spot. The Little Gull's flight is tern-like, with rounded wings. Young birds have black markings on the head and upper parts. They take three years to reach maturity. The species is listed as Least

Concern on the IUCN Red List. The spotting of the Little Gull in NCR is a significant sighting.

- Recently, the National Highway Authority of India (NHAI) has introduced a comprehensive rating system for performance assessment of the Concessionaires engaged in the National Highway development and maintenance. It is a detailed methodology for rating the concessioners has been formulated by NHAI. Under which concessioners will be evaluated every six months and ratings will be uploaded on NHAI website and its social media handles.
- Recently, the third Copernicus Sentinel-1C satellite was launched last night aboard a Vega-C rocket from Europe's Spaceport in French Guiana. It is the Earth observation component of the European Union's Space programme. It offers information services that draw from satellite Earth Observation and in-situ (non-space) data.
- Recently, the Union Minister for Education launched the PM eVIDYA DTH 24x7 Channel No. 31 dedicated to Indian Sign Language (ISL) in New Delhi, underlining the government's commitment to inclusive education. PM eVIDYA, launched on 17th May 2020 as part of the Atmanirbhar Bharat Abhiyaan, aims to bridge the digital divide and ensure quality education for all learners across the nation. Aligned with the National Education Policy (NEP) 2020, it provides multi-mode access to education through digital, online, and on-air platforms, minimizing learning losses and enhancing accessibility, especially in rural and remote areas. Key components include DIKSHA, a digital platform offering e-content and QR-coded textbooks; PM eVIDYA DTH Channels, now expanded to 200 channels catering to classes 1–12 in multiple languages; SWAYAM, a MOOC platform offering higher education and school courses; and community platforms like Radio, Shiksha Vani, and e-content resources for teachers. This initiative leverages technology to make education equitable and accessible nationwide.
- Karnataka has slipped to the third position in marine exports, ceding the second spot to Gujarat in 2023-24. The state exported 2.735 lakh tonnes in 2023-24, a decline from 2.984 lakh tonnes in 2022-23, primarily due to drought conditions impacting fish breeding cycles and rising sea temperatures reducing fish catch. Meanwhile, Andhra Pradesh maintained its top position, with exports increasing to 4.272 lakh tonnes, driven by extensive shrimp farming across 71,921 hectares. Gujarat climbed to second place with 3.451 lakh tonnes, supported by commercial shrimp farming. Nationally, India's seafood exports hit a record high of 18.19 lakh tonnes in 2023-24, with frozen shrimp accounting for 40.19% of export quantity and 66.12% of earnings. Karnataka faces challenges such as limited aquaculture farming (970.39 hectares) and a 25% decline in marine fish production to 5.42 lakh tonnes in 2023-24. Recommendations include expanding shrimp farming, mitigating climate change effects, and supporting aquaculture farmers to enhance production resilience.
- On December 6, 2024, the RBI revised its monetary policy, cutting the Cash Reserve Ratio (CRR) by 50 basis points to 4%, freeing ₹1.16 lakh crore to boost bank lending

and support economic growth amidst tight liquidity caused by dollar sales, tax outflows, and credit demand. The repo rate remains unchanged at 6.5% for the 11th consecutive policy, reflecting concerns over food inflation and the need for durable price stability. Borrowers benefit as repo-linked lending rates remain stable, while banks face mixed impacts with marginally lower deposit rates and rising MCLR-linked loan rates. The GDP growth forecast for FY25 was lowered to 6.6% (from 7.2%), citing a slowdown in Q2, but recovery signals exist. Retail inflation forecasts rose to 4.8% (from 4.5%) due to CPI inflation peaking at 6.21% in October 2024. The RBI retains a neutral stance, balancing liquidity, inflation control, and growth challenges amidst evolving economic conditions.

- Uber's launch of 'Uber Shikara' in Dal Lake has introduced a modern twist to traditional shikara operations, raising both optimism and concerns. For decades, shikara rides have been integral to Jammu and Kashmir's tourism, with over 4,000 shikarawallas relying on them for livelihood. Traditionally, shikaras function as transportation to houseboats and joyrides for tourists, with fixed government rates of Rs. 800/hour, though actual pricing varies. Uber Shikara aims to address challenges such as pricing confusion by introducing standardized rates, online booking, and transparent pricing while compensating shikarawallas per government norms with additional commissions. While these changes promise ease for tourists and potential business growth, local shikarawallas fear competition and marginalization, citing parallels to disruptions faced by Kerala taxi drivers due to corporate entries. Dal Lake itself, a 18 sq. km freshwater body surrounded by the Zabarwan Mountains, is a key tourist attraction offering experiences such as houseboat stays, historic Mughal Gardens, cultural sites like Hazratbal, floating gardens, and the iconic Char Chinar.
- Filmmaker Payal Kapadia's "All We Imagine As Light", a Mumbai-set story about three women and their friendship, on Monday received two nominations at the 82nd Golden Globes in Best Motion Picture Non-English Language and the Best Direction - Motion Picture categories.
- Eminent filmmaker Shaji N. Karun has been selected for the J.C. Daniel Award for 2023, recognising his lifetime contribution to Malayalam cinema. The award, the highest honour in Malayalam cinema instituted by the Kerala government, includes a cash prize of ₹5 lakh, a citation, and a statuette. Mr. Karun has been able to infuse creative energy into the new wave cinema in Malayalam, a jury chaired by an earlier recipient of the award T.V. Chandran.
- The Supreme Court has exercised its extraordinary powers to grant permanent commission to a woman Army officer who was wrongly excluded from consideration despite her distinguished service record. The court observed that it would be unfair to deny relief to similarly situated individuals just because they didn't approach the court, with Justice Viswanathan noting that accepting such a stand would be "unreasonable". The verdict came on an appeal filed by a woman officer challenging a 2022 order of the Armed Forces Tribunal, and the court

directed the authorities to grant the officer permanent commission with effect from the same date as similarly situated officers, along with consequential benefits

- The Union Minister of Personnel, Public Grievances & Pensions has launched the "Amrit Gyaan Kosh" Portal, a joint initiative by the Capacity Building Commission and Karmayogi Bharat. The portal is a comprehensive repository of best practices in governance and policy implementation, developed on the iGOT platform, and aligns with 15 of the 17 Sustainable Development Goals (SDGs), covering critical themes such as health, education, and digital governance.
- The central government recently revised the prices of food items provided under the Pradhan Mantri Poshan Shakti Nirman (PM POSHAN) Scheme, previously known as the Mid-Day Meal Scheme. Renamed in 2021, this centrally sponsored program aims to improve the nutritional status of students and enhance school attendance, particularly among disadvantaged children. It provides one hot cooked meal daily to students in Balvatika (pre-primary) and Classes I–VIII in government and government-aided schools. The scheme addresses hunger and education by improving child nutrition, encouraging regular attendance, and offering nutritional support during summer vacations in drought-affected areas. The Labour Bureau calculates inflation for PM POSHAN items using the Consumer Price Index for Rural Labourers (CPI-RL), based on monthly data from 600 villages across 20 states. Recently, material costs for the scheme's food items were increased by 13.70% based on CPI-RL.
- The government is exploring a new approach to minimize financial burdens for developing an integrated township in Bidadi, involving a 99-year land lease model for developers. The project, spread across 8,000–10,000 acres, focuses on land pooling as the primary method and reserves land acquisition for small parcels. Similar projects in states like Maharashtra and Andhra Pradesh have been cited as references. The phased development plan for Bidadi includes government-led master development in Phase 1 (800–1,000 acres), land leasing to developers in Phase 2 (2,500–3,000 acres), and fully private development in Phase 3 (4,000–5,000 acres). Additional townships are proposed in Nandagudi, Solur, Ramanagara, and Sathnur. Challenges include securing farmer consent and addressing opposition from landowners to the proposed 50:50 or 60:40 development models, which would share developed land between government agencies and landowners.
- Prime Minister Narendra Modi launched LIC's Bima Sakhi Yojana in Panipat, Haryana, to promote insurance awareness in rural areas while empowering rural women by providing employment as insurance brokers (Bima Sakhis). The scheme aims to enhance financial literacy, increase insurance uptake in underserved regions, and support LIC's social welfare and corporate growth goals. It offers specialized training on insurance and financial literacy, enabling women to work as LIC agents and apply for development officer roles upon graduation. Eligible

participants must be women aged 18–70 years with at least a Class 10 education, excluding relatives of existing LIC agents or employees and retired LIC employees.

- Sanjay Malhotra has been appointed as the 26th Governor of the Reserve Bank of India (RBI) for a three-year term starting December 11, 2024, succeeding Shaktikanta Das. The Appointments Committee of the Cabinet approved his appointment, which comes amid critical challenges in the banking sector and preparations for the 2025 Union Budget. Malhotra, an IIT Kanpur graduate and a Princeton University alumnus, has held key positions, including Revenue Secretary and Financial Services Secretary. As RBI Governor, he will oversee banking regulation, fintech challenges, and monetary policy, chairing the Monetary Policy Committee (MPC) meetings from February. His appointment marks a significant step in tackling economic issues like GDP growth slowdown, persistent food inflation, and the evolving retail lending landscape. Established in 1935, the RBI has had 25 Governors, including notable figures like Dr. Manmohan Singh and Shaktikanta Das, and its Governor's role is equivalent to that of a Cabinet Secretary.
- The Indian Navy exemplifies enhanced collaboration through its focus on areas like artificial intelligence, cybersecurity, space exploration, and counter-terrorism, along with its efforts to strengthen partnerships with global allies. INS Tushil, a technologically advanced Krivak III-class frigate, highlights India's collaboration with Russia, featuring "Made in India" components and capabilities designed for blue water operations in air, surface, underwater, and electromagnetic domains. Part of the 2016 India-Russia agreement for four stealth frigates, two are being built in Russia and two in India at Goa Shipyard Ltd under a technology transfer agreement. These frigates boast advanced weapon systems for multi-role effectiveness. Despite construction delays due to COVID-19 and the Ukraine war, INS Tushil represents India's strides toward naval excellence. Additionally, the Indian Navy serves as a net security provider, ensuring safe maritime trade routes, combating piracy and smuggling, and offering humanitarian aid and disaster relief within the Indian Ocean Region, while promoting secure global commerce through strategic partnerships.
- As a preview to Aero India 2025, Swedish defence and aerospace company Saab unveiled a full-scale replica of its Gripen E fighter jet at the AeroSpace Park in Devanahalli, as part of the Bangalore Security Dialogue, co-hosted by the Takshashila Institution and Dynamatic Technologies. Saab plans to showcase a wide range of defence and security systems at Aero India 2025, scheduled from February 10 to 14 in Bengaluru. A key highlight of Saab's participation is its blueprint to indigenise Gripen E production in India under the Multi-Role Fighter Aircraft (MRFA) programme, responding to a 2018 Request for Information for 114 MRFA units for the Indian Air Force. Saab intends to transfer critical technologies to support local manufacturing of the Gripen E, which features modular software allowing Indian Air Force technicians to perform upgrades in days instead of months, a significant advantage. The Gripen E is also capable of carrying a variety

of weapons, including Indian-made munitions. With advanced capabilities like enhanced sensing, AI-driven data processing, and cutting-edge networking, the Gripen E offers a major upgrade over previous models

- United Nations honored ecologist Madhav Gadgil with the prestigious Champions of the Earth award for his pioneering work in the Western Ghats, a globally recognized biodiversity hotspot. As the only Indian recipient this year, Gadgil chaired the Western Ghats Ecology Expert Panel, which studied the impacts of population pressure, climate change, and development on the ecologically sensitive region. The panel's 2011 recommendations included declaring the entire Western Ghats as an Ecologically Sensitive Area (ESA) and banning activities like mining and large-scale energy projects in its most sensitive zones. Despite facing opposition from various stakeholders, Gadgil expressed satisfaction in his honest, fact-based reports that sparked crucial discussions. He remains optimistic that increased public awareness and organization will help combat environmental degradation. His efforts contributed to the UNESCO's designation of the Western Ghats as a World Heritage Site in 2012, and later led to the formation of a working group aimed at ensuring its ecological protection.
- The Bangalore Metro Rail Corporation Ltd. (BMRCL) has signed a Memorandum of Understanding (MoU) with Bagmane Developers Pvt. Ltd. for constructing the DRDO Sports Complex Metro Station as part of the Blue Line (Phase-2A) of Namma Metro. This is the third MoU for the Blue Line, and Bagmane Developers will fund ₹40 crore for naming rights for 20 years. Additionally, for ₹10 crore per station, direct connectivity from the concourse level to Bagmane's campuses at Seetharamapalya, Bellandur, and ISRO metro stations will be established for 30 years, subject to State government approval. The project, funded through an Innovative Financing Mechanism, has already received a ₹10 crore advance. The 17 km Blue Line, connecting Central Silk Board to K.R. Pura via 13 stations along the Outer Ring Road, aims to provide a sustainable, efficient mobility alternative for Bengaluru's residents, IT employees, and commuters, reducing traffic congestion and environmental pollution.
- Mahadevapura zone, as has been trend, has topped the list of eight zones under the Bruhat Bengaluru Mahanagara Palike (BBMP) in property tax collection.
- Mohammad al- Bashir named Syria's interim PM
- The Subaru Telescope recently captured a pair of interacting galaxies designated as NGC 5257 and NGC 5258.
- A recent study published in the prestigious journal 'Food Frontiers' highlighted that extract from a traditional fermented bamboo shoot variety of Tripura, popularly called 'Melye-amiley' has anti-obesity effects.
- Recently, researchers from the National Institute of Science Education and Research (NISER) in Odisha, studied a unique triple-star system called GG Tau A.
- Scientists from the University of Bristol and the UK Atomic Energy Authority have developed the world's first carbon-14 diamond battery, a groundbreaking innovation combining radioactive decay, synthetic diamonds, and plasma

chemistry. This battery uses carbon-14, a radioactive isotope with a half-life of 5,700 years, chosen for its short-range radiation that is easily absorbed by solid materials. Operating similarly to solar panels, it captures fast-moving electrons from within the diamond structure rather than light particles. The applications are extensive: it could revolutionize healthcare by powering devices like pacemakers and hearing aids, eliminating the need for frequent battery replacements. Furthermore, it holds promise for extreme environments, such as space missions and remote terrestrial locations, where traditional battery replacement is impractical, ensuring long-lasting and reliable energy sources.

- Researchers at IIT-Delhi have developed AgeXtend, an artificial intelligence (AI)-powered platform designed to discover molecules that could slow down ageing and promote healthier lives.
- The World Health Organization's (WHO) latest World Malaria Report (2024) reveals significant progress against malaria in the South East Asia Region, with estimated cases falling by 82.4% from 22.8 million in 2000 to 4 million in 2023. India accounted for about half of all estimated cases in 2023, followed by Indonesia, and together they accounted for about 88% of malaria deaths in the region. Despite this progress, malaria remains a serious global health threat, with an estimated 2.2 billion cases and 12.7 million deaths averted since 2000. As of November 2024, 44 countries and one territory have been certified malaria-free by WHO.
- The Central Road Research Institute (CRRI), a part of the Council of Scientific and Industrial Research (CSIR), has collaborated with the Bruhat Bengaluru Mahanagara Palike (BBMP) to tackle Bengaluru's road issues through innovative, eco-friendly methods. On Avenue Road, near Anjani Temple, CRRI conducted a pilot project using Ecofix technology, which repairs potholes with a mix of industrial waste like steel slag aggregates and a customised binder, even in waterlogged conditions without dewatering. Developed by Dr. Satish Pandey of CSIR-CRRI and tested in multiple Indian states, this durable solution is set to be adopted by BBMP during monsoons when hot mix plants are inactive. With India generating 19 million tonnes of steel slag annually, projected to reach 60 million tonnes by 2030, Ecofix not only ensures sustainable road maintenance but also advances eco-friendly waste management practices.
- Saudi Arabia will host the men's football World Cup in 2034 while the 2030 edition will be held in Spain, Portugal and Morocco, with one-off matches in three South American countries, world football's governing body FIFA
- American Express, in partnership with Safe Water Network, has launched a three-year initiative called Program Vasundhara to promote environmental sustainability, biodiversity conservation, and climate resilience in Bengaluru and Gurugram. Key efforts include constructing an 18-million-liter rainwater harvesting structure at Aivarakhandapura Lake in Bengaluru to improve local water availability and providing AI-powered weather insights to help farmers with crop management. In Gurugram, the program focuses on reforestation in the Aravalli region by planting 15,000 trees, restoring 10,000 hectares of land, and

implementing solar solutions in public spaces to lower carbon emissions. Additionally, nearly 1,000 women from 85 villages will receive training to launch sustainable agricultural and conservation enterprises. The program emphasizes ecosystem restoration, climate action, community engagement, capacity building, and knowledge-sharing to align with India's sustainability goals.

- The Centre will bear an additional cost of ₹425.62 crore in the financial year 2024-25 due to inflation under the Centrally Sponsored PM POSHAN Scheme, which replaced the Mid-Day Meal Scheme in 2021 with a financial outlay of ₹1.31 trillion for 2021-26. Covering 11.7 crore students in Classes 1 to 8 and Balvatika in government and government-aided schools, the scheme provides 100-150 grams of food grains daily and ensures at least 700 calories of nutritional intake. Key features include school nutrition gardens, supplementary nutrition in aspirational districts, Tithi Bhojan for special meals, and Direct Benefit Transfers (DBT) to eliminate leakages. Recent adjustments increased material costs to ₹6.19 and ₹9.29 per meal for primary and upper primary students respectively, with revised nutritional provisions such as pulses, vegetables, and oil. States contribute additional resources, while the Centre provides full foodgrain support, including transport and subsidies, ensuring meal costs of ₹11.54 for primary and ₹16.74 for upper primary students.
- The Reserve Bank of India's (RBI) latest surveys highlight declining consumer confidence regarding the general economic situation, employment, income, and spending habits, with the Current Situation Index (CSI) dropping to 94.0 in November 2024, while the Future Expectations Index (FEI) slightly improved to 121.9, reflecting optimism about future income and spending despite concerns over inflation, which saw the median perception rise to 8.4%, alongside revised inflation forecasts for FY2025 due to rising food prices and housing costs; these findings from the Consumer Confidence Survey (CCS) and Inflation Expectations Survey guide monetary and fiscal policy adjustments to address economic challenges.
- Indian scientists at the Centre for Stem Cell Research (CSCR), Christian Medical College, Vellore, led by Alok Srivastava and funded by the Union Department of Biotechnology, have developed a novel gene therapy for severe haemophilia A, a rare hereditary bleeding disorder, without using adenoviruses. Tested on five patients in Tamil Nadu, the therapy successfully prevented bleeding episodes over 14 months, offering a promising alternative to conventional treatments like frequent Factor VIII injections, monoclonal antibodies, and costly long-term management that can exceed ₹2.54 crore per patient over a decade. Unlike existing FDA-approved gene therapies like Roctavian, which require immune suppression and use adenoviruses, this Indian innovation demonstrates a cost-effective, one-time solution with reduced bleeding incidents, addressing the needs of India's large patient pool of 40,000–1,00,000 individuals.
- The BLE Gateway and Node System, developed under the National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS) by the Department of Science

and Technology (DST) with a funding of ₹110 crore, aims to revolutionize IoT applications across agriculture, logistics, and smart cities. Key features include connectivity through 4G, Wi-Fi, and LAN; long-range communication up to 1 km (line-of-sight); and the ability to manage over 100 connected BLE nodes. Its weatherproof, compact design and low power consumption make it cost-effective and durable, while wireless connectivity reduces installation costs. Integration with mobile apps, cloud platforms, and various sensors supports remote monitoring, data security through BLE encryption, and scalability. Sector-specific benefits include precision farming, logistics optimization, and smart city applications, with real-time data monitoring and energy-efficient solutions ensuring operational efficiency and security.

- Researchers from Bengaluru's Raman Research Institute (RRI) have identified the Indian Astronomical Observatory (IAO) in Hanle, Ladakh, as the most suitable site for space-based quantum communication, outperforming other evaluated locations like Mount Abu, Rajasthan, and ARIES, Nainital. Quantum-Key Distribution (QKD), a secure communication method leveraging quantum mechanics, ensures data protection by exposing eavesdropping through invasive quantum measurements. With applications in banking, defence, and healthcare, QKD operates in the terahertz (THz) range, far surpassing classical communication frequencies. The IAO's dry, cold environment, low atmospheric pressure, and minimal water vapour result in the least signal loss, making it an optimal location for advancing quantum communication.
- Uber has launched "Moto Women" in Bengaluru, offering women-only bike rides with over 300 women drivers onboard. The service aims to address safety and privacy concerns while providing flexible earning opportunities for women drivers. Moto Women integrates existing safety features, including real-time trip sharing, anonymisation of phone numbers, and monitoring irregularities. The service aims to encourage more women to become bike taxi drivers, contributing to increased workforce participation, with plans to double the number of women bike taxi drivers by Q1 2025.
- The Asian Development Bank (ADB) announced that it had approved a \$788.8-million results-based loan to Andhra Pradesh to develop Amaravati as a green and smart capital city with world-class infrastructure.
- Dommaraju Gukesh, all of 18-years, scripted history to become the youngest ever Classical World Chess Champion by defeating reigning Champion Ding Liren of China with a 7.5-6.5 score at Singapore. This was the first-ever World championship match contested by two Asian players. Gukesh is only the third Asian to win the World championship. Viswanathan Anand, who is now a mentor for Gukesh, was the first, and Ding the second.
- Bengaluru's ecology, already under strain from a scorching summer and water crisis, faces another critical threat: the encroachment of forest land. Of the city's 26,077 acres of forest across five taluks—Anekal, Bengaluru South, Yelahanka, Bengaluru East, and Bengaluru North—over 2,665 acres have been encroached

upon, with Anekal, the largest taluk, being the most affected. Bengaluru South and Bengaluru East also report significant encroachments, with the latter losing 573 of its 1,485 acres. Alarming, the city has seen its vegetation cover shrink from 68% in 1973 to less than 4% in 2023, a decline flagged by environmental experts like T.V. Ramachandra of IISc. He warns that diminishing forest ecosystems, vital for oxygen generation, carbon removal, and groundwater recharge, are exacerbating the city's water woes, as reduced infiltration and water retention now limit waterbody sustenance to the monsoon season.

- ISRO successfully conducted the sea-level hot test of its CE20 cryogenic engine at the ISRO Propulsion Complex in Mahendragiri, Tamil Nadu. This critical test, which featured restart-enabling systems, is an important step for future missions. Testing the CE20 at sea level presents challenges due to its high area ratio nozzle, with an exit pressure of around 50 mbar. One major concern during such tests is flow separation inside the nozzle, leading to vibrations and thermal issues that could cause mechanical damage. To address this, ISRO devised an innovative Nozzle Protection System for a cost-effective, less complex testing procedure. Additionally, the test evaluated the multi-element igniter, where only the first element was activated, and the performance of the other two elements was monitored. The test results showed that both the engine and facility performance were normal, and the engine met the required performance parameters. The CE20 engine, developed by ISRO's Liquid Propulsion Systems Centre, powers the upper stage of the Launch Vehicle Mark-3 (LVM3) and has successfully supported six LVM3 missions, achieving a thrust level of 19 tonnes.
- The Comptroller and Auditor General (CAG) of India's report on Public Health Infrastructure and Management of Health Services has highlighted inadequate implementation of the Karnataka Integrated Public Health Policy, citing the absence of prescribed norms or the failure to adopt existing national standards. The report, which covers the period from 2016 to 2022, pointed out that in cases where norms were set, they did not align with national standards. It also noted that the State government's manpower norms fell short of the Indian Public Health Standards (IPHS), particularly for hospitals with over 300 beds, where staffing requirements were not specified. The report observed a lack of systematic analysis to revise staff numbers, with vacancies for doctors, nurses, and paramedics ranging from 29% to 53%, and disparities across various hospital tiers. The shortage of doctors, particularly in tertiary care facilities, and a 59% vacancy in AYUSH hospitals raised concerns about service quality. Maternity services were also impacted by staff shortages, lack of drugs, and non-availability of prescribed pathological investigations, with stillbirth rates ranging from zero to 44.19 in the test-checked hospitals.
- A team of researchers from the Bengaluru-based Ashoka Trust for Research in Ecology and the Environment (ATREE), along with their collaborators, has discovered five new species of Darwin wasps from India and Thailand. These wasps, which are parasitic and have larvae that consume their hosts from within,

represent the first documentation of the Microleptinae subfamily in India. The Ichneumonidae family, which includes 42 subfamilies, has Microleptinae as one of its smallest, with a single genus, Microleptes, containing 14 known species worldwide. The subfamily is primarily found in the Palaearctic, Nearctic, and Oriental regions, with the only previously known species from the Oriental region being *Microleptes malaisei* from Myanmar. The newly described species include four from India—*Microleptes chiani*, *M. gowrishankari*, *M. sandeshkaduri*, and *M. tehriensis*—and one from Thailand, *M. depressus*. These species are named in honor of individuals and locations significant to the researchers and their work, such as Tamilazhagan (Chian), Dr. P. Gowri Shankar, Sandesh Kadur, and Tehri in Uttarakhand.

- President Droupadi Murmu conferred the honorary rank of 'General of Indian Army' on Nepal's Army chief General Ashok Raj Sigdel. The honour was given to him for his commendable military prowess and immeasurable contribution to further fostering Nepal's long and friendly association with India, according to a statement issued by the President's office. There has been a tradition set by Nepal and India since 1950 of conferring the title of Honorary General on the Army chief of each other. Nepal's President Ramchandra Paudel last month conferred the honorary rank on Indian Army Chief General Upendra Dwivedi at a special ceremony — also known as Sheetal Niwas — in Kathmandu.
- An impressive shuttle cock-inspired design of the High-Performance Centre inside the Kalinga Stadium Complex here catches one's eyes as you walk past the Aquatic Centre. Named 'Shuttle by Dalmia Bharat', the Dalmia Bharat-Gopichand High Performance Centre for badminton here was the cynosure of attention on Thursday evening when it was inaugurated by Odisha Chief Minister Mohan Charan Majhi and Himanta Biswa Sharma, the Assam Chief Minister and also the president of Badminton Association of India. The centre, a three-way collaboration between the Odisha Government, Pullela Gopichand Foundation and the Dalmia Bharat Group, spans an indoor area of 77,000 sq.ft. housing eight courts with residential and other facilities for young players.
- Gruha Lakshmi benefits paid to gender minorities
- Union Minister for Ports and Shipping Sarbananda Sonowal informed that the Inland Waterways Authority of India (IWAI), under the Ministry of Ports, Shipping, and Waterways, has signed an MoU with the Karnataka Tourism Department for developing River Kabini and River Sharavathi. Environmental Impact Assessment (EIA) and Environmental Management Plans have been tendered to establish floating jetties and navigational aids. Replying to MP Vishweshwar Hegde Kageri, the Minister noted Karnataka has 12 declared National Waterways. Meanwhile, Union Road Transport Minister Nitin Gadkari stated that the four-laning of the Mala Gate to Karkala stretch on NH-169 (Shivamogga-Mangaluru section), sanctioned for Rs. 177.94 crore in March 2022, is 65% complete and will finish by February 2025. Two-laning of NH-169A on Agumbe Ghat has been included in the 2024-25 Annual Plan, he informed Udupi-Chikmagalur MP Kota Srinivas Poojary.

Additionally, Minister of State for Chemicals and Fertilizers Anupriya Patel disclosed that 814 Jan Aushadhi Kendras (JAKs) were opened and 145 closed in Karnataka between FY 2019-20 and FY 2023-24, with 10-12 lakh consumers utilizing medicines daily from over 14,300 JAKs nationwide, as per her response to Bangalore Central MP P C Mohan.

- Revenue Minister Krishna Byre Gowda said the government had decided to take up remodelling and development of 'rajakaluves'
- The Karnataka State government is set to take a loan of ₹3,000 crore from the World Bank for the development of Bengaluru's rajakaluves (main stormwater drains) as well as underground drainage.
- The United States of America has developed a new anti-missile system called Dark Eagle and is nearing operational readiness after a successful test flight.
- The Malayan Night Heron, a migratory bird from Southeast Asia, has been officially recorded in Madurai for the first time, near the Alagar Kovil hills
- Recently, a team of scientists has claimed that Manganese (Mn) contamination of water is causing cancer in the Gangetic plains of Bihar.
- The Karnataka state government has announced plans to utilize the interest earned on a corpus fund of Rs 47 crore to treat rare disorders, primarily benefiting individuals from the Scheduled Castes and Scheduled Tribes. The corpus fund, managed by the Suvarna Arogya Suraksha Trust (SAST), will cover treatment costs for 17 rare diseases, with SAST officials tasked with identifying suitable treatment methods and estimating costs. Notably, diseases covered under state or central schemes, or the National Policy for Rare Diseases, will be excluded from this corpus fund's support
- The Karnataka Renewable Energy Development Limited (KREDL) has been awarded the second prize in the State Energy Efficiency Performance Award (SDA Group-1) category at the National Energy Conservation Awards 2024. The award ceremony, organised by the Bureau of Energy Efficiency (BEE) under the Ministry of Power, was held at Vigyan Bhavan, New Delhi
- The Kalaburagi district administration has launched an initiative to empower women by leveraging their traditional cooking skills, specifically making jowar and bajra 'rottis', a staple in north Karnataka. The initiative, Kalaburagi Rotti, brings women producers onto a cooperative platform, selling their products online and soon offline through franchisee outlets, providing employment to around 500 people, including 100 women and self-help groups.
- The Ram Temple project in Ayodhya bagged the Sword of Honour award from the British Safety Council, said Nripendra Misra, chairman of the construction committee of Shri Ram Janmbhoomi Teerth Kshetra Trust
- Mumbai defeated a fighting Madhya Pradesh by five wickets to emerge the Syed Mushtaq Ali Trophy champion
- Union Health Minister JP Nadda officially launch the ambitious 100-Day TB Elimination Campaign in Panchkula, Haryana on December 7, 2024. The campaign, focused on enhancing detection, reducing diagnostic delays and improving

treatment outcomes, will be implemented in 347 districts of 33 states where the prevalence of the disease is higher.

- The RBI has created an AI-powered model called MuleHunter.AI, which could reduce digital fraud by helping banks deal with the increasing problem of “mule” bank accounts.
- Manama Dialogue is a forum for ministers, policymakers, and decision-makers to debate the Middle East’s most pressing foreign-policy, defence and security challenges. The dialogue was held from 6-8 December and was attended by External Affairs Minister S Jaishankar. Held annually since 2004 in the Kingdom of Bahrain, the Dialogue is a central element of the Middle East’s security architecture. The theme of the 20th edition of the event was ‘Middle East leadership in shaping regional prosperity and security’.
- Celebrating the significance of social justice and literary excellence, the 2024 Vaikom Award was conferred upon Devanur Mahadeva, one of Kannada literature’s most celebrated voices and a lifelong advocate for the oppressed. The Vaikom Award, instituted in 2023 to honour individuals or organisations from across India who embody the values of equality and justice, recognises Mahadeva’s extensive work in advocating for Dalit rights, his literary achievements, and his ideological synthesis of Gandhi and Ambedkar’s philosophies.
- The Tokyo Metropolitan Government has announced intentions to implement a four-day workweek for its employees, in an effort to address Japan’s record-low birth rates and assist young families.
- Ireland is providing an intriguing chance for residents with the necessary immigration documents to relocate to its picturesque offshore villages. As part of the ‘Our Living Islands’ initiative, the government is offering major economic incentives to attract people to move to the country’s islands. According to Euro News, this program intends to revitalise Ireland’s offshore communities and secure their long-term survival.
- Recently, the Indian Space Research Organisation (ISRO) successfully conducted the sea-level hot test of its CE20 cryogenic engine, an indigenous engine developed by the Liquid Propulsion Systems Centre of ISRO. The CE20 engine powers the upper stage of the LVM3 launch vehicle and has been qualified to operate at a thrust level of 19 tonnes, successfully supporting six LVM3 missions so far. For the Gaganyaan mission, it was recently upgraded to operate at a thrust level of 20 tonnes, with further enhancement to 22 tonnes for the future C32 stage to improve the payload capacity of LVM3. Notably, the engine features an innovative Nozzle Protection System to address earlier complexities in testing. Key achievements of the recent test include the successful operation of an engine with a nozzle area ratio of 100, the evaluation of a multi-element igniter by activating only the first element, and the confirmation of normal engine and facility performance. This test represents a significant milestone in ISRO's indigenous engine development, highlighting its capability to overcome complex rocket propulsion challenges and further enhancing its technological edge.

- In a successful conservation initiative, the white-winged wood duck (deo hanh in Assamese), the state bird of Assam, has been spotted in an artificial pond, "Neelmoni Beel," at Nameri Tiger Reserve (NTR).
- Recently, the Indian Institute of Technology-Madras (IIT-M) released highly detailed 3D images of a foetal brain named, Dharini.
- Recently, the exercise Desert Knight was launched over the Arabian Sea to boost military interoperability and enhance defence ties. It is a trilateral air combat exercise between India, France and the UAE.
- The 1,300-year-old Abathsahayeswarar Temple in Thukkatchi, Thanjavur district, Tamil Nadu, has been selected by UNESCO to receive the Asia-Pacific Awards for Cultural Heritage Conservation. Built during the reigns of Kings Vikrama Chola and Kulothunga Chola, the temple is a testament to the Chola dynasty's architectural brilliance and spiritual legacy. Historically, the village was named Vikrama Chozheeswaram and Kulothunga Chola Nallur, honoring these rulers, with Kulothunga Chola installing the idol of Aadhi Sarabeshwarar in the temple. The temple houses multiple deities, including Soundaryanayaki Ambal and Ashtabhuja Durga Parameshwari, and comprises five prakarams (enclosures). The UNESCO Asia-Pacific Awards for Cultural Heritage Conservation, established in 2000, recognize efforts by individuals and organizations in restoring, conserving, and transforming heritage structures in the region. These awards encourage private initiatives and public-private partnerships to preserve historic properties, promoting community involvement in conservation projects.
- The Jalvahak Scheme was launched by the Union Minister for Ports, Shipping, and Waterways, Sarbananda Sonowal, to boost long-haul cargo movement via inland waterways. The scheme offers up to 35% reimbursement of total operating expenditure to incentivize the transport of cargo on National Waterways (NW)-1, NW-2, and NW-16. It features fixed scheduled services from Haldia on NW-1 (Ganga) and NW-2 (Brahmaputra), ensuring timely delivery of cargo. The scheme promotes economic benefits by reducing transportation costs and ecological advantages by encouraging environment-friendly cargo movement. The scheme helps alleviate congestion in railways and roadways, improving overall freight movement efficiency. The routes covered include Kolkata → Patna → Varanasi → Patna → Kolkata on NW-1 and Kolkata → Pandu (Guwahati) on NW-2. Key beneficiaries of this scheme are major shipping companies, freight forwarders, trade bodies, and cargo owners. The scheme is initially valid for three years, with its first milestone marked by the flagging off of cargo ships like MV AAI, MV Homi Bhaba, and MV Trishul from G.R. Jetty, Kolkata. UltraTech Cement became the first industry user to leverage NW-1 for large-scale gypsum transport.
- Ladakh's Indian Astronomical Observatory (IAO) in Hanle has been identified as an ideal site for space-based quantum communication, according to a study by researchers from the Raman Research Institute (RRI) in Bengaluru. The study evaluated multiple sites, including Mount Abu and the Aryabhata Research Institute of Observational Sciences (ARIES) in Nainital, but found IAO's dry, cold

conditions and low atmospheric pressure make it optimal for quantum-key distribution (QKD). QKD is a secure communication method that leverages quantum mechanics to detect eavesdropping attempts, offering enhanced security for industries like banking, defense, and healthcare. The IAO's environment ensures minimal signal loss due to factors such as low water vapor and oxygen concentrations.

- IIT Madras has achieved a significant milestone by completing a 410-meter test track for the Hyperloop train, marking an important advancement in transportation technology. The project is led by the Avishkar Hyperloop team at IIT Madras and involves a collaboration with TuTr, a startup incubated at the institution. The team comprises 76 undergraduates and postgraduates, working towards revolutionizing transportation with the Hyperloop concept, which was first popularized by Elon Musk in 2012. Hyperloop trains operate in a vacuum-sealed, frictionless environment, allowing them to reach speeds up to 1,100 km/h, with an expected operational speed of 360 km/h. The Mumbai-Pune corridor is slated to be the first full-scale Hyperloop system in India, promising to reduce travel time between the two cities to just 25 minutes.
- Britain has joined the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), becoming the first European nation to do so. This marks the UK's biggest trade deal since Brexit. The CPTPP is a free trade agreement formed in 2018 that aims to reduce trade barriers among its 12 members, which include countries like Japan, Canada, and Australia. With Britain's accession, the economic impact is expected to boost the UK economy by £2.0 billion annually. The deal facilitates tariff reductions, stronger commitments to open services, and protection for foreign companies, while countering China's economic influence in the Indo-Pacific region.
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Protection System to address earlier complexities in testing. Key achievements of the recent test include the successful operation of an engine with a nozzle area ratio of 100, the evaluation of a multi-element igniter by activating only the first element, and the confirmation of normal engine and facility performance. This test represents a significant milestone in ISRO's indigenous engine development, highlighting its capability to overcome complex rocket propulsion challenges and further enhancing its technological edge.

- More than half of the Metro stations proposed on the 36-km Hebbal-Sarjapur corridor will feature additional space for parking and property development, marking a significant shift in the approach of Namma Metro, which has traditionally been conservative in these areas. This change in strategy aims to enhance the non-fare revenue component and reduce reliance on state government grants. The detailed project report (DPR) outlines plans for approximately 15 lakh square feet of commercial development and 2 lakh square feet of parking space across 17 of the 28 stations on the line, some of which will be underground. Certain stations will also allocate up to 1.6 lakh square feet of built-up area for non-Metro purposes, such as malls and office spaces. In a move to maximize commercial potential, BMRL is keen on collaborating with private developers for the development of these spaces.
- The department of higher education has signed an MoU with the British Council for sending girls to the United Kingdom to pursue postgraduate programmes under the 'Chevening Scholarship for Women' initiative.
- Tulsi Gowda, a Padma Shri award-winning environmentalist who is said to have planted and cared for over a lakh trees, died due to age-related illness at her Honnali home in Ankola taluk. She was 86. She is survived by a son and a daughter. Known as 'Encyclopedia of Forests' for her immense knowledge of local trees, Tulsi Gowda, a member of Halakki Vokkaliga tribe, had devoted her life to transforming vast tracts of barren land into dense forest in Ankola taluk. She worked at a nursery of the Forest department for sustenance. She was honoured with the Rajyotsava award and Indira Priyadarshini award in 1999. The Government of India bestowed her with Padma Shri in 2020.
- The Centre highlighted the alarming groundwater situation in Bengaluru, with an overall extraction rate of 150.84%. Situation in Bengaluru was particularly dire, with regions like Yelahanka extracting over 225% of its available groundwater. Other areas, including Bengaluru North, East, and South, reported extraction rates exceeding 200%, and the city center itself recorded an extraction rate of 217.4%. The minister also mentioned that Delhi's groundwater resources were under significant strain, with an overall extraction rate of 99.13%, categorizing it as 'critical'. While groundwater recharge technologies could aid in water conservation, he acknowledged that their scalability was limited by infrastructure and feasibility challenges.
- According to a new report by the Centre for Science and Environment (CSE), less than one-third of India's urban wastewater and sewage are treated, with over 70%

of untreated wastewater flowing into rivers, lakes, and land, severely contaminating the environment. The report highlights that only 28% of urban sewage is treated, leaving 72% untreated, which contributes to environmental degradation. It also reveals that 20% of groundwater blocks are critically overexploited, 55% of households lack proper drainage, and 91% of river stretches are polluted. India's per capita water availability has been declining steadily, from 5,200 cubic meters in the 1950s to 1,545 cubic meters today, signaling growing water stress. The CSE emphasizes the need for wastewater reuse to address water scarcity, a concern compounded by rapid urbanization, industrial growth, and climate change. Although the Jal Shakti Ministry mandates that cities recycle at least 20% of their water, the situation varies by state. In Karnataka, only 43% of sewage is treated, primarily for lake recharge and irrigation, with Bengaluru treating over 75% of its wastewater for aquifer recharge. The report stresses the need for better groundwater monitoring and expanded wastewater reuse programs in cities like Bengaluru, Chennai, and Nagpur, where efforts have begun but are still limited.

- Eleven Indian workers of a restaurant at a ski resort in Gudauri in Georgia recently died, apparently due to carbon monoxide poisoning caused by a power generator.
- The Parliamentary Standing Committee on Labour, led by BJP leader Basavaraj Bommai, has recommended that the Centre increase the ₹1,000 minimum pension provided by the Employees Provident Fund Organisation (EPFO) under its Employees Pension Scheme (EPS). Trade unions and pensioners' associations have long called for an increase. The committee's report, tabled in Parliament on Monday, highlighted that more than a decade has passed since the minimum pension was set at ₹1,000 per month. The report noted that, considering the significant rise in the cost of living from 2014 to 2024, there is a strong need to revise the amount. The committee urged the Ministry/EPFO to address this matter urgently and sympathetically, taking into account the welfare of affected pensioners and their families. Under the EPS, the Union government contributes 1.16% of wages, with a ceiling of ₹15,000 per month, and a grant-in-aid is provided to cover the difference between the ₹1,000 minimum pension and the actual member pension. The committee also pointed out that in 2023-24, over 20 lakh pensioners were receiving the minimum pension, and the total grant-in-aid for this purpose amounted to ₹957.55 crore. Furthermore, the committee emphasized the need for intensified efforts to implement the four Labour Codes, which have yet to be enforced, urging the Ministry to work closely with States and Union Territories to ensure timely implementation.
- Tata Steel Ltd. said it operationalised an all-woman shift at its Noamundi Iron Mine reinforcing its commitment to women's empowerment.
- In a recent case, the Supreme Court explained the Henderson Doctrine, a natural corollary of the Indian doctrine of constructive res judicata. The Henderson Doctrine, propounded in the English case Henderson v. Henderson (1843), asserts that all issues arising from the same subject matter in litigation must be addressed

in a single suit. It prohibits relitigating matters that could or should have been raised in prior proceedings. The doctrine emphasizes that once a matter becomes the subject of litigation in a court of competent jurisdiction, the parties involved must present their entire case. It further holds that the principle of res judicata applies not only to the issues adjudicated by the court but also to any issue that properly belongs to the subject of litigation and could have been raised at the time. The core idea is to prevent repetitive and vexatious legal challenges by barring the re-litigation of claims and issues that could and should have been raised earlier, except in exceptional circumstances.

- A little bunting bird, never before seen in Rajasthan, has been spotted in Mount Abu recently. The Little Bunting (*Emberiza pusilla*) is a passerine bird from the bunting family (*Emberizidae*). It is found across the taiga of northeastern Europe and northern Euro-Siberia, extending to the Russian Far East, and is migratory, wintering in subtropical regions of northern India, southern China, and parts of Southeast Asia. This small bird measures only 12–14 cm (4.7–5.5 in) in length, with white underparts marked by dark streaks on the breast and sides. Its chestnut face and white malar stripe resemble a small female reed bunting, but it also has black crown stripes, a white eye ring, and a fine dark border behind its chestnut cheeks. Both sexes appear similar. The bird's call is a distinctive "zik," while its song consists of a rolling "siroo-sir-sir-siroo." Listed as "Least Concern" on the IUCN Red List, the Little Bunting is a notable addition to Rajasthan's avian diversity.
- K-RIDE has achieved a milestone by launching India's longest single-span precast U-girder, measuring 31 meters, on the Mallige Line of the Bengaluru Suburban Railway Project (BSRP). Cast in January 2024 at Gollahalli, the U-girder was installed at Yeshwantpur, forming part of the Baiyappanahalli-Chikkabanavara line. As the implementing agency for the 149-km BSRP, K-RIDE is deploying U-girders, which are pre-tensioned, precast, and U-shaped, to enhance quality and reduce construction time by minimizing the number of foundations and piers. While metro projects typically use 28-meter-long U-girders, BSRP's 450 U-girders, including 60 cast so far at Gollahalli, will be longer, spanning the eight-kilometer elevated section between Hebbal and Yeshwantpur, with the Mallige Line slated for completion by December 2026.
- The influential Eastern Nagaland People's Organisation (ENPO) has accepted the Centre's offer of a "unique arrangement with executive, legislative, and financial autonomy" for the proposed 'Frontier Nagaland Territory' (FNT), encompassing six districts—Mon, Tuensang, Kiphire, Longleng, Noklak, and Shamator. Despite reiterating their demand for separate statehood, the ENPO acknowledged the current challenges faced by the Government of India and temporarily accepted the FNT proposal during a tripartite meeting with the Home Ministry. This development follows boycotts of the 2024 Lok Sabha and civic polls by voters in these districts in support of their statehood demand. The ENPO expressed optimism about the ongoing negotiations, with the next meeting scheduled for

January to address unresolved issues, while emphasizing their hope that the Centre will honour its proposed arrangement in the interest of the region's people.

- Akin to the protective PPE kits that health workers don, scientists affiliated to the Department of Biotechnology (DBT) have developed an 'anti-pesticide' suit called Kisan Kavach. The suit is intended to protect farm labourers from imbibing the pesticides they spray. Several of the common pesticides are potential neurotoxins and detrimental to health. The kit consists of a trouser, pullover, and a face-cover made of 'oxime fabric' that can chemically breakdown any of the common pesticides that get sprayed onto cloth or body during spraying operations. This prevents chemicals from leaching into the skin. The price per kit is ₹4,000.
- A parliamentary Standing Committee on Agriculture, led by Congress leader Charanjit Singh Channi, has recommended a legally guaranteed Minimum Support Price (MSP) for crops, emphasizing its potential to address farmer suicides and improve rural livelihoods. The report, tabled in Parliament, called for doubling the PM-KISAN scheme's financial assistance to ₹12,000 annually and extending benefits to tenant farmers and laborers. The committee argued that a legal MSP would enhance rural economic growth, stimulate local businesses, and ensure national food security. Assured income through MSP could enable farmers to invest in sustainable practices, mitigate market risks, and alleviate debt burdens, significantly reducing distress. The panel urged the government to outline a roadmap for implementing MSP as a legal guarantee, predicting it as a transformative step for Indian agriculture.
- Real Madrid's Vinicius Junior was crowned FIFA Best Men's Player-of-the-Year at a ceremony on Tuesday, while Barcelona's Aitana Bonmati secured the women's prize for the second time. Vinicius, who recently placed second in the Ballon d'Or, accepted the award in Qatar as Real Madrid prepared for their Intercontinental Cup final against Mexico's Pachuca. Other honorees included Carlo Ancelotti (Men's Coach), Emma Hayes (Women's Coach), Emiliano Martinez (Men's Goalkeeper), Alyssa Naehar (Women's Goalkeeper), Alejandro Garnacho (Puskas Award), Marta (Marta Award), Thiago Maia (FIFA Fair Play Award), and Guilherme Gandra Moura (FIFA Fan Award).
- India is set to host the World Boxing Cup Final in November next year, reaffirming its support for the breakaway World Boxing body. The Boxing Federation of India will also simultaneously host the third World Boxing Congress, which will include elections for the presidency and executive board. The tournament will be the first international event hosted by the BFI after opting to join the new governing body earlier this year.
- India has established its first diabetes biobank at the Madras Diabetes Research Foundation (MDRF) in Chennai, in collaboration with the Indian Council of Medical Research (ICMR).
- Recently, scientists have discovered a chemical pathway that exacerbates air quality in extremely cold winters, involving the formation of

hydroxymethanesulphonate in aerosol particles. Published in Science Advances, the study highlights how aerosol chemistry changes under supercooled conditions in cold regions. Hydroxymethanesulphonate, a secondary aerosol, forms when formaldehyde reacts with sulfur dioxide in the presence of liquid water, and while it was previously thought to occur only in clouds and fog, it has now been observed in aerosol particles during Fairbanks winters. Extremely low temperatures (around -35°C) cause supercooling of aerosol particles, allowing liquid water to remain unfrozen and enabling hydroxymethanesulphonate formation. The study also explores aerosol acidity dynamics, which are influenced by the relative concentrations of sulfate ions (SO_4^{2-}) that increase acidity and ammonium ions (NH_4^+) that neutralize it. Following the 2022 sulfur fuel ban in Fairbanks, sulfate ion concentrations decreased, while ammonium ion levels increased, reducing aerosol acidity. In cold conditions, ammonium ions are less likely to evaporate into ammonia gas, causing their buildup and further lowering acidity, creating conditions that promote hydroxymethanesulphonate formation.

- Under the guidance of the Ministry of Coal, the Singrauli-based Coal India subsidiary, Northern Coalfields Limited (NCL), has launched the 'CHARAK' (Community Health: A Responsive Action for Koylanchal) initiative. The initiative, which stands for Community Health: A Responsive Action for Koylanchal, is a health-focused Corporate Social Responsibility (CSR) project aimed at providing free medical treatment to individuals suffering from life-threatening diseases in the economically weaker sections of the Singrauli region. Through this initiative, NCL will offer free treatment at its dedicated hospital or at specialized empanelled hospitals across the country. The scheme is open to residents of Singrauli and Sonbhadra districts with an annual family income below Rs. 8 Lakhs, covering various life-threatening conditions such as malignancy, tuberculosis and related complications, HIV, cardiovascular diseases, organ transplants, burns, liver disorders, sudden hearing loss, and more.
- Recently, the Union Minister of Consumer Affairs, Food and Public Distribution and New & Renewable Energy launched the Credit Guarantee Scheme for e-NWR based Pledge Financing (CGS-NPF), aimed at providing crucial financial support to small farmers and preventing distress selling. This scheme offers a corpus of Rs 1,000 crore for post-harvest financing, allowing farmers to avail loans against electronic negotiable warehouse receipts (e-NWRs) after depositing their produce in Warehousing Development and Regulatory Authority (WDRA) accredited warehouses. The scheme covers loans up to Rs. 75 lakhs for agricultural purposes and up to Rs. 200 lakhs for non-agricultural purposes. Eligible institutions include all scheduled and cooperative banks, while eligible borrowers encompass small and marginal farmers (SMFs), women, SC/ST/PwD farmers, MSMEs, traders, FPOs, and farmer cooperatives. The scheme covers risks related to credit and warehouse management, providing guarantee coverage of 85% for loans up to Rs. 3 lakhs, 80% for loans between Rs. 3 to 75 lakhs for specific farmers, and 75% for other borrowers. This initiative is expected to improve the availability and accessibility of

finances for the targeted beneficiaries, enhancing post-harvest lending against e-NWRs and boosting farmers' incomes.

- Exercise SLINEX 2024 (Sri Lanka–India Exercise) will be conducted from 17 to 20 Dec 24 at Visakhapatnam under the aegis of the Eastern Naval Command
- A committee led by economist M. Govinda Rao has been tasked with studying regional imbalances in Karnataka and exploring the use of satellite imagery to assess backward regions. The committee is considering utilizing satellite imagery developed by the National Institute of Advanced Studies (NIAS), with space experts analyzing night-time images to assess light density and economic activity in different areas. This data will be segregated at the taluk level for a more detailed study. The committee was formed 22 years after the D.M. Nanjundappa report highlighted regional imbalances, categorizing 114 backward taluks. Despite a special development plan, many of these areas remain underdeveloped. A team of statisticians is now comparing the current economic growth to the findings of the Nanjundappa report. Surveys and questionnaires have been distributed to various stakeholders, including politicians, scholars, and industries, and district visits are planned to understand the ground realities, with an inventory of responses expected to be completed by December 2024.
- In 2023-24, Karnataka's economy experienced a growth of 10.2% in nominal terms, with the agriculture sector being a key contributor due to a strong south-west monsoon. This positive growth in agriculture helped boost both supply and demand-side factors, supporting the state's overall economic progress. While national inflation rose from 4.83% in April to 5.49% in September, food inflation is expected to decrease due to favorable sowing conditions for kharif and rabi seasons. Revenue receipts saw a 13.8% increase, and foreign investments of \$3.5 billion were attracted in the first half of the fiscal year. Additionally, capital investment saw a significant rise, with government expenditure on capital projects increasing by 28.3%. The state's Global Capability Centre (GCC) policy aims to promote international tech and research companies, with incentives such as tax and rent breaks. The policy also focuses on investments beyond Bengaluru, targeting cities like Mysuru, Mangaluru, Hubballi-Dharwad, and Kalaburagi. Despite a revenue surplus of ₹3,648 crore for the April-September period, the state is projected to face a revenue deficit of ₹27,354 crore for 2024-25. Borrowing figures indicate a budgeted gross borrowing of ₹1.05 lakh crore, with ₹24,974 crore allocated for repayments, leading to a projected rise in liabilities from ₹5.81 lakh crore to ₹6.65 lakh crore.
- Recently, the Indian National Centre for Ocean Information Services (INCOIS), under the Ministry of Earth Sciences (MoES), developed a newer version of the Search and Rescue Aid Tool (SARAT). Initially launched in 2016, SARAT was designed to assist in search and rescue operations at sea by quickly and efficiently locating individuals or vessels in distress. Developed under the Make in India initiative, it aims to enhance the country's search and rescue capabilities. SARAT employs model ensembling to handle uncertainties in the location and time of

missing objects and considers environmental factors like ocean currents and winds for accurate tracking. The tool uses high-resolution data from the Regional Ocean Modelling System, and users can select from up to 60 types of missing objects. With an interactive map and features such as search area visualization, alerts, and multi-language support, SARAT facilitates quick response to distress situations. The enhanced SARAT Version 2 offers improved search area expansion and better visualizations, providing clearer identification of the probable search areas and last known positions.

- A high-level committee, chaired by former ISRO Chairperson K. Radhakrishnan, has recommended the restructuring of the National Testing Agency (NTA) to improve its functioning. The committee suggested introducing a Digi-Exam system, inspired by Digi-Yatra, to ensure seamless authentication at all stages of the examination process. The restructuring plan includes creating an empowered governing body, with sub-committees focused on test audit, ethics, and stakeholder relations. The NTA's scope should be limited to entrance exams, with expansion only after capacity augmentation. Additionally, the governance model recommends appointing a Director-General of Additional Secretary rank, organizing NTA into ten verticals, and improving coordination with state and district authorities for secure test administration. The committee also recommended policy interventions such as multi-session and multi-stage testing, enhanced security measures, and transparent score normalization for exams like NEET-UG and CUET.
- In a groundbreaking effort, conservationists in India have begun satellite tagging the Ganges river dolphin, the country's national aquatic species, in Assam's Kulsi river. A 40-member team successfully tagged a healthy male dolphin, enabling scientists to track its movement and habitat range in real-time. The project, led by the Wildlife Institute of India, aims to tag two-three more dolphins and address knowledge gaps about this elusive species, ultimately informing evidence-based conservation strategies.
- Radhakishan Damani, founder of Avenue Supermarts (DMart), tops the Hurun India Top 200 Self-Made Entrepreneurs of the Millennium 2024 list, followed by Zomato's Deepinder Goyal and Swiggy's Sriharsha Majety and Nandan Reddy. The list features 19 women, including Falguni Nayar of Nykaa and Ghazal Alagh of Mamaearth, and highlights Bengaluru as a hub for entrepreneurship, with 66 companies headquartered there.
- The Karnataka State government is set to utilize modern technology to safeguard and preserve old revenue records. Revenue Minister Krishna Byre Gowda announced that tenders have been called to acquire compactors for preserving old files containing significant revenue records in all Revenue Department offices. The pilot project will commence soon and eventually extend to all taluks, with ₹300 crore allocated for digitizing and preserving original copies. Additionally, the government aims to digitize all crucial revenue and survey records statewide. A special drive has also been initiated to dispose of 'podi' applications within a stipulated timeframe, resulting in 16,644 'podi'-free villages being declared.

- The Sri Jayadeva Institute of Cardiovascular Sciences and Research has launched a safety mobile app called SUHRD to combat sexual harassment and violence against doctors. The app features "Shake to Safety", SOS alerts, GPS tracking, and anonymous complaint filing, sending emergency alerts to employees who can provide help.
- The Crime and Criminal Tracking Network and Systems (CCTNS) platform now links all 17,130 police stations across India, including remote areas, ensuring nationwide integration of police operations. Launched in 2009 under the Ministry of Home Affairs with a ₹2,000 crore budget, it aims to enhance efficiency, transparency, and citizen services in policing as part of India's National e-Governance Plan. The system stores a comprehensive crime database, provides analytical tools for crime statistics and policymaking, and offers services like complaint tracking and case updates. Additionally, CCTNS integrates with the Integrated Criminal Justice System (ICJS), connecting police data with courts, prisons, forensics, and other justice systems.
- Recently, Madhya Pradesh aims to create a suitable habitat for cheetahs in the Gandhi Sagar Wildlife Sanctuary, spread over 2,500 sq. km of landscape spanning Madhya Pradesh and Rajasthan.
- Cyclone Chido recently struck Mayotte, a French Indian Ocean territory located in the Mozambique Channel. Wind speeds reached 200 km/h, making it the strongest cyclone to hit Mayotte in over 90 years. is part of the Comoros archipelago, situated in the Mozambique Channel of the Indian Ocean. It consists of two main islands: Grande Terre (main island) and Petite Terre (Pamandzi, smaller island).
- Recently, Moldova has officially signed the International Solar Alliance (ISA) Framework Agreement, furthering its commitment to promoting renewable energy.
- About 95% of villages have declared themselves "open defecation free plus" till now, the Jal Shakti ministry. The "ODF Plus" status goes beyond the construction of toilets, focusing on overall sanitation and solid-liquid waste management. Among the states, Uttar Pradesh leads with 93,947 villages attaining ODF Plus status, followed by Madhya Pradesh with 50,580 and Maharashtra with 37,327 villages.
- The Vikram Sarabhai Space Centre (VSSC) has designed an innovative sundial, displayed at its Space Museum in Thumba, Kerala, which accurately provides Indian Standard Time and the date, unlike conventional sundials that only show local solar time. This analemma-corrected polar sundial features a unique 3D-printed miniature of the RH200 sounding rocket as its style. The sundial's plate is aligned with the Earth's polar axis and true north-south direction, ensuring precise timekeeping. ISRO chairman S. Somanath suggested replicating the sundial in other locations, and VSSC is exploring the possibility of a software kit for educational institutions and museums.
- The Ministry of New and Renewable Energy (MNRE) has announced that from June 2026, solar companies in India must use only domestically made photovoltaic cells

in their panels for participation in government procurement programs, marking a step towards reducing foreign imports. This move, part of a broader strategy to boost local manufacturing, follows the introduction of lists such as the Approved List of Module Manufacturers, which mandates sourcing panels from approved domestic companies. However, while India is expanding its solar manufacturing capacity, the cost of domestically produced solar cells is significantly higher than imports, potentially raising the overall cost of solar power projects. This policy shift aims to support the growth of India's solar industry, but the country will still depend on foreign sources for certain components like wafers and ingots.

- India and France signed a Memorandum of Understanding (MoU) on Thursday to develop a new National Museum, named Yuga Yugeen Bharat, inspired by the Louvre in Paris, at the historic North and South Blocks in New Delhi. Once completed, it will be the largest museum in the world. The MoU was signed by Herve Barbaret, Director General of France Museums, and B.R. Mani, Director General of the National Museum of India. External Affairs Minister S. Jaishankar emphasized the importance of the project as a symbol of international and cultural cooperation, strengthening the strategic partnership between India and France. The museum will be developed through adaptive reuse, leveraging France's expertise in such projects.
- Karnataka and Haryana emerged the men's and women's team winners at the 2024 Senior National Badminton Championship
- Gujarati writer Himanshi Indulal Shelat has been selected for the prestigious 2024 Kuvempu Rashtriya Puraskar, which will be presented in January 2024. The announcement was made by the Rashtriya Kuvempu Prathistana, with the decision being made unanimously by a selection committee chaired by BL Shankar. The award recognizes Shelat's significant contributions to Indian literature, particularly through her work in the Gujarati language. Born in Surat, Gujarat, in 1947, Shelat holds a PhD focusing on the novels of VS Naipaul and has authored nearly 20 books, including essays, novels, critiques, and translations. The award includes a cash prize of Rs 5 lakh, a silver medal, and a citation.
- The Supreme Court of India has directed the Union Government to develop a policy for managing sacred groves, which are small forest patches traditionally protected by local communities for religious and cultural purposes. These groves play a crucial role in biodiversity conservation, primarily found in states like Tamil Nadu, Kerala, Karnataka, and Maharashtra. The Court's directives include formulating a comprehensive policy for their protection, conducting a nationwide survey to assess their extent, and integrating the management of sacred groves with existing conservation laws like the Wildlife (Protection) Act of 1972 and the National Forest Policy of 1988. The move highlights the ecological and cultural importance of sacred groves, emphasizing the involvement of local communities in their protection. However, challenges such as land-use changes and urbanization

threaten these groves, and the policy seeks to address these issues through community participation and regular monitoring.

- Researchers at Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR) in Bengaluru have engineered flexible plasmonic devices using a cost-effective alternative, Scandium Nitride (ScN) films. Traditional plasmonic materials are often rigid, expensive, and primarily composed of costly metals like gold and silver, limiting their design possibilities. The innovations by the JNCASR team offer a scalable method for creating flexible plasmonic structures that retain performance even under bending and flexing, making them ideal for flexible device applications. Scandium Nitride supports near-infrared wavelength plasmonics, paving the way for advancements in biomedical applications and flexible electronics, particularly in wearable medical devices and high-performance adaptable gadgets.
- INS Nirdeshak, the second ship of the Survey Vessel (Large) project, was commissioned into the Indian Navy by M/s Garden Reach Shipbuilders and Engineers (GRSE), Kolkata. Designed primarily for conducting hydrographic surveys, it plays a critical role in ensuring safe navigation and supporting maritime operations. With over 80% indigenous content, INS Nirdeshak enhances India's defense manufacturing capabilities while promoting self-reliance. Equipped with advanced systems like Multi Beam Echo Sounders, Side Scan Sonars, Autonomous Underwater Vehicles (AUV), and Remotely Operated Vehicles (ROV), it ensures precision mapping and efficient deep-sea operations. Additionally, it contributes to regional security, scientific exploration, and environmental health. By strengthening the "Security and Growth for All in the Region" (SAGAR) initiative, it fosters international cooperation and supports maritime diplomacy.
- The Kendra Sahitya Akademi Award 2024 has been announced, recognizing literary excellence across various languages. Dr. K. V. Narayana, a noted Kannada literary critic and linguist, has been awarded for his work 'Nudigala Alivu.' The award presentation is scheduled for March 8, 2025, with a prize of ₹1,00,000 and a plaque. Other notable recipients include Gagan Gill for her poetry collection 'Main Jab Tak Aai Bahar' and Easterine Kire for her novel 'Spirit Nights.' The Sahitya Akademi, established in 1954, recognizes outstanding literary works in 22 Indian languages and English, with a focus on promoting excellence and new trends in Indian writing. This year's awards include 21 recipients across categories such as poetry, novels, essays, short stories, literary criticism, and plays. The Sahitya Akademi's award plaque, initially made of marble, was redesigned by filmmaker Satyajit Ray, and temporarily replaced by savings bonds during the 1965 Indo-Pak war.
- Union Minister of State for Rural Development Chandra Sekhar Pemmasani informed Rajya Sabha that Karnataka has 3.60 lakh Self Help Groups (SHGs) with 42,07,374 members, including 5,51,115 from Scheduled Caste and 2,63,856 from Scheduled Tribes. The Centre has released Rs 1,266.26 crore to Karnataka under Deendayal Antyodaya Yojana-National Rural Livelihood Mission (DAY-NRLM) since 2019, with the state spending Rs 2,172 crore. Additionally, 231 medical devices

manufacturing sites have been approved in Karnataka under the Medical Device Rules 2017

- Recently, the National Institute of Siddha (NIS) achieved a Guinness World Record by providing Varmam therapy to 567 individuals simultaneously. Varmam therapy, a core aspect of the Siddha system of medicine, is a unique, non-invasive healing practice renowned for its effectiveness in pain management and treating various health conditions. It involves stimulating 108 vital life energy points identified by Siddhars to provide rapid relief from musculoskeletal pain, injuries, and neurological disorders. This scientifically grounded therapy also addresses acute and chronic diseases such as stroke, arthritis, and trauma-related injuries. The achievement underscores the global recognition of Siddha medicine, a traditional healing system originating in South India around 10,000 BC, rooted in the knowledge of Tamil Siddhars and celebrated for its holistic and therapeutic potential.
- United States has announced its emission reduction target for 2035, promising to reduce its emissions to 61-66 per cent below 2005 levels by that time.
- The excavation of Pan Supari Bazaar at Hampi is uncovering significant insights into the trade activities during the Vijayanagar period, highlighting the economic prosperity of the era. The site, located between the Hazara Rama Temple and Shrunagarada Hebbagilu, is believed to have been a bustling marketplace for gold and precious metals. Artifacts such as potsherds, a terracotta bead, and a 15th-century coin have been unearthed. The excavation, which began in 1985 and resumed with fresh funding in 2024, is a collaborative effort between the Archaeological Survey of India (ASI) and academic institutions. This collaboration promises to deepen our understanding of the Vijayanagar Empire's trade networks, daily life, and cultural richness.
- BBMP has released a feasibility report on Bengaluru's traffic management plan aimed at addressing the city's traffic congestion through comprehensive infrastructure development. The total cost of the plan is estimated at ₹54,964 crore, with key components including twin-tube tunnel roads, elevated corridors, road widening, and flyovers. The twin-tube tunnels will cover 46 km at a cost of ₹40,000 crore, reducing travel time significantly, particularly for the North-South corridor. Specific projects include a 27 km road widening from K.R. Puram to Yeshwantpur and an integrated elevation project between Hudson and Minerva Circles. The plan also proposes funding through loans, including ₹19,000 crore for the twin-tunnel project, and will align with existing and planned metro routes for better connectivity.
- Two new undersea cable systems, India Asia Xpress (IAX) and India Europe Xpress (IEX), will enhance India's digital connectivity by providing additional Internet links to Asia and Europe. The cables, owned by Reliance Jio with investment from China Mobile, span over 15,000 kilometers and connect key locations such as Chennai, Mumbai, Singapore, Thailand, Malaysia, France, Greece, Saudi Arabia, Egypt, and Djibouti. This expansion strengthens India's role in regional and international

digital infrastructure, improving bandwidth and network resilience, especially in the face of geopolitical concerns. Notably, the cables aim to improve India's defense strategy against disruptions like cyberattacks, following the March 2024 disruptions in cables to West Asia and Europe. Additionally, government initiatives are focused on ensuring stability, with India playing a more active role in submarine cable resilience and security.

- The Ministry of Commerce released the foreign trade data for November 2024, showcasing key trends and challenges. Services exports for the first time surpassed goods exports, marking a shift in India's trade dynamics. However, monthly imports hit a record \$69.95 billion, contributing to a merchandise trade deficit of \$37.84 billion. Gold imports surged significantly, reaching \$14.86 billion. The current account deficit (CAD) is projected to rise to 2.8% of GDP, exerting pressure on the rupee, which fell below 85 against the US dollar. Additionally, sectors like petroleum and gems and jewellery faced declining earnings. US tariff threats and the growing imports from China pose challenges to India's trade relations, requiring policy interventions. Recommendations to boost export competitiveness include expanding the Production Linked Incentive (PLI) scheme, implementing customs reforms, and developing industrial clusters to enhance production and reduce costs.
- Karnataka's labour department is launching a pioneering initiative to provide medical care to construction workers through 100 mobile medical units (MMUs) across the state, with 30 MMUs set to launch in Hubballi by December 24-25, and the remaining 70 expected to start functioning by January's third week. Each MMU will be equipped with advanced medical equipment, including body impedance analysers and ECG devices, and staffed with MBBS doctors who can conduct various tests, such as basic vitals, dengue, and renal function tests. The initiative aims to provide immediate treatment to construction workers and their families before transferring them to nearby hospitals, with an electronic health ecosystem in place to document patient records. The programme is expected to cost Rs 127 crore and will encourage workers to create Ayushman Bharat cards for insurance purposes
- Karnataka Chief Minister Siddaramaiah has reaffirmed his government's commitment to establishing a separate secretariat for the Kalyana Karnataka region, a long-pending demand aimed at promoting all-round development in the area. Speaking at Kalaburagi airport, Siddaramaiah emphasized the need for focused development initiatives, citing the D M Nanjundappa report, which identified 39 taluks in Kalaburagi and Belagavi divisions as the most backward. Despite spending over Rs 35,000 crore to address regional imbalances, visible progress has been elusive, prompting the constitution of a high-level committee led by economist Prof Govindarao to formulate and implement targeted programs. Additionally, Siddaramaiah addressed the concerns of tur farmers in the region, who have sought a package to mitigate losses due to blight disease, affecting over

2 lakh hectares in Kalaburagi district alone, with the government set to take a decision based on a forthcoming report.

- CM Siddaramaiah asserted that his government would take measures to establish branches of the National Institute of Mental Health and Neurosciences (NIMHANS) in Kalaburagi and Mysuru.
- The National Green Tribunal has formed a joint committee to investigate Bengaluru's alarming nitrogen dioxide levels, which exceeded safe limits for 295 days in 2023, posing serious health risks including asthma, respiratory irritation, and even lung cancer. The committee, comprising officials from central and state pollution control boards and the Ministry of Environment, Forest and Climate Change, will visit the site, collect data, and submit a factual report within two months. The NGT's principal bench has directed the registry to list the matter before the Chennai bench on February 2, 2025, given its jurisdiction over the southern zone. This move aims to address the critical environmental issue and ensure swift action to mitigate the harmful effects of nitrogen dioxide pollution in Bengaluru.
- The Kannada Sahitya Parishat has decided to organise the 88th Akhila Bharata Kannada Sahitya Sammelan in Ballari next year.
- India scored a 41-run win over Bangladesh and emerged champion in the inaugural Women's T20 U-19 Asia Cup in Kuala Lumpur
- Ariv Dutta and Sakshya Santosh (in pic) won the youth under-11 boys' and girls' titles in the UTT National rankings table tennis championship in Bengaluru
- The Telecommunications (Procedures and Safeguards for Lawful Interception of Messages) Rules, 2024, notified on December 6, empower enforcement and security agencies to intercept messages under specific conditions, replacing Rule 419A of the Indian Telegraph Rules, 1951. These rules designate the Union Home Secretary or State Home Secretaries as competent authorities for issuing interception orders, with provisions allowing heads or second senior-most officers (not below IG rank for States) to act in remote areas or under operational constraints, provided such orders are submitted for confirmation within three days and approved within seven days. Unconfirmed interceptions must cease, and intercepted messages cannot be used as evidence. The rules also mandate the destruction of interception records every six months unless retained for functional or judicial reasons. Unlike Rule 419A, the 2024 rules relax the prerequisite of "emergent cases," limit the number of authorised officers, and prohibit using unconfirmed interceptions in court. While rooted in the Indian Telegraph Act, 1885, and Supreme Court-mandated safeguards from the PUCL judgment of 1996, these rules have raised concerns about accountability, lack of punitive measures for misuse, and potential abuse of relaxed provisions for remote and operational circumstances, highlighting the need for stricter checks to balance privacy and security.
- The third edition of the VIRAASAT Sari Festival is being organized by the Ministry of Textiles from 15th to 28th December 2024 at Handloom Haat in New Delhi.

- The Indian government and the Asian Development Bank (ADB) have signed a significant \$350 million policy-based loan under the second subprogramme of the Strengthening Multimodal and Integrated Logistics Ecosystem (SMILE) programme, designed to drive wide-ranging reforms in India's logistics sector. The SMILE programme is a policy-based loan initiative aimed at enhancing India's logistics sector to support manufacturing growth and strengthen supply chain resilience. It is a collaborative effort between the Department of Economic Affairs (DEA), Department for Promotion of Industry and Internal Trade (DPIIT), and ADB. The programme operates in two subprogrammes to ensure phased and sustainable reforms.
- GLP-1 receptor agonists, a new class of medicines endorsed by the World Health Organization, mimic the hormone Glucagon-Like Peptide-1 (GLP-1) to regulate appetite, blood sugar levels, and lipid metabolism, making them highly effective in managing obesity, diabetes, and other conditions like cardiovascular and neurodegenerative diseases. These medications, including drugs like semaglutide and tirzepatide, are often administered via injection and function by binding to GLP-1 receptors, replicating the hormone's natural effects. GLP-1 itself, released by the intestines in response to food intake, plays a crucial role in regulating blood glucose and other essential biological processes, positioning these agonists as transformative therapeutic tools for addressing complex health issues.
- Renowned tabla maestro Pt. Swapan Choudhary from Kolkata has been awarded the prestigious "National Tansen Samman" for 2023. Established in 1980 by the Madhya Pradesh Government in honor of the legendary Music Emperor Tansen, this is the highest national recognition in the field of Indian classical music. The award includes an honorarium of ₹5 lakh, a citation plaque, and a shawl-shripal, celebrating exceptional contributions to Indian classical music.
- A mysterious illness known locally as "Dinga Dinga" has been wreaking havoc in Uganda, predominantly affecting women and girls with symptoms including fever, excessive body shaking, and in severe cases, paralysis, severely impairing mobility. Despite efforts to identify the cause, health experts remain baffled, and the illness is being treated with antibiotics, with symptoms characterized by uncontrollable body shaking, extreme weakness, and paralysis-like immobility, earning it the nickname "Dinga Dinga", meaning "shaking like dancing"
- Karnataka's government has approved nine industrial projects worth Rs 9,823.31 crore, expected to generate 5,605 jobs, with three new projects including the state's first semiconductor project at Kochanahalli, Mysuru, worth Rs 3,425.60 crore, creating 460 jobs. Other approved projects include DN Solutions India Pvt Ltd's Rs 998 crore investment at the ITIR, Devanahalli, expected to create 467 jobs, and Sansera Engineering Ltd's Rs 2,150 crore project at Harohalli, estimated to create 3,500 jobs. The government also urged investors to operationalise their units within prescribed timelines, cautioning penalties for non-compliance, and approved a new data centre in Bengaluru to bolster digital infrastructure.

- After two years of effort, the Karnataka Forest Department is set to operationalise a wildlife forensic lab in Bengaluru, located at the State Forensic Science Laboratory in Madiwala, at a cost of ₹3 crore. This long-awaited facility, approved last year, aims to expedite the resolution of wildlife crimes and conflict cases by providing quick DNA test results, addressing an average of 400 cases registered annually in Karnataka, ranging from the illegal sale of wildlife as pets to trafficking of parts like tusks, tiger skins, and pangolin scales. Previously, reliance on external labs delayed DNA results by weeks or months, but the new lab will deliver results in days, enhancing prosecution rates and evidence quality in court. Over two years, the department has developed infrastructure and collected DNA samples for Schedule I and II species while identifying challenges like contaminated samples from mishandling, such as in the Nelamangala leopard case, highlighting the need for training officers on proper sample collection and site management. Additionally, the lab will assist in conflict cases by verifying captured animals against DNA evidence, ensuring accurate resolutions. Expected to launch within two months in collaboration with the police, the lab represents a crucial step in combating wildlife crime and protecting biodiversity in the state.
- Shyam Benegal, the master of parallel cinema whose iconic works 'Ankur', 'Nishant' and 'Manthan' left an indelible mark on Indian filmmaking, passed away at the age of 90 in Mumbai
- Manipur rode on Asem Roja Devi's 55th-minute strike against Odisha in the final to retain the senior women's National football championship, for the Rajmata Jijabai Trophy, in Narainpur (Chhattisgarh)
- A speed gun is a non-contact device that measures an object's speed by emitting electromagnetic radiation, capturing the reflection, and using the Doppler effect to infer speed.
- The Indian Space Research Organisation (ISRO) is set to launch the PSLV-C60 SpaDeX mission by the end of this month from Sriharikota. This mission will carry 24 PS4-Orbital Experiment Module (POEM-4) payloads, with four of them developed by Karnataka-based academia and start-ups. These include RVSat-1, developed by R.V. College of Engineering, Bengaluru, which focuses on microbiological experiments in microgravity to study the growth of gut bacteria in space and its applications in astronaut health and bioremediation. The BGS ARPIT Payload from SJC Institute of Technology, Chickballapur, is a multimode message transmitter, aimed at providing global amateur radio satellite services. Bellatrix Aerospace Pvt. Ltd. has developed the RUDRA 1.0 HPGP Payload, which demonstrates a high-performance green propulsion system, while GalaxEye Space Solutions Pvt. Ltd. has created the GLX-SQ Payload to demonstrate Synthetic Aperture Radar (SAR) imaging in space. In addition to these, the PSLV-C60 mission will also carry additional payloads, including India's first space robotic manipulator, the Walking Robotic Arm (RRM-TD), and the Compact Research Module for Orbital Plant Studies (CROPS), which aims to demonstrate plant growth in extraterrestrial environments.

- The Ministry of Home Affairs (MHA) reimposed the Protected Area Regime (PAR) in Manipur, Nagaland, and Mizoram on December 17, 2024, due to growing security concerns in these border states. The decision requires foreigners to obtain prior approval and Protected Area Permits (PAP) to visit these regions. The Protected Area Regime (PAR) restricts foreigners' entry and movement in certain areas, particularly border states, unless they have the necessary government permission. The Foreigners (Protected Areas) Order, 1958, mandates that foreign nationals must obtain a permit to enter these protected areas, including details about the place of entry, residence, and duration of stay. Initially, the PAR was relaxed in 2010 to boost tourism, but increasing ethnic violence in Manipur, the influx of refugees from Myanmar, and the suspension of the Free Movement Regime (FMR) led to the re-imposition of these restrictions. Foreigners now must apply for PAPs through various channels and register with local authorities upon arrival, with special provisions for nationals from certain countries like Afghanistan, China, and Pakistan.
- The Union government has scrapped the 'no-detention' policy for students in classes 5 and 8, as per the amended Right to Education (RTE) Act, 2019. Under the new rules notified by the Ministry of Education, schools can now fail students in these classes. As part of the revised rules, students who fail must be provided specialized inputs and given a re-examination opportunity within two months. If they fail the re-examination, they will be held back in the same class, although no child will be expelled until they complete elementary education. The decision to scrap the policy was driven by feedback indicating that the 'no-detention' policy left students underprepared and contributed to higher failure rates in class 10. Following amendments to the RTE Act, which allowed states and the Centre to decide whether to retain the policy, 16 states and Union Territories (UTs) opted out, with Karnataka abolishing it in 2022.
- The India State of Forest Report (ISFR) 2023, released on December 21, 2023, by Union Minister for Environment, Forest, and Climate Change, Shri Bhupender Yadav, presents the findings from the Forest Survey of India (FSI), which assesses the country's forest and tree resources every two years using satellite data and national inventories. The report reveals that the total forest and tree cover in India is 827,357 sq km, covering 25.17% of the country's geographical area, with 715,343 sq km dedicated to forest cover and 112,014 sq km to tree cover. From 2021, India has seen a 1,445 sq km increase in forest and tree cover, with notable contributions from Chhattisgarh, Uttar Pradesh, and Odisha. Mizoram, Gujarat, and Odisha topped the list for forest cover increases. Madhya Pradesh, Arunachal Pradesh, and Maharashtra are the states with the largest forest and tree cover, while Lakshadweep, Mizoram, and the Andaman & Nicobar Islands lead in forest cover percentage. Additional findings include a significant growth in mangrove cover, bamboo-bearing area, and carbon stock, with India surpassing its 2030 carbon stock target by 2.29 billion tonnes.

- The Union Minister Shri Bhupender Yadav recently inaugurated advanced wildlife and pashmina certification facilities at the Wildlife Institute of India (WII) in Dehradun, marking a significant step in wildlife conservation and the promotion of traditional handicrafts. The Next-Generation Sequencing (NGS) facility, a cutting-edge technology for decoding genomes, will aid in wildlife conservation by analyzing genetic diversity, understanding evolutionary relationships, and addressing illegal wildlife trade, while also helping assess the impact of climate change on biodiversity. The Pashmina Certification facility, established under a Public-Private Partnership between WII and the Export Promotion Council for Handicrafts (EPCH), aims to authenticate pashmina fiber using a Scanning Electron Microscope (SEM) with EDS, providing unique IDs and e-certificates to ensure traceability. This initiative supports artisans in Jammu and Kashmir, enhances global trade credibility, and discourages illegal practices, such as the use of Shahtoosh. It aligns with the Atmanirbhar Bharat initiative by fostering self-reliance, generating revenue, and creating employment opportunities while contributing to wildlife conservation by discouraging illegal fiber trade and protecting the Tibetan antelope habitat.
- NASA's Parker Solar Probe achieved a historic milestone on Tuesday by flying closer to the Sun than any spacecraft before, enduring temperatures of 1,700°F (930°C). Launch and Goal: Launched in August 2018, the spacecraft's seven-year mission seeks to enhance understanding of the Sun and improve forecasting of space-weather events that impact Earth.
- The Karnataka State Road Transport Corporation (KSRTC) has launched 20 new Ambaari Utsav sleeper buses, increasing the fleet to 40. Designed for long-distance travel, these Scandinavian-inspired buses feature 40 plush sleeper berths, advanced air conditioning, mobile charging points, fire detection systems, and ergonomic driver controls. With enhanced safety features like rear fog lights and pedestrian-view cameras, the buses prioritize passenger comfort, safety, and environmental sustainability. They will connect Bengaluru with key cities, including Hyderabad, Vijayawada, and Mangaluru. The KSRTC, serving 35.43 lakh daily passengers, continues expanding its fleet, adding 4,301 buses in the last year.
- The Atal Innovation Mission (AIM), NITI Aayog, and the United Nations Development Programme (UNDP), in collaboration with Citi Foundation, have launched the seventh edition of the Youth Co:Lab National Innovation Challenge 2024-2025. Youth Co:Lab, co-created in 2017 by UNDP and Citi Foundation and introduced in India in 2019, aims to empower youth to implement Sustainable Development Goals (SDGs) through leadership, social innovation, and entrepreneurship. This year's challenge, in partnership with AssisTech Foundation (ATF), focuses on inclusive solutions for persons with disabilities, addressing sub-categories like Assistive Technology, Inclusive Educational Technology, and Accessible Care Models. AIM, established by NITI Aayog in 2016, fosters innovation and entrepreneurship through initiatives like Atal Tinkering Labs, Atal Incubation

Centres, and Atal New India Challenges. AIM's programs are monitored via real-time systems and are reviewed by third parties for continuous improvement.

- Former Supreme Court judge Justice Madan B. Lokur has been appointed Chairperson of the United Nations Internal Justice Council for a term ending November 12, 2028. In a communication from U.N. Secretary-General António Guterres, it was confirmed that Justice Lokur will lead the council, which includes other distinguished jurists: Ms. Carmen Artigas (Uruguay), Ms. Rosalie Balkin (Australia), Mr. Stefan Brezina (Austria), and Mr. Jay Pozenel (USA). Justice Lokur, who served as a Supreme Court judge in India from 2012 to 2018, also became the first Indian judge appointed to the Supreme Court of Fiji's non-resident panel in 2019.
- Union Minister for Road Transport and Highways inaugurated Asia's first 1 km highway stretch featuring a bio-bitumen blended surface, a petroleum-free alternative to traditional bitumen. Bio-bitumen, made from renewable resources like vegetable oils and synthetic polymers, offers sustainable road construction with a lower carbon footprint and reduced environmental toxicity. It is versatile, suitable for applications like road paving, roofing, and waterproofing, and contains fewer hazardous pollutants compared to petroleum-based bitumen. While traditional bitumen is a dense, viscous hydrocarbon obtained from crude oil or natural deposits, bio-bitumen represents a greener, long-term solution for infrastructure development.
- To avoid animal-related accidents, the National Highways Authority of India (NHAI) has started a pilot project to provide cattle shelters along national highways. The initiative aims to create a safer travel experience for commuters while ensuring the care and management of stray cattle and animals found along the national highways, the NHAI said in a statement.
- UN Secretary-General Antonio Guterres has paid tributes to Brigadier General Amitabh Jha of India, who was serving with the UNDOF at Golan Heights, and said he will be remembered for his "leadership and unwavering commitment to United Nations peacekeeping." Brigadier Jha was serving as Deputy Force Commander of the United Nations Disengagement Observer Force (UNDOF) from April 2023 and had recently served as acting Force Commander of UNDOF in complex circumstances, following the fall of the Assad Government in Syria.
- 'Jai Bapu, Jai Bhim, Jai Samvidhan' to be theme of rally marking 100 years of Belgaum session
- Chief Minister Siddaramaiah launched whey protein-enriched idli/dosa batter prepared by the Karnataka Milk Federation under its brand name Nandini.
- The Kerala government has declared a state of mourning on December 26 and 27 as a mark of respect to the deceased writer, M.T. Vasudevan Nair, popularly known as MT, who put his indelible stamp on Malayalam literature.
- Maheshwari Chauhan and Anantjeet Singh of Rajasthan won the mixed skeet gold at the 67th National Shooting Championship, defeating Mairaj Ahmad Khan and

Areeba Khan 44-43, while Tamil Nadu's R. Narmada and Sri Karthik Sabari Raj secured the mixed air rifle gold with a 16-6 win over Railways, and Manini Kaushik took home the 50-metre rifle prone women's gold.

- Indian weightlifter Martina Devi clinched a silver medal in the women's junior plus-87kg category at the Asian junior weightlifting championships held at Doha
- Recently, Assam introduced Anti-Depredation Squads (ADS) in areas surrounding the Pobitora Wildlife Sanctuary in Morigaon. Pobitora Wildlife Sanctuary, located east of Guwahati, Assam, was established in 1998 and spans 48.81 square kilometers within the Brahmaputra flood plains. It comprises the Rajamayong and Pobitora Reserve Forests and is surrounded by small hills such as Kasasila, Hatimuria, Boha, Kardia, Govardan, and Panbari. Known for hosting the highest density of Greater One-Horned Rhinoceroses in India, it also serves as a key source for the Indian Rhinoceros Vision 2020, contributing eight rhinos for translocation to Manas National Park. The sanctuary's grasslands are home to species like the Greater One-Horned Rhinoceros, Wild Water Buffalo, Monitor Lizard, and Wild Boar, while its flora consists of wet savannah dominated by *Arundo donax*, *Erianthus ravennae*, *Phragmites karka*, *Imperata cylindrica*, and *Saccharum* spp. However, water hyacinth (*Eichornia crassipes*) poses a significant challenge, forming thick mats that hinder waterfowl movement.
- The Srisailam Temple, a Hindu temple dedicated to Lord Shiva, located in Andhra Pradesh, has yielded a significant discovery with the Archaeological Survey of India (ASI) unearthing copper plates and ancient inscriptions in its Ghantamandapam. This temple, one of the 12 Jyotirlingas, is a specimen of Vijayanagara architecture, boasting a unique combination of Jyothirlingam and Mahasakthi in one campus, and has a rich history dating back to the 2nd century AD, with contributions from the Satavahanas, Kakatiyas, and Vijayanagara kings, and is also said to have been visited by Aadi Sankara.
- India and Mauritius recently commenced a Joint Hydrographic Survey to enhance navigational safety in Mauritian waters during a coordination meeting onboard INS Sarvekshak. INS Sarvekshak, a hydrographic survey ship of the Indian Navy based at Southern Naval Command in Kochi, is equipped with advanced survey systems like Deep Sea Multi-Beam Echo Sounder, Side Scan Sonars, and a fully automated digital surveying system. The ship also carries an integral Chetak helicopter for extensive deployment during the survey. As the second ship of the Darshak class, it has a crew of 15 officers and 175 sailors and has previously conducted hydrographic surveys in countries like Sri Lanka, Seychelles, Tanzania, and Kenya, showcasing its role in foreign cooperation.
- Turkey has successfully tested the firing of the supersonic missile UAV-122 from the Bayraktar Akinci drone.
- The Indian Army contingent, comprising 334 personnel, departed for Nepal recently to participate in the eighteenth edition of the Joint Military Exercise Surya Kiran.

- The Wildlife Institute of India-Dehradun is preparing to execute India's first Fishing Cat Collaring Project at Coringa Wildlife Sanctuary, Andhra Pradesh where the endangered species is said to be thriving.
- Recently, the Scientific Aptitude Assessment Exercise was conducted online under the CSIR's JIGYASA program, which was launched in 2017 by the Council of Scientific & Industrial Research (CSIR). The program, also known as the CSIR Jigyasa program, aims to foster curiosity and scientific temper as part of its Scientific Social Responsibility (SSR). An extension of the program, the CSIR Jigyasa Virtual Lab (CJVL), enhances classroom learning by offering research laboratory-based learning experiences for school students. The initiative collaborates with various organizations, including Kendriya Vidyalayas, Navodaya Vidyalayas, the Karnataka State S&T Academy, Atal Innovation Mission, Niti Aayog, and the Indian Institute of Technology Bombay. It targets students from standards VI to XII (ages 11-18), providing them with opportunities to explore science, mathematics, biology, and IT through interactive activities and expert guidance from researchers and faculty.
- Researchers have found a way to develop FELUDA as a point-of-care diagnostic service at a minimal cost for detection of *H. pylori* and its mutations in dyspeptic patients from rural areas of India, with minimal or no access to diagnostic laboratories.
- India's Gas Turbine Research Establishment (GTRE), part of the Defence Research and Development Organisation (DRDO), has announced that the Kaveri engine has been cleared for inflight testing. Developed since the late 1980s with the aim of powering the Light Combat Aircraft (LCA) Tejas, the Kaveri engine currently produces 49-51 kN of thrust, making it suitable for applications like the Ghatak stealth UCAV program. DRDO plans to enhance this with an afterburner, increasing thrust to 73-75 kN for more demanding scenarios. Extensive ground testing, high-altitude simulations in Russia, and trials in India have demonstrated its reliability and performance. This marks a significant milestone in India's pursuit of self-reliance in aero-engine technology, especially for unmanned aerial vehicles.
- Rwanda has successfully contained and declared its first-ever outbreak of Marburg Virus Disease (MVD) officially over, after a 42-day period without new cases, as confirmed by the World Health Organization (WHO). MVD is a severe, often fatal hemorrhagic fever caused by the Marburg virus, with no approved vaccines or treatments currently available. First identified in 1967, it is primarily transmitted from fruit bats to humans and spreads through direct contact with infected bodily fluids or contaminated surfaces. Symptoms range from high fever and headache to severe bleeding and organ failure, with a fatality rate varying between 24% to 88%. While no specific treatment exists, supportive care can improve survival. Rwanda received investigational vaccines as part of outbreak control efforts, with promising vaccines undergoing Phase 2 trials in neighboring countries.
- A recent study published in Science Advances has refined the timing and duration of Ocean Anoxic Event 1a (OAE 1a) by analyzing prehistoric rocks and fossils from Mount Ashibetsu, Japan. OAE 1a, which occurred during the Cretaceous Period,

was triggered by massive volcanic eruptions that released large amounts of carbon dioxide (CO₂), causing global warming and oxygen depletion in the oceans. This led to anoxic marine basins with little or no oxygen, severely disrupting marine ecosystems and contributing to the extinction of species like plankton. The event lasted around 1.1 million years, starting 119.5 million years ago, and is linked to significant volcanic activity, including eruptions from the Ontong Java Nui complex. The study's findings highlight modern parallels, warning that current human-induced CO₂ emissions could trigger similar disruptions in marine ecosystems, with potential long-term impacts such as a Holocene extinction event.

- India's Deep Ocean Mission recently made a significant achievement by capturing high-resolution images of an active hydrothermal vent located 4,500 meters beneath the Indian Ocean's surface. Hydrothermal vents are underwater hot springs found near tectonic plate boundaries, where hot water and minerals are expelled from beneath the Earth's crust. Discovered in 1977 near the Galapagos Islands, these vents are formed when cold seawater seeps through cracks in the oceanic crust, heats up due to nearby magma, and resurfaces as mineral-rich fluids, creating vents and plumes. There are two main types: black smokers, which release iron sulfide-rich fluids forming black chimneys, and white smokers, which emit fluids rich in barium, calcium, and silicon, creating white chimneys.
- Recently, Spain's Congress approved the termination of the controversial Golden Visa program, which provided temporary residency to foreign nationals in exchange for significant investments or donations in real estate, business, or other sectors. The program allowed high-net-worth individuals (HNWIs) to relocate to Spain and obtain legal residency rights, including the ability to live, work, study, and access healthcare. The decision to end the Golden Visa program follows growing concerns over its potential misuse and its impact on housing markets, especially in cities like Barcelona and Madrid.
- India recently dispatched a consignment of 1,000 metric tonnes of rice as part of its humanitarian aid to Lesotho, a landlocked country entirely surrounded by South Africa. With a population of approximately 2.3 million and a per capita GDP of \$878.0 in 2023, Lesotho is classified as a lower middle-income nation. The country, characterized by its highland terrain, is the only independent state in the world located entirely above 1,400 meters in elevation. Lesotho, which gained independence from Britain in 1966, is a constitutional monarchy with a king as the head of state. Its capital, Maseru, is the largest city, and the country is home to the Orange River, one of Africa's longest rivers, which originates in the Lesotho Highlands.
- The 'Viksit Panchayat Karmayogi' initiative, launched on Good Governance Day by the Union Minister of Personnel, Public Grievances, and Pensions, is a key component of the broader 'Prashasan Gaon Ki Aur' campaign. It aims to enhance the capacity and effectiveness of Panchayati Raj Institutions (PRIs) by equipping elected representatives and officials with the necessary tools and knowledge for



efficient governance and participatory planning. Currently being piloted in Odisha, Assam, Gujarat, and Andhra Pradesh, the initiative leverages e-learning platforms, AI-powered chatbots, and mobile apps to bridge knowledge gaps and improve service delivery.

