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Current Affairs
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CPGRAMS: A Citizen-Centric Path to a Better India

- The government is prioritizing a **citizen-centric approach** for a developed Bharat, ensuring active participation from citizens in the development process.
- **CPGRAMS** (Centralized Public Grievance Redress and Monitoring System) plays a key role in bridging the gap between citizens and the government by swiftly addressing their concerns.

Efficient Grievance Resolution with CPGRAMS

- Developed and monitored by the **Department of Administrative Reforms and Public Grievances (DARPG)**.
- Available 24/7, connecting all Ministries and Departments of India and the States.
- Citizens can file complaints through the web portal, mobile app on the Google Play Store, or the UMANG app.
- Each complaint receives a unique registration ID for tracking progress.
- The **'My Grievance' app** serves as an independent platform for filing and tracking complaints.
- Grievance Redressal timeline reduced from 30 to 21 days.

Guidelines for Effective Grievance Redressal

- **Transparency, efficiency, and accountability** are the focus.
- **2024 Policy Guidelines** highlight the government's commitment to addressing grievances effectively.
- **Integrated Platform**: CPGRAMS (www.pgportal.gov.in) serves as the central platform for filing grievances.
- **Nodal Officers**: Appointed in every Ministry/Department to ensure timely and effective grievance resolution.
- **Grievance Cells**: Dedicated cells in each Ministry/Department staffed with knowledgeable personnel.
- **Reduced Timelines**: Grievance redressal must be completed within 21 days.
- **Escalation Process**: Appellate officers and sub-nodal officers oversee grievance escalations.
- **Whole of Government Approach**: Ensures grievances are addressed effectively across all government bodies.
- **Feedback System**: Feedback sent via SMS/email, with citizens able to file an appeal if dissatisfied.
- **Grievance Redressal Index**: Monthly performance rankings of Ministries/Departments.
- **Training and Capacity Building**: Grievance officers trained under the **SEVOTTAM scheme**.
- **Regular Review**: Senior officers regularly review grievance redressal performance.

Key Achievements of CPGRAMS

- Connects **92 Central Ministries, Departments, and Organizations** with **36 States/UTs**.
- Supported by over **73,000 active subordinate users**.
- Enabled the resolution of **70,03,533 grievances** from 2022 to 2024.
- **Fourth Sushasan Saptah and Prashasan Gaon ki Ore Campaign**: Held in over 700 districts, achieving significant milestones in grievance redressal.

NextGen CPGRAMS

- Set to launch on **1st July 2025**.
- Features include grievance filing via **WhatsApp/Chatbot**, voice-to-text lodging, instant alerts, and auto-escalation.
- Machine learning-based auto-replies and auto-populated reports for Grievance Redressal Officers.
- **Global Recognition and Citizen Impact**
- Recognized as a model of effective governance at the **Third Biennial Pan-Commonwealth Heads of Public Service Meeting** in April 2024.
- Proven effective in addressing citizens' grievances with swift resolutions and improved public safety.

Conclusion

- CPGRAMS has become a key tool in improving how the government addresses citizens' issues.
- By simplifying the grievance process and ensuring quicker resolutions, it has built a stronger connection between the public and the government.
- With significant improvements in service delivery and global recognition for its effectiveness, CPGRAMS is helping India move towards a more responsive and citizen-focused government.

Vivad Se Vishwas Scheme

- The **Vivad Se Vishwas (VsV) scheme** was introduced in the Union Budget 2024-25 by Union Finance Minister Nirmala Sitharaman.
- It aims to resolve income tax disputes by allowing taxpayers to waive interest and penalties if they file a declaration before the stipulated deadline and pay the disputed amount along with a specified percentage.

Key Features of the Vivad Se Vishwas Scheme

- **Deadline Extension**: The original deadline was December 31, 2024, but it has been extended to January 31, 2025.
- **Eligibility**: Taxpayers with disputes/appeals can opt for this scheme to conclude their income tax disputes.
- **Payment Terms**:
- If the declaration is filed by January 31, 2025, taxpayers must pay 100% of the disputed tax demand.
- For declarations filed on or after February 1, 2025, taxpayers must pay 110% of the disputed tax demand.

Benefits of the Scheme

- **Resolution of Disputes**: Helps taxpayers conclude their income tax disputes effectively.
- **Avoidance of Additional Penalties**: By opting for the scheme, taxpayers can avoid additional penalties and interest.
- **Simplified Process**: The scheme provides a straightforward process for taxpayers to resolve their disputes.

RBI's Financial Stability Report

- The **Reserve Bank of India (RBI)** published its Financial Stability Report (FSR) on December 31, 2024.
- The report provides an assessment of the health of the financial system and explores the possible impact on the system in various stress scenarios.

Economic Growth Forecast

- The RBI forecasts the economy will expand by **6.6% in FY25**, in line with the forecast given by outgoing governor Shaktikanta Das.
- GDP growth had retreated to **5.4%** in the three months to September, the slowest in seven quarters.

Concerns Highlighted in the Report

- **Bad Loans**: Commercial banks could witness a rise in the share of bad loans, with the capital buffers potentially declining in extreme stress scenarios.
- **Microfinance and Consumer Credit Stress**: Lingering stress in these sectors, with more than a third of external commercial borrowings remaining unhedged.
- **Equity Valuations**: Stretched valuations and risks from external spillovers require close monitoring.
- **Write-offs**: Sharp rise in write-offs among private sector banks, potentially masking worsening asset quality.
- **Retail Loan Portfolios**: Fresh accretion of NPAs in retail loan portfolios, dominated by slippages in the unsecured loan book.

Key Ratios and Stress Test Scenarios

- **Gross Non-Performing Assets (GNPA)**: Expected to rise to **3% by March 2026** under the baseline scenario, from a 12-year low of 2.6% in September 2024.
- **Capital Adequacy Ratio**: Could fall to **16.5% in March 2026** in the baseline scenario, and decline further in high-risk scenarios.

Dynamic Ground Water Resource Assessment Report 2024

- The **Union Minister of Jal Shakti**, Shri CR Patil, released the Dynamic Ground Water Resource Assessment Report for 2024 on December 31, 2024.
- The assessment was conducted by the **Central Ground Water Board (CGWB)** in collaboration with States/UTs.

Key Findings

- **Total Annual Groundwater Recharge**: Assessed at **446.90 Billion Cubic Meter (BCM)**.
- **Annual Extractable Groundwater Resource**: Assessed at **406.19 BCM** after accounting for natural discharge.
- **Annual Groundwater Extraction**: Recorded at **245.64 BCM** for all uses.
- **Average Stage of Groundwater Extraction**: Stands at **60.47%**.
- **Categorization of Assessment Units**
- **Safe Units**: 4951 units (73.4%) categorized as 'Safe'.
- **Semi-Critical Units**: 711 units (10.5%) categorized as 'Semi-Critical'.
- **Critical Units**: 206 units (3.05%) categorized as 'Critical'.
- **Over-Exploited Units**: 751 units (11.1%) categorized as 'Over-Exploited'.
- **Saline Units**: 127 units (1.8%) categorized as 'Saline' due to brackish or saline groundwater.

Improvements and Trends

- **Increase in Groundwater Recharge**: Attributed to recharge from water bodies, tanks, and water conservation structures.
- **Improvement in Groundwater Conditions**: Noted in 128 assessment units compared to 2023.
- **Decrease in Over-Exploited, Critical, and Semi-Critical Units**: Observed overall.

Good Governance Index 2023

- The **Good Governance Index (GGI)** was launched on December 25, 2019, to mark the birth anniversary of former Prime Minister Atal Bihari Vajpayee, observed as Good Governance Day.
- The GGI provides a biennial ranking of states and Union territories (UTs) based on various governance indicators.

Key Features of the Good Governance Index

- **Indicators**: Evaluates over 50 indicators across sectors like agriculture, public health, economic governance, and citizen-focused services.
- **Ranking**: Tamil Nadu topped the rankings for big states in 2019, while Gujarat secured the top spot in 2021.
- **Biennial Release**: The GGI is released every two years, with the next edition slated for December 2025.

Recent Developments

- The central government decided not to release the **Good Governance Index 2023** and will publish the next edition in 2025.
- The decision was based on concerns that the 2023 data would appear outdated if launched at the end of 2024.
- The government plans to carry out the GGI exercise again and collect fresh data.

Previous Editions and Improvements

- The **2021 GGI** evaluated 58 indicators across 10 sectors and was launched by Union Home Minister Amit Shah on December 25, 2021.
- Gujarat topped the ranking in 2021, and 20 states showed improvement compared to 2019.
- District-level governance indices have been issued for Maharashtra, Uttar Pradesh, Jammu and Kashmir, and Arunachal Pradesh between 2021 and 2024.

SpaDeX mission for space docking

- The **Indian Space Research Organisation (ISRO)** successfully launched the **Space Docking Experiment (SpaDeX)** mission on December 30, 2024.
- The mission aims to demonstrate technologies needed for spacecraft rendezvous, docking, and undocking using two small satellites.

Mission Details

- **Launch Vehicle**: **Polar Satellite Launch Vehicle (PSLV-C60)**.
- **Satellites**: Two small satellites, **SDX01 (Chaser)** and **SDX02 (Target)**, each weighing about 220 kg.
- **Payloads**: The mission also carried **24 other innovative payloads**.
- **Launch Site**: **Satish Dhawan Space Centre (SDSC)**, Sriharikota.

- **Orbit**: The satellites were launched into a **475-km circular orbit**.

Significance of the Mission

- **Technological Advancement**: Demonstrates India's capability in spacecraft rendezvous, docking, and undocking, a technology mastered by only an elite group of spacefaring nations.
- **Innovation**: The mission includes innovative payloads that contribute to advancements in space technology.

Defence Ministry's Contracts to Enhance Submarine Capabilities

- The **Ministry of Defence** has signed two major contracts worth approximately **Rs 2,867 crore** to enhance the capabilities of the Indian Navy's submarine fleet.

Key Contracts

First Contract:

- **Value**: Rs 1,990 crore.
- **Partner**: **Mazagon Dock Shipbuilders Limited (MDL)**.
- **Purpose**: Construction of an **Air Independent Propulsion (AIP) Plug** for the **DRDO-AIP system**.
- **Benefit**: Allows submarines to stay submerged for longer durations by generating power without the need for atmospheric oxygen.

Second Contract:

- **Value**: Rs 877 crore.
- **Partner**: **France's Naval Group**.
- **Purpose**: Integration of the **Electronic Heavy Weight Torpedo (EHWT)** onto the **Kalvari-Class submarines**.
- **Benefit**: Enhances the firepower of the submarines, enabling them to engage surface ships and other submarines effectively.

Significance of the Contracts

Indigenous Development:

- The AIP technology is being indigenously developed by **DRDO**.
- Contributes to the **'Aatmanirbhar Bharat'** initiative by enhancing the endurance of conventional submarines.

Employment Generation:

- The projects are expected to generate employment for nearly **three lakh people**.

Nanoplastics and Antimicrobial Resistance

- Let's discuss the emerging threat of **nanoplastics** in exacerbating **antimicrobial resistance (AR)**.
- A study by the **Institute of Nano Science and Technology, Mohali** highlights how discarded PET bottles contribute to this global menace.

Key Findings

Antibiotic Resistance in India:

- India is among the worst-hit countries by AR.

- Growing resistance to existing antibiotics poses a serious threat to achieving the **UN Sustainable Development Goals (SDG)** by 2030.

- Nanoplastics, derived from single-use plastic bottles, contribute to the spread of AR.
- They coexist with microorganisms in diverse environments, including the human gut.

Impact on Gut Microbiota:

- **Lactobacillus acidophilus**, a beneficial gut bacterium, can become a carrier of AR genes due to nanoplastics.
- Nanoplastics facilitate cross-species gene transfer from **E. coli** to **Lactobacillus acidophilus** through **horizontal gene transfer (HGT)**.

Mechanisms of AR Gene Transfer

Direct Transformation Pathway:

- Nanoplastics act as physical carriers, transporting AR plasmids across bacterial membranes.
- Promotes direct gene transfer between bacteria.

OMV-Induced Transfer Pathway:

- Nanoplastics induce oxidative stress and damage to bacterial surfaces.
- Activates stress response genes, increasing **outer membrane vesicle (OMV)** secretion.
- OMVs loaded with AR genes become potent vectors for gene transfer across bacterial species.

Implications and Recommendations

Public Health Risk:

- Nanoplastics introduce AR genes to beneficial gut bacteria, potentially transferring them to pathogenic bacteria.
- Protecting beneficial gut bacteria is crucial for immune support, digestion, and disease prevention.

Policy and Awareness:

- Need for strict safety guidelines, awareness programs, and policies prioritizing responsible plastic usage and waste management.
- Limiting nanoplastic contamination can help preserve gut microbiota integrity and minimize AR gene transfer.

KM3NeT: Mediterranean Undersea Neutrino Telescope Expansion

- The **KM3NeT** research team has recently concluded their annual campaign to deploy new detectors for the underwater neutrino telescope in the Mediterranean Sea.
- This marks a significant step towards the completion of KM3NeT, which aims to detect high-energy neutrinos.

Key Features of KM3NeT

- **Dual Telescopes**: KM3NeT comprises two separate telescopes, each featuring hundreds of vertical cables strung with glass spheres containing photomultiplier tubes.
- **Sicilian Telescope**: Detects high-energy neutrinos from deep space, helping pinpoint cosmic accelerators.
- **Telescope**: Focuses on atmospheric neutrinos and their oscillations, enhancing our understanding of particle physics.

Recent Developments

- **Detector Deployment**: The recent campaign added more detectors, increasing the total to 57.
- **Deployment Process**:
- A crane lowers each detector strand to the seabed.
- A remotely operated submersible connects the strand to the network.
- A buoy pulls the strand upwards, allowing it to unfurl in the water.

Vaishali Shines in World Blitz Championship 2024

Vaishali's Performance:

- Vaishali won the women's qualifier with **9.5 points**, ensuring her advancement to the quarterfinals.
- She finished ahead of Russia's **Kateryna Lagno**, who scored 8.5 points.
- Vaishali's victories included key wins against strong opponents like Georgian GM **Nana Dzagnidze** and Russian GM **Valentina Gunina**.

Challenges and Strategies:

- Vaishali faced severe time constraints during her match against Gunina, managing to execute 23 moves with minimal thinking time.
- Despite being behind on the clock and on the board, Vaishali's resilience and strategic play led to her victory.

Upcoming Matches:

- In the quarterfinals, Vaishali will face Chinese Grandmaster **Zhu Jiner**.

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02 January 2025

Centre Amends Prison Manual Rules to Address Caste-Based Discrimination

- **Union Home Ministry** amends prison manual rules to check **caste-based discrimination** of inmates.
- Communication sent to **Chief Secretaries** of all States and Union Territories.
- **Model Prison Manual, 2016** and **Model Prisons and Correctional Services Act, 2023** have been amended.
- Changes follow the **Supreme Court's order** on October 3, 2024, regarding caste-based discrimination of prisoners.

Key Decisions by Union Cabinet for Farmers' Welfare

- **Union Cabinet** approves continuation of **Pradhan Mantri Fasal Bima Yojana** and **Restructured Weather Based Crop Insurance Scheme** till 2025-26 with a total budget of **₹69,515.71 crore**.
- **Fund for Innovation and Technology (FIAT)** set up with an allocation of **₹824.77 crore** for technology improvements in insurance schemes.
- Extension of one-time special package on **Diammonium Phosphate (DAP)** till December 31, 2025.
- Signing of **Memorandum of Understanding (MoU)** on trade of **Non-Basmati White Rice (NBWR)** between India and Indonesia.

Ministry of Defense Declares 2025 as 'Year of Reforms'

- **Ministry of Defence (MoD)** declares 2025 as the **'Year of Reforms'** to modernize the **Armed Forces**.
- Focus on **Jointness & Integration** initiatives and establishment of **Integrated Theatre Commands**.
- Emphasis on new domains like **Cyber and Space**, and emerging technologies such as **Artificial Intelligence (AI)**, **Machine Learning (ML)**, **Hypersonics**, and **Robotics**.
- Simplification of **acquisition procedures** to facilitate swifter capability development.
- Promotion of **public-private partnerships** and **technology transfer** between the defence sector and civil industries.
- Aim to position India as a credible **exporter of defence products**.
- Focus on **veterans' welfare** and leveraging their expertise.
- Instilling a sense of pride in **Indian culture** and achieving global standards through **indigenous capabilities**.

Tobacco Board's Initiatives for Sustainability and Growth

- **Tobacco Board** focuses on sustainability and growth of the industry; exports reach **₹12,005 crores** in 2023-24.
- **Tobacco farmers' income** doubled over the last 5 years.
- **Crop planning** and regulation of production to meet domestic and export demands.
- **Handholding assistance** provided to farmers to produce quality tobacco.
- **Electronic auctioning system** implemented for better price discovery.
- **Export promotion activities** carried out to sustain and improve India's tobacco exports.

- **Welfare measures** extended to tobacco farmers, including financial relief in times of need.

IIT-Bombay's Affordable Device for Tinnitus Diagnosis and Management

- **IIT-Bombay researchers** develop an affordable device to diagnose and manage **tinnitus**.
- Device offers **personalized treatment solutions** and is combined with a user-friendly app.
- **Tinnitus**: A condition characterized by persistent ringing or buzzing in the ears, affecting over **740 million adults worldwide**.
- Device features **precise tinnitus matching** to identify the exact nature and frequency of the sound experienced by the patient.
- Provides a **customizable, multimodal approach** to treatment, ensuring tailored experiences for patients.
- Includes tools for **tracking disease progression**, enabling clinicians to monitor patient improvement over time.
- Project funded by **Tata Centre for Technology and Design (TCTD)** and **Wadhwani Research Centre for Bioengineering (WRCB)**.

Decline in School Enrolment in India: 2023-24

- **Significant Drop in Enrolment**: The 2023-24 academic year witnessed a decline of over 1 crore (10 million) in school enrolments across India, as reported by the Ministry of Education.
- **Primary Education Impacted**: The most substantial decrease was observed at the primary level (Classes I to V), with enrolments falling from 12 crore in 2022-23 to 11 crore in 2023-24.
- **Gender Disparity**: The reduction affected both boys and girls, though the decline was slightly more pronounced among boys.
- **Regional Variations**: States like Uttar Pradesh, Bihar, and Madhya Pradesh reported the highest declines, while southern states such as Kerala and Tamil Nadu showed relatively stable enrolment figures.
- **Potential Causes**: Factors contributing to this decline include economic challenges, migration, and increased dropout rates, particularly exacerbated by the COVID-19 pandemic's impact on education.

SEBI Uncovers Front-Running Scam Involving Ketan Parekh

- **Front-Running Allegations**: The Securities and Exchange Board of India (SEBI) has identified a front-running scheme involving former stockbroker **Ketan Parekh** and 21 associates, resulting in illicit gains of approximately ₹65.77 crore.
- **Regulatory Actions**: SEBI has imposed trading bans on Ketan Parekh, **Rohit Salgaocar**, and **Ashok Kumar Poddar**, and has ordered the impoundment of the unlawful profits.
- **Modus Operandi**: The group allegedly executed trades ahead of large transactions by a U.S.-based fund, leveraging non-public information to profit from subsequent market movements.
- **Historical Context**: Ketan Parekh was previously implicated in a major stock market scandal in 2001, involving price manipulation of select stocks, leading to significant market disruptions.

Understanding Front-Running

- **Definition**: Front-running is the unethical practice of executing trades based on advance, non-public knowledge of large pending transactions, aiming to profit from the anticipated market impact.
- **Regulatory Prohibition**: In India, front-running is prohibited under Regulation 4(q) of the SEBI (Prohibition of Fraudulent and Unfair Trade Practices) Regulations, 2003, which classifies it as a fraudulent and unfair trade practice.
- **Preventive Measures**: SEBI has mandated that Asset Management Companies (AMCs) establish institutional mechanisms to detect and prevent market abuses, including front-running.

Implications for Market Integrity

- **Investor Confidence**: Incidents of front-running undermine investor trust in the fairness and transparency of financial markets.
- **Regulatory Vigilance**: SEBI's proactive measures in identifying and penalizing such malpractices are crucial for maintaining market integrity and deterring future violations.
- **Ethical Standards**: The case underscores the importance of adherence to ethical standards by market participants to ensure a level playing field for all investors.

Centre Forms Panel to Rejig Wholesale Price Index

- **Formation of Panel**: The Indian government has formed a panel to **revise the Wholesale Price Index (WPI)**.
- **Objective**: The aim is to update the base year and include new items to reflect the current economic scenario.
- **Chairperson**: The panel will be chaired by **Ramesh Chand**, a member of NITI Aayog.
- **Composition**: The panel includes representatives from the **Ministry of Commerce and Industry**, **Ministry of Statistics and Programme Implementation**, and other stakeholders.
- **Significance**: This revision is crucial for accurate measurement of inflation and economic planning.

Opening India's Nuclear Power Sector to Private Participation

- **NPCIL's Initiative**: The Nuclear Power Corporation of India Ltd (NPCIL) has issued a Request for Proposal (RfP) inviting private sector participation to establish **Bharat Small Reactors (BSRs)**, each with a capacity of up to 220 megawatts (MW).
- **Union Budget 2024-25 Announcement**: This move aligns with the Union Budget 2024-25, where Finance Minister Nirmala Sitharaman announced the development of BSRs through a public-private partnership model to enhance India's nuclear energy capacity.
- **Stringent Terms**: Experts note that the RfP includes stringent terms, which may cause apprehension among potential private investors.

Significance of Private Participation in India's Nuclear Sector

- **Resource Mobilization**: Private investment can attract substantial capital for expanding India's nuclear infrastructure, aiding in meeting the country's growing energy demands.
- **Technological Advancement**: Involvement of private entities can introduce innovative technologies and enhance operational efficiencies within the nuclear sector.
- **Decarbonization Efforts**: BSRs offer a sustainable solution for decarbonizing hard-to-abate industries, contributing to India's climate goals.

Challenges and Considerations

- **Regulatory Framework**: The Atomic Energy Act of 1962 prohibits private control of nuclear power generation. While amendments have been made, private participation remains limited to specific roles.
- **Investment Risks**: Stringent terms and regulatory complexities may deter private investors due to perceived financial and operational risks.
- **Public-Private Collaboration**: Successful integration of private players requires clear guidelines and effective collaboration between public and private sectors to ensure safety and efficiency.

Global Context

- **International Practices**: Globally, countries like the United States and France have established models for private participation in nuclear energy, offering potential lessons for India.
- **Safety and Security**: Maintaining stringent safety protocols is paramount, necessitating robust regulatory ovlic-private partnership in the nuclear domain.

Discovery of New Stellaria Species in West Bengal

- **New Species Identified**: Researchers have identified a new species of the genus **Stellaria** in West Bengal.
- **Location**: The species was discovered in the **Darjeeling Himalayas**.
- **Research Team**: The discovery was made by a team of researchers from the **Botanical Survey of India (BSI)**.

Faunal Survey at Shendurney Wildlife Sanctuary

- **Faunal Survey Conducted**: A comprehensive faunal survey was conducted at the **Shendurney Wildlife Sanctuary**.
- **Species Checklist Enriched**: The survey has enriched the regional species checklist with several new additions.
- **Key Findings**: The survey identified new species and recorded the presence of several rare and endangered species.
- **Research Team**: The survey was carried out by a team of experts from various institutions.
- **Conservation Efforts**: The findings highlight the importance of conservation efforts in the region.

Districts with Excess Nitrates in Groundwater at Seven-Year High

- **Excess Nitrates**: The number of districts with excess nitrates in groundwater has reached a **seven-year high**.
- **Health Risks**: High nitrate levels in drinking water can cause serious health issues, including **methemoglobinemia** or "blue baby syndrome" in infants.
- **Agricultural Practices**: The primary source of nitrate contamination is **agricultural runoff** from the excessive use of fertilizers.
- **Affected Regions**: Several districts across India are affected, with significant impacts on rural areas.
- **Government Measures**: The government is taking steps to address this issue, including promoting **sustainable agricultural practices** and improving **water quality monitoring**.

India's 4th Biennial Update Report to UNFCCC

- **Submission Date**: India submitted its **4th Biennial Update Report (BUR-4)** to the **United Nations Framework Convention on Climate Change (UNFCCC)** on **30th December 2024**.
- **GHG Emissions**: In 2020, India's total **Greenhouse Gas (GHG) emissions** decreased by **7.93%** compared to 2019.
- **Emission Sectors**: The **energy sector** contributed the most to overall emissions (75.66%), followed by **agriculture (13.72%)**, **Industrial Processes and Product Use (8.06%)**, and **waste (2.56%)**.
- **Carbon Sequestration**: India's **forest and tree cover** sequestered approximately **522 million tonnes of CO2**, equivalent to reducing **22%** of the country's total carbon dioxide emissions in 2020.
- **Emission Intensity**: Between 2005 and 2020, India's **emission intensity of GDP** reduced by **36%**.
- **Non-Fossil Sources**: As of October 2024, the share of **non-fossil sources** in the installed electricity generation capacity was **46.52%**.
- **Renewable Power**: The total installed capacity of **renewable power**, including large hydropower, is **203.22 GW**.
- **Additional Carbon Sink**: From 2005 to 2021, an additional **carbon sink** of **2.29 billion tonnes of CO2** was created through forest and tree cover.

Russian Gas Exports to Europe via Ukraine Halted

- **Transit Deal Expired**: Russian natural gas exports to Europe via Ukraine were halted as the transit deal expired on **January 1, 2025**.
- **Historical Context**: This marks the end of a decade-long fraught relationship since Russia's seizure of **Crimea in 2014**.
- **Ukraine's Decision**: Ukraine decided not to extend the deal amid the ongoing war with Russia.
- **Economic Impact**: Ukraine faces a loss of **$800 million** annually in transit fees, while Russia's **Gazprom** will lose close to **$5 billion** in gas sales.
- **Alternative Routes**: Russia continues to export gas via the **TurkStream pipeline**, which supplies central European customers including Hungary and Serbia.
- **European Union's Response**: The EU has intensified efforts to reduce dependence on Russian energy by seeking alternative sources.

Magnus Carlsen and Ian Nepomniachtchi Share World Chess Blitz Championship Title

- **Historic Feat**: Magnus Carlsen and Ian Nepomniachtchi shared the **2024 FIDE World Blitz Chess Championship** title, marking the first time in history that the title has been shared.
- **Final Match**: The decision came after both players played three consecutive draws in the sudden death stage, with Carlsen initially leading with two straight victories.
- **Carlsen's Proposal**: Carlsen proposed sharing the title, which Nepomniachtchi agreed to, creating a historic moment in chess.
- **Controversy**: Carlsen faced controversy earlier in the tournament due to a dress code violation, which led to his temporary withdrawal.
- **FIDE's Decision**: FIDE later relaxed the dress code, allowing Carlsen to return and compete in the Blitz Championship.

Human Metapneumovirus (HMPV) Outbreak in China

- **Human Metapneumovirus (HMPV)** is causing a surge in respiratory diseases in China.
- Symptoms are similar to **Covid-19**.
- No specific treatment or vaccine available for HMPV.

Current Situation

- China is experiencing an increase in respiratory diseases, with HMPV being a significant concern.
- Monitoring systems for winter illnesses, including pneumonia of unknown origin, have been piloted.
- Social media reports suggest HMPV is spreading rapidly, affecting children and the elderly, and overwhelming hospitals and crematoriums.
- China's health authorities have not officially declared HMPV as an epidemic but are setting up protocols to handle unknown pathogens.

Symptoms of HMPV

- **Upper respiratory infection**: Cough, wheeze, runny nose, sore throat.
- **Severe cases**: Pneumonia, asthma flare-ups, worsening of chronic obstructive pulmonary disease (COPD).
- **Incubation period**: 3 to 6 days.
- Symptoms can progress to bronchitis or pneumonia.

Prevention Measures

- Frequent hand washing with soap and water for at least 20 seconds.
- Avoid touching the eyes, nose, or mouth with unwashed hands.
- Avoid close contact with sick individuals.
- Wearing masks when having cold-like symptoms.

Treatment

- No specific antiviral treatment or vaccine.
- General supportive care to address symptoms.

Comparison with Covid-19

- Both HMPV and Covid-19 cause respiratory issues like coughing, fever, wheezing, sore throat, and shortness of breath.
- HMPV cases increased in Henan, China, after Covid-19.

Potential for a New Pandemic

- No official statement from health authorities about a state of emergency.
- Awareness and precaution are crucial due to the lack of specific treatment or vaccine.

Mahakumbh Mela 2025

- **Mahakumbh Mela** is a major Hindu pilgrimage and festival held once every 12 years.
- The 2025 Mahakumbh Mela will commence on **January 13** and end on **February 26** in **Prayagraj**.

IMD's Special Webpage

- The **India Meteorological Department (IMD)** has launched a dedicated webpage for the Mahakumbh Mela.
- This webpage will provide **weather updates every 15 minutes** and **weather forecasts twice a day**.

Temporary District and Infrastructure

- Mahakumbh has been designated as a **temporary district** for the duration of the festival.
- **Three new Automatic Weather Stations (AWS)** have been installed to provide real-time weather updates.
- **Two digital displays** will be set up in the district for public access to weather information.

Bathing Rituals (Shahi Snan)

Significant bathing dates include:
- **January 14** (Makar Sankranti)
- **January 29** (Mauni Amavasya)
- **February 3** (Basant Panchami)

Cultural and Spiritual Significance

- The Mahakumbh Mela is a symbol of **unity and spirituality**.
- Sadhus and seers from various Akharas (monastic orders) participate in grand processions and rituals.
- The festival attracts millions of pilgrims from across India and the world.

Air India's Introduction of In-Flight Wi-Fi Services

- Air India has become the first Indian airline to offer in-flight Wi-Fi services on select domestic and international flights, enhancing passenger connectivity and in-flight experience.
- **Launch Date:** January 1, 2025.

Aircraft Equipped:

- Airbus A350
- Boeing 787-9
- Select Airbus A321neo
- **Service Availability:** Complimentary for an introductory period.

Access Procedure:

1. Enable Wi-Fi on your device.
2. Select the 'Air India Wi-Fi' network.
3. Enter required details (e.g., PNR and last name) on the redirected portal.
4. Enjoy internet access.

Understanding In-Flight Wi-Fi Technology:

- In-flight Wi-Fi enables passengers to connect to the internet while airborne, utilizing two primary technologies:
1. **Satellite-Based Connectivity:**
   - **Mechanism:**

- Aircraft are equipped with antennas that communicate with satellites in geostationary orbit.
- Data is transmitted between the aircraft and ground stations via these satellites.
  - **Advantages:**
    - Provides coverage over large areas, including oceans and remote regions.
  - **Considerations:**
    - Latency can be higher due to the long-distance data travel.
    - Weather conditions may affect signal quality.

2. **Air-to-Ground (ATG) Connectivity:**
   - **Mechanism:**
     - Aircraft connect to ground-based cell towers, similar to mobile networks.
     - Data is transmitted directly between the aircraft and these towers.
   - **Advantages:**
     - Lower latency compared to satellite-based systems.
     - Generally more cost-effective.
   - **Considerations:**
     - Coverage is limited to land masses with tower infrastructure.
     - Not suitable for over-ocean flights.

Global Context:

- Many international airlines have been offering in-flight Wi-Fi for years, utilizing either satellite or ATG systems based on their route structures and service strategies.

Regulatory Framework in India:

- **Approval:** In 2018, the Telecom Commission of India approved in-flight connectivity, allowing airlines to offer internet services above an altitude of 10,000 feet.
- **Licensing:** Service providers must obtain the necessary licenses from the Department of Telecommunications (DoT) to offer in-flight connectivity.

Challenges and Considerations:

- **Bandwidth Management:** Ensuring equitable distribution of limited bandwidth among passengers to prevent service degradation.
- **Security Concerns:** Implementing robust cybersecurity measures to protect against potential threats.
- **Cost Implications:** Balancing the high installation and operational costs with passenger demand and willingness to pay.

Implications for Air India and Passengers:

- **Enhanced Passenger Experience:** Availability of in-flight Wi-Fi caters to the growing demand for constant connectivity, improving customer satisfaction.
- **Competitive Advantage:** Positioning Air India as a pioneer in the Indian aviation sector by offering services comparable to international standards.
- **Operational Efficiency:** Potential for improved communication between crew and ground operations, enhancing overall flight efficiency.

Experts on GM Crop Committees to Declare Conflict of Interest

Overview

- **Genetically Modified (GM) Crops**: Crops that have had their DNA altered through genetic engineering.
- **Conflict of Interest**: A situation where an individual's personal interests could influence their professional decisions.

Current Situation

- Experts on committees evaluating GM crops in India must now declare any **conflict of interest**.
- This move aims to ensure **transparency** and **credibility** in the decision-making process.

Key Points

- **Declaration Requirement**: Experts must disclose any financial, professional, or personal interests that could affect their impartiality.
- **Committee Composition**: Committees include scientists, government officials, and representatives from various sectors.
- **Evaluation Process**: The committees assess the safety, efficacy, and environmental impact of GM crops before approval.

Importance of Transparency

- Ensures that decisions are made based on **scientific evidence** and **public interest**.
- Helps maintain **public trust** in the regulatory process.
- Prevents **bias** and **undue influence** from stakeholders with vested interests.

Winter Char Dham

- **Winter Char Dham**: A new initiative by the Uttarakhand government to promote tourism during the off-season winter months.
- **Objective**: Increase tourist footfall and boost the state's economy during winter.

Winter Seats of Char Dham

- **Gangotri**: Winter seat at **Mukhba** in Uttarkashi.
- **Yamunotri**: Winter seat at **Kharsali** in Uttarkashi.
- **Kedarnath**: Winter seat at **Omkareshwar Temple** in Ukhimath, Rudraprayag.
- **Badrinath**: Winter seat at **Pandukeshwar** in Chamoli.

Current Situation

- The Uttarakhand government inaugurated the winter Char Dham circuit on December 8.
- As of December 30, the shrines recorded a footfall of 15,314 pilgrims.
- The Omkareshwar Temple saw the highest footfall with 6,482 pilgrims.

Government's Hope

- The Char Dham yatra drives the state's economy, contributing over Rs 200 crore daily.
- The winter Char Dham aims to change the perception of Uttarakhand as just a summer destination.
- The initiative is expected to attract tourists to lesser-known destinations in the vicinity of the four winter abodes.

Concerns

- **Environmental Impact**: Increased footfall may strain local infrastructure, degrade fragile ecosystems, and disrupt the sanctity of holy places.
- **Wildlife Disturbance**: Winter traffic can disturb rare and threatened animals like snow leopards and mountain sheep.
- **Safety and Public Health**: The harsh terrain and weather conditions in the mountains pose safety and health risks.

Canada's RCIC Scheme

Overview

- **Rural Community Immigration Class (RCIC)**: A new program by Immigration, Refugees and Citizenship Canada (IRCC) launched in December 2024.
- **Objective**: Address labor shortages and promote development in smaller rural communities by attracting individuals willing to settle long-term in these areas.

Current Situation

- Changes in immigration and study visa rules have made it harder to secure **Permanent Residency (PR)** in Canada.
- The **Post-Graduate Work Permits (PGWPs)** of nearly 7.66 lakh international students are set to expire by the end of next year.
- The RCIC scheme provides a pathway for foreign nationals, including students, to apply for PR if they commit to living and working in designated rural communities.

Eligibility Criteria

- **Education Level**: Applicants with 10+2, graduation, or secondary school qualifications.
- **Studies**: Students who have completed at least 18 months of study in one of the designated communities are eligible to apply for PR directly.
- **Job Offer**: Applicants need a job offer letter from a registered or designated employer in the community.
- **Work Experience**: Relevant work experience is typically required, though this condition may be waived for international graduates who meet certain criteria.
- **Language Proficiency**: Applicants must meet the Canadian Language Benchmark (CLB) requirements based on the job's NOC TEER level:
- TEER 0-1: CLB 6
- TEER 2-3: CLB 5
- TEER 4-5: CLB 4
- **Financial Proof**: Applicants must demonstrate they have at least half of the low-income threshold for rural areas to sustain themselves for one year.
- **Intent to Reside**: Candidates must provide genuine proof of their intention to live in the designated rural community.

Benefits for International Students

- **Less Competition**: Rural areas have less competition than larger cities, increasing the chances of securing a PR pathway.
- **Employer Assistance**: Designated employers in these communities often assist with the PR process, easing the application burden.

Bhopal Gas Tragedy: Pithampur Residents Protest Incineration of UCC Hazardous Waste

Overview

- **Bhopal Gas Tragedy**: A catastrophic industrial disaster that occurred in December 1984 at the Union Carbide India Limited (UCIL) pesticide plant in Bhopal, Madhya Pradesh.
- **Hazardous Waste**: 377 metric tonnes of harmful Union Carbide waste brought from Bhopal to Pithampur for incineration.

Current Situation

- **Protests**: Residents of Pithampur are protesting against the incineration of hazardous waste, fearing health and environmental risks.
- **Waste Composition**: Includes 162 metric tonnes of soil, 92 metric tonnes of Sevin and naphthol residues, 54 metric tonnes of semi-processed pesticides, and 29 metric tonnes of reactor waste.
- **Methyl Isocyanate (MIC)**: A toxic chemical linked to the 1984 gas leak disaster is part of the waste.

Government's Response

- **CM Mohan Yadav's Assurance**: The disposal will be done under scientific guidance and will not impact the environment.
- **Supreme Court Order**: The scientific disposal of the waste was ordered after a trial disposal in 2015 confirmed compliance with environmental regulations.

Environmental and Health Concerns

- **Air and Water Contamination**: Residents fear that incineration could lead to contamination of air and water sources.
- **Public Health**: Potential health risks for the local population due to exposure to toxic chemicals.

Territorial Army's Ganga Task Force for Gomti River Rejuvenation

Overview

- **Territorial Army** has launched a new task force named **Ganga Task Force (GTF)** for the rejuvenation and protection of the **Gomti River**.
- The initiative is under the aegis of the **National Mission for Clean Ganga (NMCG)**, Ministry of Jal Shakti.

Current Situation

- The GTF battalion comprises primarily **ex-servicemen**.
- Responsibilities include:
- **Pollution monitoring**
- **Patrolling of riverbanks and ghats**
- **Public awareness campaigns**
- **Riverbank stabilisation efforts**
- **Inauguration Ceremony**
- The formal raising ceremony took place on January 1 at **Lucknow Cantonment**.
- **Brigadier Chinmay Madhwal**, Commander of Territorial Army group headquarters, handed over the symbolic flag to **Colonel Aravind Prasad S**, Commanding Officer of the GTF.

- The ceremony was attended by both military and civilian sectors, including **Professor Dr Venkatesh Dutta** from Babasaheb Bhimrao Ambedkar University.

Objectives and Significance

- The initiative aims to boost **environmental preservation** and **sustainable development**.
- It underscores the Indian Army's continued contribution to **nation-building** and **environmental sustainability**.

Nano-Formulation of Melatonin for Parkinson's Disease

Overview

- **Melatonin**: A hormone produced by the brain in response to darkness, known for its antioxidative and neuroprotective properties.
- **Parkinson's Disease (PD)**: A neurological disorder caused by the death of dopamine-secreting neurons in the brain due to the aggregation of synuclein protein.

Current Research

- Scientists have developed a **nano-formulation of melatonin** using **human serum albumin (HSA)** as a nanocarrier.
- This nano-formulation has shown improved **bioavailability** and **sustained release** of melatonin.

Key Findings

- **Enhanced Antioxidative and Neuroprotective Properties**: The nano-melatonin demonstrated better antioxidative effects and neuroprotection compared to bare melatonin.
- **Mitophagy Induction**: The nano-formulation improved mitophagy, which helps remove unhealthy mitochondria and reduces oxidative stress.
- **Mitochondrial Biogenesis**: It also enhanced mitochondrial biogenesis, counteracting pesticide-induced toxicity in an in vitro PD model.
- **BMI1 Regulation**: The study revealed that the nano-formulation upregulated BMI1, a crucial epigenetic regulator, which induced mitophagy and protected neurons from degeneration.

Implications

- The findings suggest that nano-melatonin could be a potential therapeutic solution for **Parkinson's Disease**.
- It may also be used to treat other diseases where dysregulated mitophagy is critical for pathological outcomes.

National Sports Awards 2024

Overview

- The **National Sports Awards 2024** were announced by the Ministry of Youth Affairs & Sports.
- The awards will be presented by the President of India on **17th January 2025** at Rashtrapati Bhavan.

Major Dhyan Chand Khel Ratna Award 2024

- **Shri Gukesh D** (Chess)

- **Shri Harmanpreet Singh** (Hockey)
- **Shri Praveen Kumar** (Para-Athletics)
- **Ms. Manu Bhaker** (Shooting)

Arjuna Awards for Outstanding Performance in Sports and Games 2024

- **Ms. Jyothi Yarraji** (Athletics)
- **Ms. Annu Rani** (Athletics)
- **Ms. Nitu** (Boxing)
- **Ms. Saweety** (Boxing)
- **Ms. Vantika Agrawal** (Chess)
- **Ms. Salima Tete** (Hockey)
- **Shri Abhishek** (Hockey)
- **Shri Sanjay** (Hockey)
- **Shri Jarmanpreet Singh** (Hockey)
- **Shri Sukhjeet Singh** (Hockey)
- **Shri Rakesh Kumar** (Para-Archery)
- **Ms. Preeti Pal** (Para-Athletics)
- **Ms. Jeevanji Deepthi** (Para-Athletics)
- **Shri Ajeet Singh** (Para-Athletics)
- **Shri Sachin Sarjerao Khilari** (Para-Athletics)
- **Shri Dharambir** (Para-Athletics)
- **Shri Pranav Soorma** (Para-Athletics)
- **Shri H Hokato Sema** (Para-Athletics)
- **Ms. Simran** (Para-Athletics)
- **Shri Navdeep** (Para-Athletics)
- **Shri Nitesh Kumar** (Para-Badminton)
- **Ms. Thulasimathi Murugesan** (Para-Badminton)
- **Ms. Nithya Sre Sumathy Sivan** (Para-Badminton)
- **Ms. Manisha Ramadass** (Para-Badminton)
- **Shri Kapil Parmar** (Para-Judo)
- **Ms. Mona Agarwal** (Para-Shooting)
- **Ms. Rubina Francis** (Para-Shooting)
- **Shri Swapnil Suresh Kusale** (Shooting)
- **Shri Sarabjot Singh** (Shooting)
- **Shri Abhay Singh** (Squash)
- **Shri Sajan Prakash** (Swimming)
- **Shri Aman** (Wrestling)

Arjuna Awards (Lifetime) for Outstanding Performance in Sports and Games 2024

- **Shri Sucha Singh** (Athletics)
- **Shri Murlikant Rajaram Petkar** (Para-Swimming)

Dronacharya Award for Outstanding Coaches in Sports and Games 2024

- **Regular Category**:
- **Shri Subhash Rana** (Para-Shooting)
- **Ms. Deepali Deshpande** (Shooting)
- **Shri Sandeep Sangwan** (Hockey)
- **Lifetime Category**:

- **Shri S Muralidharan** (Badminton)
- **Shri Armando Agnelo Colaco** (Football)

Rashtriya Khel Protsahan Puraskar

- **Physical Education Foundation of India**

Maulana Abul Kalam Azad (MAKA) Trophy 2024

- **Chandigarh University** (Overall winner)
- **Lovely Professional University, Punjab** (1st runner up)
- **Guru Nanak Dev University, Amritsar** (2nd runner up)

Injectable Hydrogel for Targeted Breast Cancer Therapy

- Researchers at **IIT Guwahati** and **Bose Institute, Kolkata** have developed an advanced **injectable hydrogel** for localized cancer treatment.
- This hydrogel delivers **anti-cancer drugs** directly to tumor sites, reducing systemic side effects.

Key Features

- **Hydrogels**: Water-based, three-dimensional polymer networks capable of absorbing and retaining fluids.
- **Ultra-short Peptides**: Biocompatible and biodegradable building blocks of proteins used in the hydrogel.
- **Controlled Drug Release**: The hydrogel responds to elevated **glutathione (GSH)** levels in tumor cells, triggering a controlled drug release.

Benefits

- **Localized Action**: Ensures the hydrogel stays at the injection site, minimizing interaction with healthy tissues.
- **Reduced Side Effects**: Minimizes systemic side effects typically associated with conventional cancer treatments like chemotherapy.
- **Improved Drug Uptake**: Enhances drug uptake by cancer cells, induces cell cycle arrest, and promotes programmed cell death.

Preclinical Trials

- **Murine Model of Breast Cancer**: A single injection of the hydrogel loaded with **Doxorubicin** resulted in a ~75% reduction in tumor size within 18 days.
- **Efficacy**: The hydrogel remained localized at the tumor site, steadily releasing the drug over time without causing detectable side effects on other organs.

IIT Bombay Develops Bacteria to Combat Soil Pollution and Boost Agriculture

- Researchers at **IIT Bombay** have developed bacteria capable of consuming toxic pollutants in the soil and producing essential nutrients as byproducts.
- This innovation aims to tackle soil pollution and enhance agricultural productivity.

Key Features

- **Bacterial Species**: Identified bacteria from the genera **Pseudomonas** and **Acinetobacter**.

- **Pollutant Degradation**: These bacteria can break down **aromatic compounds** found in pesticides, herbicides, and industrial by-products.
- **Nutrient Production**: The bacteria produce essential nutrients that boost plant growth by enhancing growth hormones, inhibiting harmful fungi, and making nutrients more accessible to plants.

Benefits

- **Reduced Dependency on Chemicals**: Decreases the need for chemical pesticides and insecticides.
- **Improved Soil Health**: Enhances soil fertility and health by degrading harmful substances.
- **Cost-Effective Solution**: Offers a more affordable alternative to traditional pollutant removal methods like chemical treatments or soil removal.

Environmental Impact

- **Aromatic Compounds**: These organic chemicals with benzene-like structures are major pollutants in agriculture and various industries.
- **Pollution Sources**: Commonly found in pesticides, herbicides, cosmetics, textiles, construction, petroleum, and plastics industries.
- **Soil Contamination**: These compounds hinder seed germination, stifle plant growth, reduce yields, and accumulate in plant biomass.

Ebola Virus' Skin Route

Overview

- **Ebola Virus (EBOV)**: A deadly virus primarily spread through direct contact with bodily fluids.
- **New Study**: Research from the University of Iowa highlights a potential transmission pathway via skin contact in the late stages of infection.

Key Findings

- **Skin as a Transmission Route**: The study suggests that EBOV can reach the surface of human skin, providing insights into person-to-person transmission via skin contact.
- **Infected Cell Types**: Identified cell types in the skin targeted by EBOV include macrophages, endothelial cells, fibroblasts, and keratinocytes.
- **Viral Replication**: More robust in the epidermal layer than in the dermis, indicating rapid spread through the skin.

Research Methodology

- **Human Skin Explant Model**: Researchers used full-thickness skin biopsies in a culture system to simulate how EBOV might move from blood vessels to the skin's outermost layer.
- **Tracking Techniques**: Virus particles were introduced to the dermal side, and their journey was tracked over three days using tagging techniques.

Implications for Public Health

- **Ebola Outbreaks**: The findings are significant for managing and understanding Ebola outbreaks, especially regarding the presence of infectious EBOV on the skin's surface of deceased individuals.
- **Antiviral Treatments**: The study offers a new, cost-effective model for testing antiviral treatments.

India's Ambitious Banana Export Targets

Overview

- **India** aims to achieve **$1 billion** in banana exports within the next five years.
- The **Agricultural and Processed Food Products Export Development Authority (APEDA)** has reported a tenfold increase in banana exports over the past decade.

Current Situation

- Successful trial shipments to the **Netherlands** via sea routes have opened new markets.
- **Russia** is expected to become a significant importer of Indian bananas.
- In the fiscal year 2023-24, India exported bananas worth **$300 million**, up from **$176 million** in 2022-23.
- India's global market share in banana exports has increased from **0.21% in 2013** to **1.74% in 2023**.

Transportation and Infrastructure

- Current exports rely heavily on costly **air transport**.
- Adoption of **sea transport protocols** is expected to reduce costs and increase export volumes.
- APEDA is working on sea transport protocols for bananas and other fruits like **mangoes, pomegranates, and jackfruit**.

Government Initiatives

- Financial support, modern farming techniques, and improved infrastructure have been instrumental in transforming India into a prominent banana exporter.
- States like **Uttar Pradesh** have designated banana cultivation as a priority under the **One District One Product (ODOP)** initiative in **Kushinagar**.
- Subsidies and incentives for farmers have led to better-quality bananas, benefiting districts in the **Purvanchal** and **Awadh** regions such as **Deoria, Gorakhpur, and Ayodhya**.

Discovery of Pallas's Cat in Himachal Pradesh

Overview

- **Pallas's Cat**: A small wild feline species, also known as **Otocolobus manul**.
- **Significance**: First photographic evidence of Pallas's cat in Himachal Pradesh, India, during a snow leopard survey.

Current Situation

- **Location**: Found in the **Kinnaur area** at elevations between **3,900 and 4,100 meters** within rocky habitats.
- **Threats**: Habitat loss, depletion of prey, and hunting.
- **Conservation Status**: Classified as "Near Threatened" by the **International Union for Conservation of Nature (IUCN)**.

Characteristics of Pallas's Cat

- **Appearance**: Flat face, short legs, and thick fur adapted to high-altitude climates.
- **Behavior**: Solitary and nocturnal, preying on small mammals, birds, and insects.
- **Habitat**: Inhabits steppes of Central Asia and now confirmed in the Indian Himalayas.

Importance of the Discovery

- **Biodiversity**: Highlights the rich and diverse ecosystems of the Indian Himalayas.
- **Conservation Efforts**: Provides critical data for conserving lesser-known species overshadowed by mega-fauna like the snow leopard.
- **Research Opportunities**: Opens new avenues for studying the cat's behavior, interaction, and ecology within India.

EPFO Rolls Out Centralized Pension Payment System Across India

Overview

- **Employees' Provident Fund Organisation (EPFO**) has fully implemented the **Centralized Pension Payments System (CPPS)** across all its regional offices in India.
- The system aims to enhance pension services by providing seamless access to pensions from any bank or branch nationwide.

Key Features

- **Decentralized to Centralized**: Shift from a decentralized system where each regional office maintained separate agreements with only 3 4 banks to a centralized system.
- **Pension Access**: Pensioners can now access their pensions from any bank or branch without needing physical verification visits.
- **Immediate Crediting:** Pensions are immediately credited upon release, eliminating the need for Pension Payment Orders (PPO) transfers when pensioners move locations or change banks.

Implementation and Impact

- **Pilot Programs:** Successful pilot programs were conducted in Karnal, Jammu, and Srinagar in October 2024, followed by a second pilot in 24 regional offices in November 2024.
- **Disbursement**: In December 2024, about **Rs 1,570 crore** was disbursed to over **68 lakh pensioners** across 122 regional offices.
- **Relief for Pensioners**: The system provides significant relief for pensioners who move to their hometowns after retirement.

Baanknet: Revamped E-Auction Portal for Public Sector Banks

Overview

- **Baanknet**: A revamped e-auction portal launched by the **Department of Financial Services (DFS)** Secretary **M. Nagaraju**.
- **Purpose**: Consolidates information on properties put up for e-auction by **Public Sector Banks (PSBs)**, providing a one-stop destination for buyers and investors.

Key Features

- **Property Listings:** Includes residential properties (flats, independent houses, open plots), commercial properties, industrial land and buildings, shops, vehicles, plant and machinery, agricultural and non-agricultural land.
- **User-Friendly:** Simplifies the process of finding and participating in property e-auctions.
- **Enhanced Features**: Automated and integrated payment gateway, KYC tools, microservices-based architecture with open APIs for third-party integration, dashboard feature for spend analytics and MIS reports, dedicated helpdesk and call center facility with callback request.

Implementation and Impact

- **Launch Event:** Launched in New Delhi with the presence of chairpersons of debt recovery appellate tribunals, presiding officers of debt recovery tribunals, managing directors and CEOs of PSBs, and senior officers of DFS.

- **Training**: DFS has provided training to executives of all PSBs and recovery officers in debt recovery tribunals to ensure effective utilization of the portal.
- **Property Migration**: Over **122,500 properties** have already been migrated to the new portal for auction.

Union Minister Unveils LEADS 2024 Report

Overview

- **Logistics Ease Across Different States (LEADS) 2024** report released by Union Minister **Piyush Goyal**.
- The report evaluates logistics performance across four key pillars: **Logistics Infrastructure, Logistics Services, Operating and Regulatory Environment, and Sustainable Logistics**.

Key Features

- **Action Plans**: States must develop regional and city-level logistics plans for better logistics planning and last-mile connectivity.
- **Green Logistics**: Advocacy for sustainable growth through green logistics initiatives.
- **Public-Private Partnerships (PPPs)**: Encouragement for leveraging PPPs for the success of multi-modal hubs.
- **Technology Adoption**: Emphasis on adopting newer technologies like Artificial Intelligence (AI), Machine Learning (ML), and Data Analytics for future success.
- **Skill Development**: Focus on skill development to boost the logistics sector.
- **Gender Inclusivity**: Encouragement for greater participation of women in the logistics sector.

Implementation and Impact

- **LEADS Framework**: The LEADS framework includes Longevity, Efficiency and Effectiveness, Accessibility and Accountability, and Digitalisation of processes.
- **Performance Highlights**: Coastal Group Achievers include **Gujarat, Karnataka, Maharashtra, Odisha, and Tamil Nadu**.
- **Collaborative Efforts**: Commended the collaborative efforts of all stakeholders in making logistics a critical enabler for India's economic growth.

CAG's New Tool to Track Government Schemes

Overview

- **Comptroller and Auditor General (CAG)** has introduced a new digital tool called the **Open Data Kit (ODK)** platform.
- The tool aims to enhance transparency and accountability in public spending and the delivery of government schemes.

Key Features

- **Data Collection and Management**: ODK allows the CAG to securely collect and manage data.
- **Integration**: The platform integrates with CAG's operating system, **OIOS**.
- **Beneficiary Surveys**: Used to gather information from beneficiaries to identify problem areas and collect audit evidence.
- **Multilingual Support**: Enables surveys in multiple languages simultaneously.

Recent Applications

- **Patient Satisfaction**: Recently used to assess patient satisfaction at **AIIMS Mangalagiri** in Guntur and **AIIMS Bibinagar** in Hyderabad.
- **Performance Audit**: Part of a performance audit to evaluate the effectiveness of government schemes.

Draft Data Protection Rules 2025

Overview

- **Ministry of Electronics and Information Technology (MeitY)** released the **Draft Digital Personal Data Protection Rules, 2025**.
- The draft rules aim to operationalize the **Digital Personal Data Protection Act, 2023** (DPDP Act).

Key Features

- **Data Localisation**: Specifies that certain types of personal data must be processed within India.
- **Significant Data Fiduciaries**: Companies like **Meta, Google, Apple, Microsoft, and Amazon** will be classified as significant data fiduciaries based on the volume and sensitivity of personal data they process.
- **Parental Consent**: Requires verifiable parental consent for processing personal data of children.
- **Safeguards**: Proposes safeguards for citizens when their data is processed by the government.
- **Public Consultation**: Open for public comments until **February 18, 2025**.

Implementation and Impact

- **Committee Formation**: A committee will determine the types of personal data that cannot be transferred outside India.
- **Lawful Processing**: Processing of personal data by the government must be done in a lawful manner.
- **Exemptions**: The DPDP Act grants exemptions to the government for processing personal data on grounds of national security, public order, and friendly relations with other states.

China's Plan for World's Largest Dam on Brahmaputra

Overview

- **China's Announcement**: China has announced plans to construct the world's largest dam on the **Brahmaputra River** in Tibet.
- **India's Response**: India has urged China to ensure that activities in the upstream areas do not harm the interests of downstream states.

Key Features

- **Dam Size**: The proposed dam will be three times the size of the **Three Gorges Dam**.
- **Environmental Concerns**: The dam is located in an environmentally-sensitive Himalayan zone, which is also geologically fragile and prone to earthquakes.
- **Geopolitical Impact**: The dam could lead to geopolitical tensions between India and China, potentially resulting in "**water wars**".

- **Water Flow Control**: The dam will allow China to control the water flow and release large amounts of water during hostilities.

Implementation and Impact

- **Cost**: The total investment in the dam is expected to exceed **one trillion yuan (USD 137 billion)**.
- **Project Timeline**: The project is part of China's **14th Five-Year Plan (2021-2025)** and aims to produce **300 billion kWh of electricity annually**.
- **India's Actions**: India will continue to monitor developments and take necessary measures to protect its interests. India has also expressed concerns through diplomatic channels.

06 January 2025

Supreme Court Rules Against Bald Assertions in Chargesheets

Overview

- **Supreme Court** recently ruled that chargesheets cannot be based on **bald assertions of connivance**.
- The ruling was made by a bench of Justices **C.T. Ravikumar** and **Sanjay Karol**.

Key Features

- **Substance Requirement**: Chargesheets must have substantial evidence, not just bare allegations.
- **Case Background**: The case involved an appeal against the **Madhya Pradesh High Court's order** refusing to quash a First Information Report (FIR) under Section 482 of the Code of Criminal Procedure.
- **Sections Involved**: The chargesheet included Sections **419 (cheating by personation), 420 (cheating and dishonestly inducing delivery of property), 467 (forgery of valuable security), 468 (forgery for purpose of cheating), 471 (using as genuine a forged document), and 120B (criminal conspiracy)**.
- **Public Servant Protection**: The appellant argued that his actions were part of his official duty and thus protected under Section 83 of the Madhya Pradesh Girha Nirman Mandal Adhiniyam, 1972.

Implementation and Impact

- **Court's Observations**: The Supreme Court noted that there was no substantial evidence to suggest the appellant's involvement in dereliction of duty.
- **Judgment**: The Court allowed the appeal, quashing the criminal proceedings against the appellant.

Golden Jackals Adapt to Urbanization in Navi Mumbai

Overview

- **Golden Jackals (Canis aureus)**, once confined to mangroves and grasslands, are increasingly being spotted in urban areas of **Navi Mumbai** due to habitat loss from urbanization.

Key Features

- **Population**: Estimated population of **80,000** across India.
- **Habitat Loss**: Construction projects like the **Coastal Road** and **Pradhan Mantri Awas Yojana** have severely impacted their habitats.
- **Behavioral Shifts**: Jackals are adapting to urban environments, with increased sightings during daylight hours.
- **Protection Status**: Protected under **Schedule I of the Wildlife Protection Act, 1972**.
- **Urban Encroachment**: Urban expansion has forced jackals into fragmented habitats, leading them to venture into human-dominated areas.

Implementation and Impact

- **Sightings**: Rise in jackal sightings in areas like **Kharghar**, with some incidents involving vehicle collisions.

- **Environmental Impact**: Jackals play a crucial role in maintaining biodiversity in mangrove and grassland ecosystems.
- **Adaptation**: Increased sightings during daylight hours indicate mounting pressure on these creatures to adapt to urban landscapes.

Government Launches Special Visas for International Students

Overview

- **Ministry of Home Affairs (MeitY)** has introduced two special category visas for international students: **e-student visa** and **e-student-x visa**.
- These visas are part of the **Study in India (SII)** initiative to streamline the admission process for international students.

Key Features

- **e-student Visa**: For foreign students who wish to pursue regular, full-time courses at undergraduate, postgraduate, and doctoral levels in recognized Indian institutions..
- **e-student-x Visa**: For dependents of e-student visa holders.
- **Application Process**: Students must apply through the **SII portal** and receive an admission offer letter from partner institutes.
- **Validity**: Visas are issued for up to five years, depending on the course duration, and can be extended.
- **Entry Points**: Valid e-student visa holders can enter India from any desired port of immigration check post.

Implementation and Impact

- **SII Portal**: Facilitates the admission process for long-term and short-term courses.
- **Partner Institutes**: Over **600+ partner institutes** offering more than **8,000+ diverse courses** in various disciplines.
- **Flexibility**: Students have the flexibility to choose courses of their interest and study in premier Indian institutes.

Empowering Women Leaders: Panchayat Se Parliament 2.0 Unveiled

Overview

- **Panchayat Se Parliament 2.0**: A program launched by **Lok Sabha Speaker Om Birla** to educate over **500 women representatives** from Panchayati Raj institutions on India's Constitution and parliamentary procedures.
- **Commemoration**: Marks the **150th birth anniversary of tribal icon Birsa Munda**.

Key Features

- **Workshops and Sessions**: Includes interactive workshops and sessions moderated by experts and Members of Parliament.
- **Guided Tours**: Participants will visit significant government sites such as the **new Parliament House**, **Samvidhan Sadan**, **Pradhanmantri Sangrahalaya**, and **Rashtrapati Bhawan**.
- **Focus Areas**: Emphasis on constitutional provisions, parliamentary procedures, and governance.

- **Diverse Participation**: Attendees include Women and Child Development Minister **Annapurna Devi** and Chairperson of the National Commission for Women **Vijaya Rahatkar**.

Implementation and Impact

- **Leadership Development**: Aims to foster effective leadership among elected women representatives, especially those from Scheduled Tribes.
- **Educational Insight**: Provides a deeper understanding of India's legislative processes and democratic institutions.
- **Recognition**: Recognizes the contributions of women representatives in areas such as education and rural development.

Quarantine Measures for Bird Flu: Centre's Advisory Post Tiger and Leopard Deaths in Nagpur

Overview

- **Union Animal Husbandry Ministry**: Issued a circular to all states urging them to quarantine infected or symptomatic tigers and other feline species.
- **First Case in India**: Maharashtra reported the first case of avian influenza among animals.

Key Details

- **Deaths**: Three tigers and one leopard died at the Gorewada Rescue Centre in Nagpur due to the H5N1 strain of avian influenza.
- **Symptoms**: The animals showed symptoms such as fever, limping, diarrhea, vomiting, and chest infection.
- **Testing**: Samples were sent to the National Institute of High Security Animal Diseases (NIHSAD) in Bhopal, confirming the presence of the H5N1 virus.

Advisory and Actions

- **Quarantine**: Infected or symptomatic animals must be quarantined to prevent transmission to other animals or humans.
- **Biosecurity Protocols**: Enhanced biosecurity measures and testing protocols are required.
- **Protective Equipment**: Zoo staff must be provided with protective equipment and undergo health screenings.
- **Disinfection**: Thorough disinfection of animal enclosures is necessary.

Odisha CM Inaugurates Adivasi Mela, Launches Shahid Madho Singh Haath Kharcha Scheme

Overview

- Odisha Chief Minister Mohan Charan Majhi inaugurated the Adivasi Mela and launched the Shahid Madho Singh Haath Kharcha Scheme in Bhubaneswar.
- The scheme aims to provide financial assistance to tribal students to reduce dropout rates.

Key Features

- **Financial Assistance**: Tribal students in **Class IX and XI** will receive a one-time financial assistance of **Rs 5,000**.

- **Eligibility**: Students must be enrolled in government or aided schools and should not be receiving benefits under any other scholarship schemes.
- **Implementation**: The scheme will benefit around **3 lakh students** belonging to the Scheduled Tribe (ST) community across the state.
- **Adivasi Mela**: The event showcases tribal village, tribal market, tribal culture, their lifestyle, and live demonstrations. It will continue until **January 16**.

Implementation and Impact

- **Dropout Rate**: The scheme aims to check the dropout rate among tribal students by providing financial support.
- **Budget**: The scheme has been allocated a budget of **Rs 156 crore**.
- **Support**: The Chief Minister transferred financial assistance of **Rs 80 crore** to **1.6 lakh tribal students** on the inaugural day.

Golden Globes 2025

Overview

Golden Globes 2025: The 82nd edition of the Golden Globe Awards took place at the Beverly Hilton Hotel in Los Angeles on January 5, 2025.

Host: Comedian **Nikki Glaser** hosted the event, marking the first time a woman has solo-hosted the show.

Key Highlights

Top Winners:

- **Best Motion Picture – Drama**: *The Brutalist*
- **Best Motion Picture – Musical or Comedy**: *Emilia Pérez*
- **Best Television Series – Drama**: *Shogun*
- **Best Female Actor – Motion Picture Drama**: **Fernanda Torres** for *I'm Still Here*
- **Best Male Actor – Motion Picture Drama**: **Adrien Brody** for *The Brutalist*
- **Best Female Actor – Television Series Drama**: **Anna Sawai** for *Shogun*
- **Best Male Actor – Television Series Drama**: **Hiroyuki Sanada** for *Shogun*
- **Best Supporting Actor – Motion Picture**: **Kieran Culkin** for *A Real Pain*
- **Best Supporting Actress – Motion Picture**: **Zoe Saldana** for *Emilia Pérez*

Notable Nominations:

- **Jacques Audiard** for *Emilia Pérez* (Best Director)
- **Timothée Chalamet**, **Zendaya**, **Angelina Jolie**, **Daniel Craig**, **Denzel Washington** for various acting categories
- **India's Representation**:
- **Payal Kapadia**'s film *All We Imagine As Light* was nominated for Best Director and Best Motion Picture – Non-English Language but did not win.

India Second Most Targeted Nation for Cyberattacks in 2024

Overview

- **CloudSEK's Threat Landscape Report 2024**: India ranked as the **second most targeted nation** globally for cyberattacks in 2024, with **95 entities** falling victim to data theft.

Key Details

- **Top Targeted Countries**: The **United States** topped the list with **140 cyberattacks**, followed by India and **Israel** with 57 attacks.
- **Affected Sectors**: The financial and banking sectors were the most affected in India, with **20 breaches** reported. Other sectors included the government (**13 breaches**), telecommunications (**12 breaches**), healthcare and pharma (**10 breaches**), and education (**9 breaches**).
- **Major Data Breaches**: Notable breaches included the exposure of **850 million records** of Indian citizen data from Hi-Tek Group, customer data from Star Health and Allied Insurance, and **2TB of data** from Telecommunications Consultants India Limited.
- **Ransomware Incidents**: There were **108 ransomware incidents** in India, with **Lockbit** emerging as the most active ransomware group, responsible for over 20 attacks. **Killsec** and **Ransomhub** followed with more than 15 and 12 incidents, respectively.

Implementation and Impact

- **Cybersecurity Measures**: The report underscores the need for robust cybersecurity measures to safeguard critical sectors and prevent further attacks.
- **Public-Private Collaboration**: Emphasizes the role of comprehensive risk assessments, advanced threat monitoring, and public-private collaboration in mitigating cyber risks.

BHARATPOL Portal: A New Era in International Investigations

- **Union Home Minister** and **Minister of Cooperation**, Shri Amit Shah, inaugurated the **BHARATPOL portal** developed by the **Central Bureau of Investigation (CBI)** in New Delhi.
- The portal aims to enhance India's capabilities in **international investigations** and **crime control**.

Key Features of BHARATPOL:

- **Connects investigative agencies** and police forces across India with the **INTERPOL network** of 195 countries.
- Facilitates cooperation in combating crimes related to **drugs, weapons, human trafficking**, and other cross-border offenses.
- Provides access to **19 types of databases** from INTERPOL for crime analysis, prevention, and apprehension of criminals.

Modules of BHARATPOL:

1. **Connect**:
    - Enables law enforcement agencies to function as an extension of INTERPOL's National Central Bureau (NCB-New Delhi).
    - Ensures quick, secure, and structured transmission of requests for INTERPOL notices.
2. **INTERPOL Notices:**
    - Facilitates the issuance of notices to locate criminals globally.
3. **References**:
    - Simplifies seeking and providing international assistance for investigations.
4. **Broadcast**:
    - Provides immediate access to requests for assistance from 195 countries.
5. **Resources**:
    - Facilitates document exchange and capacity-building initiatives.

Significance:

Trial in Absentia:

- Allows prosecution of fugitive criminals in their absence through court orders.
- Simplifies the process of extraditing convicted criminals from foreign countries to India.

Real-time Interface:

- Enhances communication among agencies for effective crime control measures.
- Expedites responses to domestic and international requests for real-time data sharing.

Impact on Law Enforcement:

- Strengthens the judicial system, enhances transparency, and improves the efficiency of law enforcement efforts.
- Addresses crimes such as **drug trafficking, arms smuggling, human trafficking**, and **cross-border terrorism**.
- Facilitates collaboration with law enforcement agencies in 195 countries through real-time information sharing.

Indian Navy Strengthens Ammunition Transportation Capabilities

- The Indian Navy has inducted the **8th ammunition cum torpedo cum missile (ACTCM) barge**, LSAM 22 (Yard 132), at the Naval Dockyard in Mumbai.
- The induction ceremony was attended by **Commodore Vinay Venkataram**, Officer-in-Charge, Fleet Maintenance Unit.

Key Features of ACTCM Barges:

Enhances Operational Readiness:

- Ensures efficient transportation of essential munitions and equipment.
- Facilitates transportation, embarkation, and disembarkation of articles or ammunition to Indian Navy platforms both alongside jetties and at outer harbours.

Indigenous Design and Construction:

- Designed in collaboration with an Indian ship designing firm.
- Model tested at the **Naval Science and Technological Laboratory, Visakhapatnam**.
- Built in accordance with the relevant Naval Rules and Regulations of the **Indian Register of Shipping**.

Significance:

Boosts Self-Reliance:

- Highlights the government's efforts to achieve self-reliance in defence.
- Encourages the participation of **Micro, Small, and Medium Enterprises (MSMEs)** in defence projects.

Operational Commitments:

- Provides an impetus to the operational commitments of the Navy by ensuring timely and efficient transportation of ammunition and equipment.

Contract Details:

- The contract for the construction and delivery of **11 ACTCM barges** was signed with **Suryadipta Projects Pvt. Ltd** in 2021.
- Seven barges have already been delivered to the Indian Navy.

Income Inequality in India: 2023 Exceeds 1950s Levels

- A recent report by the **People Research on India's Consumer Economy (PRICE)** highlights that **income inequality** in India in 2023 is higher than in the 1950s.
- The report uses data from household income surveys conducted by the **National Council of Applied Economic Research** and PRICE.

Key Findings:

Gini Coefficient:

- The **Gini coefficient** for India in 2023 stood at **0.410**, up from **0.371** in 1955.
- The Gini coefficient measures income inequality, with 0 representing perfect equality and 1 representing perfect inequality.

Impact of the Pandemic:

- In 2021, the Gini coefficient had risen to **0.528** due to the adverse impact of the pandemic.

Rural vs. Urban Inequality:

- For rural areas, the Gini coefficient in 2023 was **0.405**, up from **0.341** in 1955.

- For urban areas, it saw a slight decline to **0.382** from **0.392** during the same period.

Concentration of Wealth:

- The report notes the entrenched concentration of wealth among the top income earners and the persistent struggles of the bottom 10%.
- The share of total household income for the bottom 10% declined to **2.38%** in 2023 from **3%** in 1955.
- The share of the bottom 50% households rose slightly to **22.82%** from **22%** during the same period.

Policy Recommendations:

- The report emphasizes the need for **sustained, inclusive economic strategies**.
- Investments in **education, healthcare, and infrastructure**, particularly in rural areas, along with social safety nets and progressive taxation, are pivotal for equitable growth.

Social Welfare Schemes:

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA):

- Provides employment opportunities and financial support to rural households.

Direct Benefit Transfer (DBT):

- Ensures direct transfer of subsidies and benefits to the bank accounts of beneficiaries.

Financial Inclusion Initiatives:

- Aim to bring more people into the formal banking system and provide access to financial services.

Dubai Ranks Top 10 in Global Power City Index 2024

- Dubai has secured the **8th spot globally** in the **Global Power City Index (GPCI) 2024**.
- It remains the **top city in the Middle East** for the second consecutive year.

Key Highlights:

Innovation and Economic Growth:

- Dubai excels in **innovation**, **economic growth**, and **global connectivity**.
- Recognized as a global hub for **business, talent, and investment**.

Modern Infrastructure:

- The city's success is attributed to its **modern infrastructure** and **progressive laws** that encourage innovation.
- Strong **public-private partnerships** foster collaboration and growth.

GPCI Assessment Criteria:

- The GPCI evaluates cities based on their ability to attract people, investments, and businesses.
- It assesses six key areas:
- **Economy**
- **Research and Development**
- **Cultural Interaction**
- **Livability**
- **Environment**
- **Accessibility**

Significance:

- Dubai's ranking reflects its growing **global influence** and appeal.
- The city is setting new standards for excellence and is not just keeping pace with global trends but leading them.

CSIR-CIMFR's Milestone: First Trial Blast of Dozer Push Mining Method in India

- The **CSIR-Central Institute of Mining and Fuel Research (CSIR-CIMFR)** has successfully conducted the first trial blast for the **Dozer Push Mining Method** in India.
- The trial was conducted at the **PEKB (Parsa East and Kanta Basan) Coal Mine** operated by **Adani Enterprises Limited** in Chhattisgarh.

Key Features of the Dozer Push Mining Method:

Innovative Approach:

- Integrates advanced digital technologies to enhance safety and operational efficiency.
- Utilizes unmanned, automated machinery for mining operations.

Trial Details:

- Involved drilling 108 holes using automated drill machines.
- Cast/throw blasting using 60 tons of bulk emulsion explosives.
- Blasted material pushed using large-sized automated dozer machines.

Advantages:

Efficiency and Cost-Effectiveness:

- Faster coal recovery and reduced delays caused by adverse weather conditions.
- Estimated 7-10% reduction in operational costs compared to conventional methods.

Safety:

- Enhances worker safety by minimizing risks associated with manual labor and traditional mining techniques.

Significance:

Operational Readiness:

- Improves the utilization of dragline machines and reduces unit costs.
- Enhances productivity and operational efficiency in mining processes.

Environmental Impact:

- Precise detonation with minimal environmental impact.

Boosting Indo-US Nuclear Collaboration: The Need and Key Hurdles

- The article discusses the need to strengthen the **Indo-US nuclear collaboration** and the key hurdles in achieving this goal.
- The focus is on the recent visit of US National Security Advisor **Jake Sullivan** to India and the potential removal of three entities from the blacklist.

Key Hurdles:

1. **10CFR810 Authorization:**

- Part 810 of Title 10, Code of Federal Regulations (10CFR810) under the **US Atomic Energy Act of 1954**.
- Allows US nuclear vendors to export equipment to countries like India under strict safeguards.
- Does not permit the manufacturing of nuclear equipment or performing nuclear design work in India.

2. **Indian Liability Law:**
- The **Civil Liability for Nuclear Damage Act, 2010** (CLND Act).
- Holds suppliers liable for nuclear accidents, which is a significant concern for US companies.
- The law is seen as a major impediment to foreign investment in India's nuclear sector.

Significance of Collaboration:

- Strengthening the **innovation alliance** under the **US-India initiative on Critical and Emerging Technology**.
- Enhancing India's nuclear capabilities and energy security.
- Promoting bilateral cooperation in advanced nuclear technologies.

Enhancing Accessibility: e-Shram Portal Now in 22 Scheduled Languages

On January 7, 2025, the Union Minister of Labour & Employment, Dr. Mansukh Mandaviya, launched the multilingual functionality of the e-Shram portal, expanding its accessibility to all 22 scheduled languages of India.

Multilingual Expansion:

- The e-Shram portal, initially available in English, Hindi, Kannada, and Marathi, now supports all 22 scheduled languages, enhancing user accessibility across diverse linguistic groups.
- This enhancement was achieved through the Bhashini project of the Ministry of Electronics & Information Technology (MEITY).

e-Shram Portal Overview:

- Launched in August 2021, the e-Shram portal serves as a national database for unorganized workers, aiming to provide them with social security benefits and facilitate the delivery of various welfare schemes.
- As of January 2025, the portal records an average of over 30,000 registrations per day by unorganized workers.

Integration with Government Schemes:

- The portal facilitates access to twelve Government of India schemes, providing a broad spectrum of social security benefits to registered workers.
- Efforts are underway to integrate additional social security and welfare schemes, including those from state governments, to enhance the support system for unorganized workers.

Future Initiatives:

- Plans include the launch of an e-Shram Mobile App, introduction of a Single Common Application Form for user convenience, and integration with payment gateways to simplify access to social protection benefits.
- Engagement of mediators such as Common Service Centres, Bank Correspondents, Post offices, and MY Bharat volunteers is being explored to ensure a seamless and user-centric experience.

New Method to Enhance Nitrogen Use Efficiency in Crops

- **New Method Developed**: Researchers have developed a new method to enhance nitrogen use efficiency (NUE) in crops like rice and Arabidopsis by reducing nitric oxide (NO) levels in plants.
- **Research Significance**: This method provides guidance for best agricultural practices to improve crop yields and reduce environmental impact.
- **Technological Advancements**: Current technologies focus on improving nitrogen use efficiency in agricultural practices, such as the use of chemical fertilizers and understanding their effects.
- **Environmental Impact**: Excessive nitrogen oxide emissions contribute to environmental pollution, and reducing these emissions is crucial for sustainable agriculture.
- **Future Research**: Researchers are encouraged to explore new ways to reduce nitric oxide levels in plants to further enhance nitrogen use efficiency.

UJALA Scheme: A Decade of Energy Efficiency

Key Highlights:

- **Launch Date**: January 2015.
- **Implementing Agency**: Energy Efficiency Services Limited (EESL) under the Ministry of Power.
- **LED Bulbs Distributed**: Over **36.87 crore** LED bulbs.
- **Annual Electricity Savings**: **₹19,153 crore**.
- **Annual Energy Savings**: **47,883 million kWh**.
- **Reduction in Peak Demand**: **9,586 MW**.
- **Reduction in Carbon Emissions**: **3.87 crore tonnes annually**.
- **Street Lighting National Programme (SLNP)**: Installation of **1.34 crore LED streetlights**.

Additional Information:

- **LED Bulb Prices**: Reduced from **₹450–500** to ₹70.
- **Operating Cost**: LED bulbs use **1 unit of electricity** for 140 hours, compared to **2 units for CFLs** and **9 units for ICLs**.
- **Environmental Impact**: Significant reduction in carbon dioxide emissions and peak electricity demand.
- **Global Influence**: The UJALA scheme has inspired similar energy efficiency initiatives in other countries.

Contextual Background:

- The UJALA scheme, initially known as the Domestic Efficient Lighting Programme (DELP), was launched to and accessible to millions of households in India.
- The scheme has transformed the lighting market in India, increasing the market share of LED bulbs from less than 1% in 2013 to over 40% in 2025
- The Street Lighting National Programme (SLNP), launched alongside UJALA, has replaced conventional streetlights with energy-efficient LED alternatives in urban and rural areas.

India's Economic Outlook for FY2024-25: Anticipated Slowdown Amidst Manufacturing and Investment Challenges

India's economy is projected to grow by 6.4% in the fiscal year 2024-25, marking the slowest expansion in four years.

Key Factors Influencing the Slowdown:

- **Manufacturing Sector Deceleration:** Growth in the manufacturing sector is expected to decline to 5.3% in 2024-25 from 9.9% in the previous year, indicating a significant slowdown.
- **Sluggish Investment:** Both public and private investments have shown signs of weakening, contributing to the overall economic deceleration.
- **Global Economic Uncertainties:** Factors such as potential shifts in global trade policies and economic conditions in major economies add to the uncertainties affecting India's growth prospects.

Sectoral Performance:

- **Agriculture**: The agricultural sector is projected to grow by 3.8%, up from 1.8% in the previous year, providing some support to the economy.

- **Services**: The services sector is expected to expand by 7.2%, slightly down from 7.6% in the prior year, indicating resilience amidst the slowdown.

Government and Policy Responses:

- **Monetary Policy Adjustments:** The Reserve Bank of India (RBI) may consider policy measures to stimulate demand, including potential interest rate cuts, to support economic growth.
- **Fiscal Measures:** The government is exploring strategies to boost economic sentiment, such as enhancing consumer spending, adjusting tax policies, and modifying tariffs to invigorate the economy.

The Significance of China's Magnitude 7.1 Earthquake: An In-Depth Analysis

Key Highlights:

- **Date and Time**: January 7, 2025, at 6:35 a.m. IST
- **Magnitude**: **7.1**
- **Epicenter**: Located around **80 km north of Mt. Everest**, 10 km below the surface
- **Affected Areas**: Tingry County in the Shigatse region of Tibet, Tibetan China, and Nepal
- **Casualties**: 95 people killed, 130 injured in China
- **Tremors Felt**: As far away as Kathmandu, Thimphu, and Kolkata
- **Significance**: The earthquake struck the **Lhasa terrane**, a region with significant spiritual, economic, and geopolitical importance

Detailed Analysis:

- **Geological Context**: The Lhasa terrane is part of the Eurasian Plate. The tectonic activity in this area is a result of the ongoing collision between the Indian Plate and the Eurasian Plate, causing significant seismic activity in the Himalayan region.
- **Hydroelectric Project**: The epicenter's location near China's ambitious hydroelectric power project on the Yarlung Tsangpo River (Brahmaputra) raises concerns. The dam, expected to generate around 300 billion kWh per year, poses potential environmental and geopolitical challenges.
- **Environmental Impact**: Construction in such a seismically active area can lead to destabilization of the region, affecting the river's flow and potentially causing floods downstream in India, especially in Arunachal Pradesh and Assam.
- **Geopolitical Tensions**: The project has been a point of contention between China and India, with concerns over water resources and environmental damage.
- **Impact on Local Communities**: The earthquake has significantly affected communities in the region, including disruptions to daily life, infrastructure damage, and the need for immediate relief efforts.
- **Economic Impact**: The damage to infrastructure, including roads, buildings, and utilities, will require substantial investment in rebuilding efforts. The disruption to the local economy may have longer-term consequences.
- **Humanitarian Efforts**: Rescue and relief operations are critical in the immediate aftermath. There is a need for coordinated efforts between local authorities, national governments, and international aid organizations.
- **Historical Context**: The region has a history of significant seismic events, emphasizing the need for stringent building codes and disaster preparedness plans.
- **Past Earthquakes**: Historical records show several devastating earthquakes in the region, underlining the need for continuous monitoring and advanced warning systems.

V Narayanan: The New ISRO Chairman

Key Highlights:

- **Appointment Date**: January 14, 2025
- **New Role**: Chairman of the Indian Space Research Organisation (ISRO) and Secretary, Department of Space
- **Predecessor**: S Somanath
- **Experience**: Nearly four decades in rocket and spacecraft propulsion
- **Current Position**: Director of the Liquid Propulsion Systems Centre (LPSC)
- **Significance**: Expected to lead ISRO's ambitious space missions and innovations

V Narayanan

- **Professional Background**: V Narayanan has been with ISRO since 1984. He has held various significant positions, including Director of the Liquid Propulsion Systems Centre (LPSC).
- **Key Contributions**: As LPSC Director, he has been credited with the development of Liquid, Semi Cryogenic, and Cryogenic Propulsion Stages for Launch Vehicles. He has delivered 183 Liquid Propulsion Systems for various ISRO missions.
- **Educational Qualifications**: M.Tech in Cryogenic Engineering from IIT Kharagpur, where he earned a Silver Medal. He also has a Ph.D. in Aerospace Engineering.
- **Awards and Recognitions**: Recipient of the Gold Medal from the Astronautical Society of India (ASI) and multiple other awards for his contributions to rocket technology.

Indonesia's Accession to BRICS

On January 6, 2025, Brazil announced Indonesia's formal induction as a full member of the BRICS bloc, marking a significant expansion of this coalition of major emerging economies.

Key Highlights:

- **BRICS Composition and Expansion:** Originally comprising Brazil, Russia, India, China, and South Africa, BRICS has now expanded to include Indonesia, enhancing its representation in the Global South.
- **Indonesia's Strategic Position:** As Southeast Asia's largest economy and most populous nation, Indonesia's membership is poised to bolster BRICS's influence in the region.
- **Geopolitical Implications:** Indonesia's entry into BRICS may recalibrate its diplomatic relations, particularly with nations like Japan, as it seeks to balance its new affiliations with existing partnerships.

Microsoft's $3 Billion Investment in India: Boosting AI and Cloud Infrastructure

Microsoft CEO Satya Nadella announced a **$3 billion investment** in India over the next two years to enhance the country's **AI and cloud infrastructure** and **skilling initiatives**.

Key Points:

- **Investment Amount**: $3 billion over two years.
- **Purpose**: To bolster AI and cloud infrastructure, and skilling initiatives.
- **Announcement Date**: January 7, 2025.

- **Location**: Bengaluru, India.

Major Initiatives:

- **New Data Centers**: Expansion of Microsoft's AI capabilities with new data centers.
- **ADVANTA (I)GE India Program**: Aim to train 10 million Indians in AI skills by 2030.
- **AI Innovation Network**: Launched by Microsoft Research Lab to deepen collaborations with startups and developers.
- **Collaboration with SaaSBoomi**: Upskill over 150,000 startup employees and drive innovation in Tier II cities.

Justin Trudeau's Resignation

Canadian Prime Minister Justin Trudeau announced his resignation as the leader of the ruling **Liberal Party**.

Key Points:

- **Announcement Date**: January 6, 2025.
- **Reason for Resignation**: Internal battles and declining popularity.
- **Duration in Office**: Trudeau has been in office since November 2015, making him one of Canada's longest-serving prime ministers.
- **Next Steps**: Trudeau will remain as Prime Minister until the party selects a new leader through a nationwide competitive process.

Major Initiatives and Achievements:

- **Economic Policies**: Focused on strengthening the middle class and advancing free trade.
- **Pandemic Response**: Led Canada through the COVID-19 pandemic with various support measures.
- **Climate Change**: Implemented policies to combat climate change and prepare the economy for the future.
- **Reconciliation**: Worked on advancing reconciliation with Indigenous communities.

Quotes:

- **Justin Trudeau**: "I intend to resign as party leader and prime minister after the party selects its next leader through a robust, nationwide competitive process."
- **Pierre Poilievre**: "Canadians desperate to turn the page on this dark chapter in our history might be relieved today that Justin Trudeau is finally leaving."

Anahat Singh's Triumph at the British Junior Open:

Anahat Singh, a 16-year-old Indian squash player, clinched the Under-17 Girls' Singles title at the British Junior Open 2025 in Birmingham, England.

Key Points:

- **Event**: British Junior Open 2025.
- **Category**: Under-17 Girls' Singles.
- **Winner**: Anahat Singh.
- **Opponent**: Malika El Karaksy of Egypt.
- **Final Score**: 3-2 (4-11, 11-9, 6-11, 11-5, 11-3).

Major Achievements:

- **Third British Junior Open Title**: Anahat previously won in the Under-11 category in 2019 and the Under-15 category in 2023.
- **Semi-Finals**: Defeated Ruqayya Salem of Egypt 3-1.
- **Quarter-Finals**: Dominated Nadia Tamer of Egypt 3-0.

Additional Information:

- **PSA Challenger Titles**: Anahat won nine PSA Challenger titles in 2024, more than any other woman globally.
- **National Titles**: Successfully defended her Indian senior and junior national titles in 2024.
- **World Ranking**: Broke into the top 100 of the women's PSA rankings, currently ranked world No. 82.
- **British Junior Open**: One of the most prestigious junior squash tournaments in the world, held annually in Birmingham, England.
- **PSA Challenger Tour**: A series of professional squash tournaments that provide ranking points and prize money for players.

09 January 2025

GEAPP's Multi-Donor Trust Fund with ISA

Key Highlights:

- **Global Energy Alliance for People and Planet (GEAPP)** signed a **Multi-Donor Trust Fund (MDTF)** with the **International Solar Alliance (ISA)**.
- The MDTF aims to mobilize **$100 million** to fund high-impact solar energy projects.
- Two additional initiatives were announced: **Digitalization of Utilities for Energy Transition (DUET)** and **Energy Transitions Innovation Challenge (ENTICE 2.0)**.

GEAPP and ISA Collaboration:

- ISA will drive the overarching vision and strategic direction of the program.
- GEAPP will provide governance oversight, facilitate fundraising efforts, and leverage its expertise in energy transition planning, financing, and project implementation.

Funding and Impact:

- Since its creation in 2021, GEAPP has invested and committed **$464 million** to 130 projects in 40 countries.
- These projects have mobilized over **$6.1 billion** in capital, bringing new or improved energy access to over 50 million people and reducing or averting **43 million tons of carbon dioxide emissions**.

India's Energy Transition:

- India has extended electricity access to over 800 million people since 2001, but nearly **2.5% of households** remain unelectrified.
- Distributed renewable energy is key to reaching these households.
- The Delhi Electricity Regulatory Commission approved India's first commercial standalone Battery Energy Storage System (BESS) project in June.
- GEAPP provided a concessional loan for 70% of the project cost, expected to be online in early 2025.

DUET Initiative:

- Focuses on the digitalization of grid systems through the development of a technology suite with smart sensors and real-time data tracking.
- Aims to reduce transmission and distribution losses and support the integration of BESS and Distributed Renewable Energy (DRE) into the grid.

ENTICE 2.0 Initiative:

- Launched in 2023, ENTICE aims to scale innovations for the energy transition by facilitating access to funding, market linkages, and mentorship.
- ENTICE 2.0 focuses on nurturing startups that can deliver scalable, investable solutions to accelerate India's energy transition

Future of Jobs Report 2025

Overview

The **World Economic Forum's (WEF) Future of Jobs Report 2025** highlights the **fastest-growing jobs** and the **skills required** by 2030. The report is based on data from over **1,000 leading global companies** and covers **22 industry sectors** and **55 economies**.

Key Points

- **Job Growth and Displacement**: By 2030, **170 million new jobs** will be created, but **92 million jobs** will be displaced, resulting in a net increase of 78 million jobs.
- **Top Fastest-Growing Jobs**:
    - Big Data Specialists
    - FinTech Engineers
    - Artificial Intelligence (AI) and Machine Learning Specialists
    - Software and Application Developers
    - Security Management Specialists
    - Data Warehousing Specialists
    - Autonomous and Electric Vehicle Specialists
    - Ers
    - Light Truck or Delivery Services Drivers
    - Internet of Things (IoT) Specialists

Skills in Demand

- **Technological Skills**: AI, big data, cybersecurity, software development, and data analysis.
- **Human Skills**: Creative thinking, resilience, flexibility, agility, and multilingualism.

Challenges

- **Skills Gap**: Nearly **40% of skills required** on the job are set to change, and **63% of employers** cite the skills gap as the key barrier.
- **Reskilling and Upskilling**: **59 out of every 100 workers** will need reskilling or upskilling by 2030. However, **11 out of 100** are unlikely to receive it, putting over **120 million workers** at risk of redundancy.

Empowering Women Entrepreneurs in Retail: EmpowHER Biz – Sapno Ki Udaan

Initiative Overview:

- **Launched by**: Women Entrepreneurship Platform (WEP) of NITI Aayog.
- **Partner**: New Shop, India's largest 24/7 convenience retail chain.
- **Goal**: Empower women entrepreneurs in the organized retail sector.

Key Features:

- Mentorship and training in retail management, digital tools, financial literacy, and business development.
- Selection of 50 women (aged 18–35) through applications.
- Top 20 receive a 100% franchise fee waiver for New Shop outlets.

Delhi NCR, Punjab, Rajasthan, Uttar Pradesh, Haryana, Madhya Pradesh, Gujarat.

Accessible, Affordable Technology for Anaemia Detection Transferred to ICMR

Overview

The Indian Council of Medical Research (ICMR) has received a technology called **AnemiaPhone** from Cornell University to enhance the detection of iron deficiency anaemia. This technology aims to provide **rapid, affordable screening and diagnosis** at the point of need, especially for women and children.

Key Points

- **Technology Overview**: AnemiaPhone uses a test strip that requires a small finger stick and a drop of blood. The strip is read by a portable, Wi-Fi or Bluetooth-enabled device, and the results are uploaded to a clinical database via mobile phone, wireless tablet, or computer.
- **Benefits**: The technology enables healthcare workers to quickly interpret the test results and provide immediate guidance, triage, referral, or intervention.
- **Impact on Healthcare**: AnemiaPhone can bridge the gap in areas where traditional lab-intensive methodologies are inaccessible or unaffordable. It can be used at home, in clinics, or during door-to-door healthcare surveys[
- **Integration into National Programs**: The technology will be integrated into India's **Anaemia Mukt Bharat (Anaemia-Free India) program**, which aims to eliminate anaemia by 2025.
- **Validation and Transfer**: The technology was formally transferred to ICMR at no cost on November 7, 2024. It was developed and tested by researchers at Cornell University's Joan Klein Jacobs Center for Precision Nutrition and Health.
- **Cornell University's Contribution**: The technology was developed by researchers Saurabh Mehta, David Erickson, and Julia Finkelstein.
- **ICMR's Role**: ICMR is India's main health research body and will be using AnemiaPhone as part of its national programs.

India-Afghanistan High-Level Meeting in Dubai: Key Discussions and Outcomes

Overview

A high-level meeting took place between **India's Foreign Secretary Vikram Misri** and **Afghanistan's Acting Foreign Minister Mawlawi Amir Khan Muttaqi** in Dubai on January 8, 2025. The meeting aimed to enhance bilateral ties and cooperation between the two countries.

Participants:

- **India**: Foreign Secretary Vikram Misri.
- **Afghanistan**: Acting Foreign Minister Mawlawi Amir Khan Muttaqi.

Agenda:

- **Humanitarian Aid**: India pledged further assistance in healthcare, medicine supplies, and refugee rehabilitation.

- **Developmental Projects**: India expressed readiness to engage in new development projects in Afghanistan.
- **Trade and Commerce**: Promotion of the **Chabahar Port** for supporting trade and humanitarian aid.
- **Regional Security**: Afghanistan assured cooperation on India's regional security concerns.
- **Sports**: Strengthening sporting ties, particularly in cricket

Static Information

- **Date of Meeting**: January 8, 2025.
- **Location**: Dubai, United Arab Emirates

India-US Collaboration on Sonobuoys Manufacturing

Overview

India and the United States have announced a strategic partnership to co-produce **sonobuoys** for **undersea domain awareness (UDA)**. This collaboration aims to enhance the Indian Navy's capabilities in detecting and tracking submarines.

Key Points

- **Participants**:
    - **India**: Bharat Dynamics Limited (BDL)
    - **US**: Ultra Maritime
- **Objective**: To manufacture sonobuoys in India under the Make in India initiative.
- **Technology Transfer**: The project involves transferring technology from Ultra Maritime to BDL for production.
- **Deployment**: Sonobuoys will be deployed from aircraft like the **P-8I maritime patrol aircraft** and **MH-60R helicopters**, as well as the **MQ-9B Sea Guardian drones**.
- **Significance**: Enhances India's anti-submarine warfare capabilities amid growing maritime threats, particularly from China

Additional Insights

- **Historical Context**: The collaboration was announced during a meeting between US National Security Advisor Jake Sullivan and Indian counterpart Ajit Doval in New Delhi.
- **Operational Timeline**: Expected to become operational by **2027**.
- **Interoperability**: The sonobuoys will be interchangeable and interoperable between the US Navy and Indian Navy.
- **Strategic Importance**: This partnership aligns with the **U.S.-India Initiative on Critical and Emerging Technologies (ICET)** launched in May 2022.
- **Broader Implications**: Enhances regional security and maritime safety in the Indian Ocean Region.

Static Information

- **Date of Announcement**: January 7, 2025.
- **Location**: New Delhi, India

18th Pravasi Bharatiya Divas

- **Theme**: "*Diaspora's Contribution to a Vikshit Bharat (Developed India)*"
- **Location**: Bhubaneswar, Odisha
- **Date**: January 9, 2025

Key Points from PM Modi's Address:

- **Key Message**: "The future is not in 'yuddha' (war) but in 'Buddha' (peace)"
- **Global Role**: India's rising global role due to achievements in various fields.
- **Peace over War**: Emphasis on peace and non-violence inspired by Emperor Ashoka's path at Dhauli, Odisha.
- **Global South**: India raises the voices of the Global South and proposed African Union as a permanent member of the G20.
- **Diaspora Contributions**: Recognition of the history and achievements of the Indian diaspora.
- **Exhibition**: Showcasing the spread and evolution of the Indian diaspora, with a focus on Mandvi to Muscat.
- **Girmitiyas**: Emphasis on studying the journey of indentured laborers who left India in the 19th century.
- **Future Plans**: Creating a database on Girmitiyas, making films and documentaries, and holding regular conferences.
- **India's Progress**: India has risen from the 10th to the 5th largest economy and aims to become the 3rd largest.
- **Support to Diaspora**: India's responsibility to assist the diaspora during crisis situations.

2025 Henley Passport Index

Overview

The Henley Passport Index 2025 ranks passports based on the number of destinations their holders can access without a visa. The index is based on exclusive data from the International Air Transport Association (IATA).

Top Rankings

- **Singapore**: Holds the top spot with visa-free access to **195 destinations**.
- **Japan**: Second place with access to **193 destinations**.
- **France, Germany, Italy, Spain, Finland, South Korea**: Share the third position with access to **192 destinations**.

Other Notable Rankings

- **Austria, Denmark, Ireland, Luxembourg, Netherlands, Sweden, Norway**: Share the fourth rank with access to **191 destination**s.
- **Belgium, New Zealand, Portugal, Switzerland, United Kingdom**: Fifth rank with **190 destinations**.
- **United States**: Ninth place with access to **186 destinations**.
- **India**: Slipped to **85th position**, offering visa-free access to **57 destinations**.
- **UAE**: Entered the top 10 for the first time.
- **China's Progress**: China has shown remarkable progress, rising from 94th in 2015 to 60th in 2025.

- **Afghanistan**: Remains at the bottom with access to only **27 destinations**.

Completion of the Genome India Project

Overview

Prime Minister **Narendra Modi** has hailed the completion of the **Genome India Projec**t as a historic milestone in India's research landscape. The project, which began in January 2020, aims to map the genetic diversity of India's population

Key Highlights

- **Project Initiation**: Launched in January 2020.
- **Completion**: Successfully completed in January 2025.
- **Scope**: Whole-genome sequencing of **10,000 individuals** from **99 ethnic groups**.
- **Genetic Variations**: Over **135 million genetic differences** identified, including single nucleotide polymorphisms (SNVs) and insertions/deletions (INDELs).
- **Unique Discoveries**: Uncovered **27 million genetic variations**, with **7 million** being completely new.

Significance

- **Precision Medicine**: The data will boost the development of precision medicine and innovative drugs.
- **Public Health**: Aids in the treatment of genetic and infectious diseases.
- **National Sickle Cell Anemia Elimination Mission**: Supports government welfare schemes.
- **Bioeconomy Growth**: India's bioeconomy has grown from **$10 billion in 2014 to over $130 billion by 2024**.

Revision of Gold Import Figures for November 2024

Overview

The **Government of India** has revised the official gold import figures for November 2024, reducing them by **$5 billion** due to a **double-counting error**.

Key Highlights

- **Initial Figures**: Originally reported at **$14.8 billion**.
- **Revised Figures**: Adjusted to **$9.84 billion**.
- **Reason for Revision**: Double counting occurred due to the migration of data transmission from **SEZ Online System** to **ICEGATE**.
- **Impact**: Narrowed India's trade deficit for November from **$37.8 billion** to **$32.8 billion**.

Additional Insights

- **Technical Glitches**: Migration issues between SEZ Online System and ICEGATE led to discrepancies.
- **Revised Data**: Revisions were also made for silver (downward by 29%) and electronics imports (downward by 4%).
- **Trade Data**: DGCI&S receives data from over 500 locations and about 2.5 lakh transactions daily.

Environmental Conservation Efforts in Prayagraj Ahead of Mahakumbh 2025

In anticipation of Mahakumbh 2025, the Prayagraj Municipal Corporation has undertaken significant environmental initiatives to enhance air quality and provide a healthier atmosphere for the anticipated influx of devotees.

Afforestation Using Miyawaki Technique:

- Over the past two years, approximately **56,000 square meters** of dense forests have been developed across more than 10 locations in Prayagraj using the **Miyawaki technique.**
- The largest plantation is in the Naini industrial area, with around **120,000 trees** spanning **63 species.**
- In Baswar, after clearing the city's largest garbage dumping yard, **27,000 trees** from **27 different species** have been planted, transforming waste sites into green spaces.

Environmental Benefits:

- **Air Quality Improvement**: The afforestation efforts have led to a reduction in dust, dirt, and bad odours, significantly enhancing the city's air quality.
- **Biodiversity Enhancement:** The rapid growth of these dense forests contributes to increased biodiversity, providing habitats for various animals and birds.
- **Temperature Regulation:** Such forests can lower ambient temperatures by **4 to 7 degrees Celsius**, mitigating urban heat effects.
- **Soil Fertility and Erosion Prevention:** The forests improve soil fertility and help prevent soil erosion, contributing to ecological balance.

Diverse Species Planted:

- The plantations include a variety of species such as **mango, mahua, neem, peepal, tamarind, arjuna, teak, tulsi, amla, ber,** and ornamental and medicinal plants like **hibiscus, kadamba, gulmohar, bougainvillea,** among others.

Understanding the Miyawaki Technique:

- **Origin**: Developed by Japanese botanist **Akira Miyawaki** in the 1970s, this technique focuses on creating dense, native forests in limited spaces.
- **Methodology**: It involves planting a mix of native species closely together, which leads to accelerated growth—up to **10 times faster** than traditional methods.
- **Benefits:**
  - **Carbon Sequestration:** Trees absorb more carbon dioxide, aiding in climate change mitigation.
  - **Biodiversity Support:** Supports richer biodiversity compared to conventional forests.
  - **Urban Application:** Effective in transforming polluted, barren lands into green ecosystems, managing industrial waste, and reducing pollution.

Conservation Efforts to Protect Vultures in India: Challenges and Progress

Vultures play a crucial role in maintaining ecological balance by disposing of animal carcasses, thus preventing the spread of diseases. However, their populations in India have faced significant declines due to various factors, primarily linked to the use of certain veterinary drugs.

Key Issues:

Diclofenac Toxicity:

- In the 1990s, the veterinary use of **diclofenac**, a non-steroidal anti-inflammatory drug (**NSAID**), led to a catastrophic decline in vulture populations.
- Vultures feeding on carcasses of livestock treated with diclofenac suffered from kidney failure, resulting in mortality rates exceeding 97% for some species.

Safe Alternatives:

- Meloxicam has been identified as a vulture-safe NSAID and is promoted as an alternative to diclofenac.

Regulatory Measures:

- In response to the crisis, India banned veterinary diclofenac in **2006**, followed by Nepal and Pakistan.
- Despite the ban, illegal use persisted, and other NSAIDs like **aceclofenac, ketoprofen, and nimesulide**—also harmful to vultures—remained in use.

Conservation Initiatives:

- **Captive Breeding Programs:** Facilities like the **Jatayu Conservation Breeding Centre** in Pinjore have been established to breed vultures in captivity and release them into the wild once safe.
- **Vulture Action Plan 2020-25:** Launched by the Ministry of Environment, Forest and Climate Change, this plan aims to enhance conservation measures and ensure the ban of toxic veterinary drugs.

Challenges Ahead:

- **Enforcement of Bans:** Ensuring strict enforcement of bans on harmful NSAIDs remains a significant challenge, with reports indicating continued illegal use.
- **Awareness and Education:** Raising awareness among veterinarians and livestock owners about the impact of these drugs on vultures is crucial for effective conservation.
- **Research and Monitoring:** Ongoing research to identify safe alternatives and continuous monitoring of vulture populations are essential to assess the effectiveness of conservation efforts.

AICTE's 'One Student One Mentor' Program Under NEAT 4.0: Enhancing Career Readiness

The All India Council for Technical Education (**AICTE**), under the Ministry of Education, has launched the 'One Student One Mentor' program in collaboration with **Intercell**, an AI-driven career mentoring platform, as part of **NEAT 4.0.**

Program Objective:

To provide holistic education through personalized industry mentorship and AI-powered tools, aligning with both Indian and global standards.

Intercell's Role:

- Offers live one-on-one mentoring sessions with senior industry professionals.
- Utilizes AI tools such as Mentor Match, InstaResume, Talent Finder, Internship/Jobs Support, Skill Assessment, and English Coach to enhance students' skills and employability.

NEAT 4.0 Launch:

- Initiated on January 2, 2025, at AICTE Headquarters in New Delhi.
- Aims to bridge the gap between learners and industry-relevant skills, ensuring accessibility and inclusivity for students nationwide.

India's National Highways: A Decade of Expansion and Modernization

Over the past decade, India's National Highway network has experienced significant growth and development, positioning the country as having the second-largest road network globally.

Key Developments:

- **Expansion of National Highways:** The network expanded from **91,287 km in 2014** to **146,195 km by 2024**, marking a **60% increase.**
- **High-Speed Corridors:** Length increased from **93 km to 2,474 km,** enhancing connectivity and reducing travel times.
- **Externally Aided Projects:** Out of a planned **3,105 km, 2,540 km** have been completed with funding from international agencies like the **World Bank, JICA, and ADB**.
- **National High-Speed Corridor Projects:** Eight major projects covering **936 km** approved, with an investment of **₹50,655 crore**, generating **4.42 crore man-days** of employment.
- **Bharatmala Pariyojana:** Development of **35 Multimodal Logistics Parks (MMLPs)** with an investment of approximately **₹46,000 crore**, aiming to handle **700 million metric tonnes** of cargo.
- **Port Connectivity Masterplan:** Identification of **59 critical infrastructure projects** covering about **1,300 km** to improve last-mile connectivity to ports, boosting trade and logistics.

Road Safety Measures:

- Addressed **13,795 accident-prone blackspots.**
- Implemented new vehicle safety regulations, including mandatory airbags and speed limiters.

Technological Advancements:

- **e-Transport Project**: Centralized transport services.
- **FASTag System**: Improved toll collection efficiency, with over **10.1 crore FASTags issued.**

Environmental Initiatives:

- **Vehicle Scrapping Policy**: Established **80 Registered Vehicle Scrapping Facilities** across 19 States/UTs, with 66 additional centers under construction.
- Enforced safety standards for Electric Power Train Construction Equipment Vehicles.

International Engagements:

- Participated in the **BRICS Transport Ministers' Meeting.**
- Engaged in bilateral discussions with Russia on roads and intelligent transport systems.

Citizen-Centric Initiatives:

- Launched a **cashless treatment scheme** for accident victims.
- Introduced **faceless transport services** using Aadhaar authentication and AI-based facial recognition.

Notable Infrastructure Projects:

- Inauguration of the **2,320-meter-long Sudarshan Setu Bridge** in Gujarat, enhancing regional connectivity.
- Launch of several National Highway projects by the Minister for Road Transport and Highways, contributing to economic growth and regional development.

Reduction in PM2.5 Pollution Levels in Indian Cities: A Six-Year Overview

Recent reports indicate that Indian cities have achieved a significant reduction in PM2.5 pollution levels, averaging a 27% decrease from 2019 to 2024.

Key Highlights:

- **National Clean Air Programme (NCAP) Impact:** Cities under the NCAP recorded a 24% decline in PM2.5 levels during this period, reflecting the program's effectiveness.

Top Performing Cities:

- Varanasi achieved a remarkable 76% reduction in PM2.5 levels.
- Moradabad followed with a 58% decrease.
- Other notable cities include Kalaburagi (57.2%), Meerut (57.1%), Katni (56.3%), Agra (54.1%), Baghpat (53.3%), Kanpur (51.2%), and Jodhpur (50.5%).
- **Persistently Polluted Cities:** Despite overall improvements, cities like Delhi, Gurugram, and Faridabad continue to experience high pollution levels, indicating the need for sustained efforts.

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Selection Process for Chief Election Commissioner: A Paradigm Shift

Current Developments:

- The **Chief Election Commissioner (CEC)**, **Rajiv Kumar**, is set to retire on **February 18, 2025.**
- For the first time, the selection process for the next CEC will involve a broader pool of candidates, as per the **Chief Election Commissioner and Other Election Commissioners (Appointment, Conditions of Service and Term of Office) Act, 2023.**
- The **Election Commission of India (ECI)** currently comprises the CEC and two Election Commissioners: **Gyanesh Kumar** and **Sukhbir Singh Sandhu.**

Historical Context:

- **Article 324(2)** of the Indian Constitution empowers the President to appoint the CEC and other Election Commissioners, with the number of commissioners determined by the President from time to time.
- Traditionally, appointments were made solely by the Executive branch.
- In **March 2023,** the Supreme Court of India mandated that appointments should be made by the President based on the recommendations of a **Selection Committee** comprising the Prime Minister, the Leader of Opposition in Lok Sabha, and the Chief Justice of India.

Key Features of the 2023 Act:

- The **Election Commission** will consist of a CEC and a number of Election Commissioners as determined by the President.
- The **Selection Committee** for appointments now includes:
  - The **Prime Minister.**
  - The **Leader of Opposition** in Lok Sabha.
  - A **Union Cabinet Minister** nominated by the Prime Minister, replacing the Chief Justice of India in the committee.

Political and Legal Implications:

- The exclusion of the Chief Justice of India from the Selection Committee has sparked debates about the independence and impartiality of the ECI.
- The **Supreme Court** is set to review the constitutionality of the new law, with concerns that it may undermine the autonomy of the Election Commission.

Additional Information:

- The **Election Commission of India (ECI)** is a constitutional body responsible for administering elections to the Lok Sabha, Rajya Sabha, and State Legislative Assemblies, as well as the offices of the President and Vice President in India.
- The **Chief Election Commissioner (CEC)** oversees the ECI, ensuring the conduct of free and fair elections across the country.
- The **CEC** enjoys a tenure of six years or up to the age of 65 years, whichever is earlier, and can only be removed through a process similar to that of a Supreme Court judge, ensuring a degree of independence.

Viksit Bharat Young Leaders Dialogue 2025 Commences in New Delhi

- The **Viksit Bharat Young Leaders Dialogue 2025**, a three-day event, has commenced in New Delhi, coinciding with **National Youth Day** on January 12, 2025.
- **Prime Minister Narendra Modi** inaugurated the event, engaging with **3,000 young leaders** from across India to discuss solutions to the nation's pressing problems.
- The initiative aims to involve youth in governance and nation-building, aligning with the Prime Minister's vision of a **"Viksit Bharat" (Developed India).**

Historical Context:

- **National Youth Day** is celebrated annually on January 12th to commemorate the birth anniversary of **Swami Vivekananda,** who emphasized the role of youth in nation-building.
- Traditionally, the **National Youth Festival** has been held to celebrate this occasion. However, the **Viksit Bharat Young Leaders Dialogue** marks a departure from the conventional format, focusing more on direct engagement with youth leaders.

Objectives of the Dialogue:

- To **channel the energy, creativity, and leadership** of young minds towards realizing the vision of a developed India.
- To provide a **national platform** for youth to present innovative ideas and solutions across **10 thematic areas pivotal to India's development.**
- To **engage youth in politics without political affiliations,** fostering a sense of responsibility and active participation in the democratic process.

Additional Information:

- The *Viksit Bharat Challenge* was launched to select participants for the dialogue, encouraging youth from diverse backgrounds to contribute ideas for national development.
- The event includes **PowerPoint presentations** by innovative young leaders, representing various thematic areas crucial to India's progress.
- The dialogue seeks to **break the 25-year-old tradition** of holding the National Youth Festival in a conventional manner, introducing a more interactive and participatory approach.

Veer Gatha 4.0: Record Participation as 1.76 Crore Students Engage Nationwide

- The **fourth edition of Project Veer Gatha**, a collaborative initiative by the **Ministry of Defence** and the **Ministry of Education**, has witnessed unprecedented participation, with approximately **1.76 crore students** from around **2.31 lakh schools** across India.
- Launched on **September 5, 2024**, Veer Gatha 4.0 encouraged students to engage in essay and paragraph writing on topics such as **Gallantry Award recipients, freedom fighters** like **Rani Laxmibai**, the **1857 First War of Independence**, and the role of **Tribal Uprisings** in India's freedom struggle.
- The competition concluded with the selection of **100 national-level winners**, categorized into four groups:
    - **Preparatory Stage (Grades 3-5)**
    - **Middle Stage (Grades 6-8)**
    - **Secondary Stage (Grades 9-10)**
    - **Secondary Stage (Grades 11-12)**

Each category comprises **25 winners**.

- These **Super-100 winners** will be honored in **New Delhi,** receiving a **cash prize of ₹10,000** each and the opportunity to witness the **Republic Day Parade 2025** at **Kartavya Path** as special guests.

Historical Context:

- **Project Veer Gatha** was initiated in **2021** as part of the '**Azadi Ka Amrit Mahotsav**', commemorating India's 75th year of independence.
- The project aims to raise awareness about the acts of bravery of **Gallantry Awardees** and instill a sense of **patriotism** and **civic values** among students.
- Participation has grown significantly over the years:
    - **First Edition (2021)**: Approximately **8 lakh students** participated, with **25 national winners.**
    - **Second Edition (2022):** Participation increased to **19 lakh students**, maintaining **25 national winners.**
    - **Third Edition (2023):** Marked a milestone with **1.36 crore students** participating and **100 national winners** selected.
    - **Fourth Edition (2024):** Continued the momentum with **1.76 crore students** participating.

2024: A Record-Breaking Year for Global Temperatures

In News:

- The **World Meteorological Organization (WMO)** has confirmed that **2024** was the warmest year on record, with a global average surface temperature of **1.55°C above the 1850-1900 average.**
- This marks the first time that the global average temperature has exceeded the **1.5°C threshold** set by the **2015 Paris Agreement**, underscoring the escalating pace of global warming.
- The past decade has witnessed a consistent pattern of record-breaking temperatures, with each year ranking among the top ten warmest on record.

Historical Context:

- The **Paris Agreement**, adopted in 2015, aims to limit global warming to well below 2°C above pre-industrial levels, with efforts to cap the increase at 1.5°C.
- Exceeding the 1.5°C threshold signifies a critical point, beyond which the risks of severe climate impacts—such as extreme weather events, sea-level rise, and biodiversity loss—are expected to intensify.

Additional Information:

- The WMO's assessment is based on data from six international datasets, including those from the **European Centre for Medium-Range Weather Forecasts, Japan Meteorological Agency, NASA, NOAA,** the **UK Met Office**, and **Berkeley Earth.**
- While natural phenomena like **El Niño** can cause short-term temperature fluctuations, the long-term trend indicates a clear and persistent rise in global temperatures, primarily driven by human-induced greenhouse gas emissions.

Meta's Transition to Community Notes: Implications for Content Moderation

Current Developments:

- **Meta Platforms,** the parent company of **Facebook, Instagram,** and **Threads,** has announced the discontinuation of its third-party fact-checking program. This initiative will be replaced by a user-driven system known as **Community Notes,** similar to the model previously adopted by **X** (formerly Twitter).
- The **Community Notes** feature allows users to add context to posts, providing additional information or corrections to content that may be misleading or lacking context. This approach aims to empower the community to collectively enhance the accuracy of information shared on Meta's platforms.
- This policy shift has sparked discussions regarding the effectiveness and reliability of user-generated content moderation compared to traditional fact-checking methods. Critics express concerns about potential biases and the quality of information provided through community contributions.

Historical Context:

- Meta's previous fact-checking program, initiated in **December 2016**, involved partnerships with over 100 organizations across more than 60 languages. The program aimed to combat the spread of misinformation and "fake news" on its platforms.
- The transition to Community Notes reflects a broader trend in the tech industry towards leveraging user participation for content moderation. Platforms like X have implemented similar systems, allowing users to contribute context and corrections to content, thereby decentralizing the fact-checking process.

India Joins UN Panel to Shape Global Big Data Standards for Official Statistics

Current Developments:

- India has been inducted into the **UN Committee of Experts on Big Data and Data Science for Official Statistics (UN-CEBD)**, a body established to explore the benefits and challenges of Big Data, including its potential for monitoring and reporting on sustainable development goals.
- As a member, India will contribute to shaping global standards and practices in harnessing Big Data and data science for official statistical purposes.
- This membership underscores India's commitment to leveraging data and technology for informed decision-making and highlights its growing stature in the global statistical community.

Historical Context:

- The UN-CEBD was created to further investigate the benefits and challenges of Big Data, including the potential for monitoring and reporting on sustainable development goals.
- India's active engagement in the Committee of Experts will highlight its pioneering initiatives, including the establishment of the **Data Innovation Lab** and exploration of alternate data sources such as satellite imagery and machine learning for policymaking.

World Hindi Day 2025: Celebrating Hindi's Global Impact

- **World Hindi Day** is celebrated annually on **January 10 t**o honor the global significance and rich heritage of the Hindi language.
- The theme for World Hindi Day 2025 is "**Hindi: A Global Voice of Unity and Cultural Pride,**" emphasizing Hindi's role in uniting diverse communities and promoting cultural pride.
- This day aims to promote the Hindi language across the world and bring recognition to its cultural and historical importance.

Historical Context:

- The first **World Hindi Conference** was held on **January 10, 1975, in Nagpur, Maharashtra,** marking the beginning of the annual celebration of World Hindi Day.
- In **2006**, the Government of India declared January 10 as World Hindi Day to promote the language globally.

Significance:

- Hindi is among the most widely spoken languages in Northern India and across the globe. After Mandarin and English, Hindi ranks as the third most spoken language worldwide.
- Celebrating World Hindi Day highlights the importance of Hindi as a tool for international communication and cultural exchange.

21st Third Eye Asian Film Festival: Showcasing Asian Cinema in Mumbai

- The **21st Third Eye Asian Film Festival** commenced on **January 10, 2025**, in Mumbai, featuring a curated selection of 61 films from across Asia.
- The festival opened with the acclaimed Chinese drama "**The Black Dog**", which won the Best Film award at the Cannes Film Festival.
- Screenings are scheduled at MovieMax Theatres in **Andheri, Sion,** and **Thane**, running through January 16, 2025.
- The **Asian Spectrum** section showcases films from countries including **China, Malaysia, Bangladesh, Kazakhstan, Tunisia, and Bhutan.**
- The **Country Focus** segment highlights six films from South Korea.
- Renowned lyricist and screenwriter **Javed Akhtar** will be honored with the **Asian Cinema** Culture Award, while journalist **Rafique Baghdadi** will receive the **Satyajit Ray Memorial Award.**
- The festival includes open forums with jury members, masterclasses with industry experts, and special screenings.

Historical Context:

- The Third Eye Asian Film Festival was initiated by the **Asian Film Foundation** to showcase acclaimed Asian films that have gained recognition at various international film festivals.
- Over the past two decades, the festival has become a prominent feature of Mumbai's cultural calendar, bridging the gap between Indian audiences and Asian cinema.

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India Targets ₹20,000 Crore in Organic Product Exports by 2028

Current Developments:

- **Commerce and Industry Minister Piyush Goyal** has announced India's ambition to increase **organic product exports** from the current ₹5,000–6,000 crore to **₹20,000 crore** over the next three years.
- This announcement coincided with the release of the **eighth edition of the National Programme for Organic Production (NPOP)**, introducing new regulations to enhance clarity, transparency, and alignment with global standards in organic product certification.
- The updated NPOP features **farmer-friendly regulations**, streamlined certification processes, and a revamped traceability system, aiming to bolster India's organic export sector with a target of reaching **USD 2 billion** in organic food exports by 2030.

Historical Context:

- Established in **May 2001**, the **National Programme for Organic Production (NPOP)** has undergone several revisions, with the last significant update in 2014.
- India boasts one of the largest populations of farmers engaged in organic farming, reflecting a longstanding commitment to sustainable agricultural practices.

Economic Perspective:

- The global market for organic products is currently valued at approximately **₹1 trillion**, with projections to expand up to **₹10 trillion** in the coming years, presenting a substantial opportunity for India to enhance its share in the international organic market.
- The government's focus on organic exports is expected to generate employment, increase farmers' income, and contribute to the overall growth of the agricultural sector.

Government Initiatives:

- The launch of **TraceNet 2.0,** an upgraded traceability platform under NPOP, aims to facilitate seamless operations and provide enhanced tools for regulatory oversight, ensuring the integrity of organic products throughout the supply chain.
- A dedicated **NPOP portal** has been introduced to improve visibility and ease of operations for stakeholders in the organic sector, alongside redesigned portals for **APEDA** and **Agri Exchange** to support agricultural trade.

Industry Urges Extension of RoDTEP Scheme for SEZs and EOUs

Current Developments:

- The **Export Promotion Council for EOUs and SEZs (EPCES)** has requested the government to extend the **Remission of Duties and Taxes on Exported Products (RoDTEP)** scheme for **Export-Oriented Units (EOUs)** and **Special Economic Zones (SEZs)** until **September 30, 2025.**
- As of now, the RoDTEP scheme for exports from the **Domestic Tariff Area (DTA)** is valid until **September 30, 2025.** However, for SEZs, EOUs, and **Advance Authorisation (AA)** holders, the scheme expired on **December 31, 2024.**
- The EPCES argues that excluding SEZs and EOUs from the scheme disadvantages these exporters, who contribute approximately **15%** of India's total merchandise exports.

Background:

- The **RoDTEP scheme** was introduced in 2021 to refund embedded non-creditable central, state, and local levies paid on inputs to exporters, thereby enhancing the competitiveness of Indian exports.
- Initially, SEZs and EOUs were excluded from the scheme. In **March 2024**, the government extended RoDTEP benefits to these sectors to support exporters facing global economic challenges.
- The scheme's benefits for SEZs, EOUs, and AA holders were available from **March 11, 2024,** to **December 31, 2024.**

Economic Perspective:

- SEZs and EOUs play a significant role in India's export landscape, collectively accounting for about 15% of the country's merchandise exports.
- The **Union Budget 2024-25** allocated **₹16,575 crore** to the RoDTEP scheme, reflecting the government's commitment to boosting exports.

Government Initiatives:

- The government's decision to extend RoDTEP benefits to SEZs and EOUs in March 2024 was aimed at mitigating international headwinds and enhancing the competitiveness of Indian exports.
- The current request from EPCES seeks parity for all exporters by extending the scheme's benefits uniformly across sectors.

UGC's Draft Regulations on Vice-Chancellor Appointments Stir Federalism Debate

Current Developments:

- The **University Grants Commission (UGC)** has released the **Draft UGC Regulations 2025,** proposing changes to the appointment process of **Vice-Chancellors (VCs)** in universities.
- The draft suggests that the **Chancellor** (often the Governor) will appoint the Chairperson of the **Search Committee** for selecting VCs. The committee will include nominees from the Chancellor, UGC, and the university's executive body.
- Several **state governments** and political leaders have expressed concerns, viewing these proposals as an infringement on state autonomy and an overreach by the central government.

Historical Context:

- Traditionally, the appointment of VCs has involved significant input from state governments, especially in state universities. The proposed regulations are perceived to shift this balance, granting more authority to central appointees like the Governor.
- Previous UGC regulations, such as those from **2010** and **2018**, also outlined roles for Chancellors in VC appointments, but the current draft is seen as further centralizing the process.

Political and Social Perspectives:

- Leaders from various states, including **Kerala, Tamil Nadu,** and **Punjab**, have criticized the draft regulations, arguing that they undermine the federal structure of governance and encroach upon the rights of states to manage their educational institutions.

- The **Left parties** have demanded the withdrawal of the draft, emphasizing the need to preserve the autonomy of state universities and prevent centralization of power.

Economic and Administrative Implications:

- Proponents of the draft regulations argue that a standardized and transparent process for VC appointments could enhance the quality of higher education and ensure merit-based selections.
- Critics fear that the changes could lead to bureaucratic delays and politicization of appointments, potentially affecting the administrative efficiency and academic autonomy of universities.

Innovative Copper-Based Nano Catalyst Promises Greener Industrial Processes

Current Developments:

- Scientists at the **Institute of Nano Science and Technology (INST)**, an autonomous institution under the **Department of Science and Technology (DST)**, have developed a novel **copper-based nano catalyst** with a star-like structure.
- This catalyst is synthesized through the controlled growth of **copper oxide nanostructure**s on a **sporopollenin template**, resulting in a "morning star" configuration.
- The catalyst demonstrates high efficiency in water without the need for additives, outperforming conventional catalysts that often require high temperatures, additives, or harsh solvents.
- It is reusable across five cycles, enhancing its practicality for industrial applications.

Scientific and Environmental Perspectives:

- **Sporopollenin**, a natural polymer found in the outer shell of spores and pollen, serves as a scaffold for the growth of copper oxide rods, forming the nanostar shape.
- The surface of sporopollenin is functionalized with **polyethyleneimine (PEI),** providing amine groups crucial for the nucleation and growth of the copper oxide nanostructures.
- This eco-friendly synthesis aligns with sustainable development goals, directly addressing environmental concerns associated with traditional catalytic processes.

Industrial and Economic Implications:

- The catalyst holds potential for various applications, including **organic reactions, environmental remediation, nanoscale electronics,** and **surface-enhanced Raman spectroscopy (SERS).**
- By utilizing spores—an abundant biomass waste—as a foundation for high-value catalysts, this innovation exemplifies the transformation of waste into wealth, addressing a critical need for sustainable industrial processes.

Mumbai's Ira Jadhav Sets New Record in Women's U19 One Day Trophy

- **Ira Jadhav**, a 14-year-old cricketer from Mumbai, achieved an unbeaten **346 runs off 157** balls in the Women's Under-19 One Day Trophy against Meghalaya.
- Her remarkable innings included **42 fours and 16 sixes,** propelling Mumbai to a formidable total of **563 for 3** in 50 overs.
- This performance surpasses the previous record held by **Smriti Mandhana**, who scored 224 runs in 2013.

- Jadhav's achievement marks her as the first Indian (male or female) to score a triple century in any BCCI-organised limited-overs tournament.
- Her innings featured significant partnerships, including a **274-run stand** with captain Hurley Gala, who contributed 116 runs, and a **186-run partnership** with Diksha Pawar.
- Mumbai's total of 563 for 3 is the highest team score in the history of the Women's U19 One Day Trophy.
- The match concluded with Mumbai securing a **544-run victory** over Meghalaya, who were bowled out for 19 runs.
- Jadhav's performance has garnered praise from former India women's team captain **Diana Edulji,** who expressed hope to see her in India colors.

India's Renewable Energy Capacity Achieves 15.84% Year-on-Year Growth

Current Developments:

- As of December 2024, India's total **renewable energy (RE) installed capacity** has reached **209.44 GW,** marking a **15.84% increase** from 180.80 GW in December 2023.
- In 2024, the country added **28.64 GW** of RE capacity, a significant **119.46% increase** compared to the 13.05 GW added in 2023.
- **Solar power** led this growth with an addition of **24.54 GW**, a **33.47% rise** from 73.32 GW in 2023 to 97.86 GW in 2024.
- **Wind energy** also expanded, adding **3.42 GW** to reach a total of 48.16 GW, a **7.64% increase** from 2023.
- **Bioenergy** capacity grew by **4.70%,** from 10.84 GW in December 2023 to 11.35 GW in December 2024.
- **Small hydro power** projects saw a **2.20% increase**, with capacity rising from 4.99 GW in 2023 to 5.10 GW in 2024.

Historical Context:

- India has been progressively enhancing its renewable energy capacity to meet its climate commitments and energy security goals.
- The country aims to achieve **500 GW** of renewable energy capacity by **2030**, as part of its 'Panchamrit' goals announced by Prime Minister Narendra Modi.

India Energy Week 2025: Catalyzing Global Energy Dialogue

Current Developments:

- **India Energy Week 2025 (IEW'25)** is scheduled from **February 11 to 14, 2025,** at the **Yashobhoomi Convention Centre** in New Delhi.
- Organized under the patronage of the **Ministry of Petroleum and Natural Gas** and facilitated by the **Federation of Indian Petroleum Industry (FIPI),** IEW'25 aims to surpass previous editions with record-breaking participation.
- The event will feature nearly **100 strategic sessions and technical conferences,** fostering collaboration across the global energy landscape.
- Special emphasis is placed on engaging students and educational institutions through workshops and masterclasses conducted by international experts, offered free of cost.

Historical Context:

- IEW has rapidly evolved into one of the most comprehensive energy events globally, organized by a major energy-consuming nation.
- The inaugural edition, **IEW 2023**, was inaugurated by Prime Minister Narendra Modi, highlighting India's commitment to energy transition and security.

Economic and Environmental Perspectives:

- IEW'25 serves as a platform for discussing sustainable energy solutions, aligning with global efforts to address climate change and promote renewable energy adoption.
- The event facilitates dialogue on energy security, technological advancements, and investment opportunities, contributing to economic growth and environmental sustainability.

14 January 2025

Launch of Bharat Cleantech Manufacturing Platform

Key Highlights:

- **Launch Event:** On **January 11, 2025**, during the **Bharat Climate Forum 2025** in New Delhi, **Union Minister of Commerce & Industry, Shri Piyush Goyal,** unveiled the **Bharat Cleantech Manufacturing Platform.**
- **Objective**: The platform aims to enhance India's cleantech value chains across sectors such as solar, wind, hydrogen, and battery storage.
- **Minister's Address:** Shri Goyal emphasized that while **Product Linked Incentives (PLIs)** and **subsidies** can initiate growth in the clean energy sector, they are not sustainable long-term solutions. He stated that the sector should strive for self-sufficiency and independence from government support.
- **Call to Action:** The Minister encouraged innovative thinking and scaling up manufacturing within the country. He highlighted that the **Bharat Cleantech Manufacturing Platform** would facilitate collaboration among Indian firms, fostering co-innovation and providing avenues for financing, idea exchange, and resource sharing. This initiative is expected to position India as a global leader in sustainability and the cleantech sector.
- **National Targets:** Shri Goyal expressed confidence in achieving Prime Minister Shri Narendra Modi's goal of establishing **500 Gigawatts** of **clean energy** sources by **2030**. He noted that India has surpassed its **Nationally Determined Contributions (NDCs)** set in 2015, achieving renewable energy targets for 2022 ahead of schedule and reaching the milestone of 200 Gigawatts of clean energy.

Historical Context:

The Minister acknowledged India's longstanding commitment to addressing climate change, citing Gujarat's early adoption of solar power. He attributed the affordability and scalability of solar energy in India to transparent auctions, fair competition, and significant implementation scale, guided by Prime Minister Modi's leadership.

Z-Morh Tunnel Inaugurated in Jammu & Kashmir

- **Inauguration**: On January 13, 2025, Prime Minister Narendra Modi inaugurated the **Z-Morh Tunnel**, a 6.5 km long passage near Sonamarg in Jammu & Kashmir.
- **Year-Round Connectivity:** The tunnel ensures all-weather access to Sonamarg, a town previously cut off during winter months due to heavy snowfall.
- **Strategic Importance:** This development is pivotal for enhancing military logistics to the Ladakh region and is expected to boost tourism in Sonamarg.
- **Future Projects:** Construction of the **Zoji-La Tunnel,** a 14 km long tunnel connecting Sonamarg in Kashmir to Drass in Ladakh, is underway, with completion expected by 2026.

Historical Context:

The Z-Morh Tunnel is named after the Z-shaped stretch of road it replaces, which was prone to avalanches and closures during winter.

Economic Impact:

The tunnel is anticipated to significantly boost the local economy by promoting tourism in Sonamarg, known for attractions like the Thajiwas Glacier and activities such as whitewater rafting on the Sind River.

Environmental Considerations:

While the tunnel provides all-weather connectivity, it is essential to monitor and mitigate any environmental impacts due to increased human activity in the ecologically sensitive Himalayan region.

Indian Railways Introduces Amrit Bharat Trains 2.0

- **Introduction of Amrit Bharat Trains 2.0:** The Ministry of Railways has unveiled the **Amrit Bharat Trains Version 2.0,** incorporating 12 major enhancements to improve passenger experience.
- **Manufacturing Plan: 50 Amrit Bharat 2.0 trains** are slated for production at the **Integral Coach Factory (ICF)** in Chennai over the next two years.
- **Target Demographic:** These trains are designed to offer affordable and comfortable long-distance travel, particularly catering to **low and middle-income families.**

Key Features of Amrit Bharat Trains 2.0:

- **Semi-Automatic Couplers:** Enhance operational efficiency and safety.
- **Modular Toilets:** Provide improved sanitation and maintenance.
- **Ergonomic Seats and Berths:** Offer increased comfort for passengers during long journeys.
- **Emergency Talk-Back Systems:** Allow passengers to communicate with train staff during emergencies.
- **Continuous Lighting System:** Similar to Vande Bharat trains, ensuring well-lit coaches.
- **Advanced Pantry Car Designs:** Improve food preparation and distribution.

Economic Impact:

The introduction of these trains is expected to boost the manufacturing sector, particularly benefiting the ICF in Chennai, and contribute to the overall economy by enhancing rail connectivity.

Centre Urges States to Strengthen Compliance with Forest Rights Act

- **Directive Issued:** The Union Ministry of Tribal Affairs has instructed state governments to establish robust mechanisms ensuring adherence to the **Forest Rights Act (FRA), 2006.**
- **Data Submission:** States are required to provide detailed reports on the eviction of forest dwellers, particularly from **tiger reserves,** to assess compliance with the FRA.
- **Addressing Non-Compliance:** This initiative aims to rectify instances where forest-dwelling communities have been displaced without proper recognition of their rights under the FRA.

Historical Context:

The FRA was enacted in 2006 to address the historical injustice faced by forest-dwelling communities, granting them legal rights to inhabit and utilize forest lands.

Environmental Considerations:

Balancing the rights of forest dwellers with conservation efforts, such as maintaining tiger reserves, requires careful policy implementation to ensure both human and ecological interests are protected.

HAL's CATS Warrior Achieves Key Milestone in Unmanned Combat Systems

- **Successful Engine Ground Run:** Hindustan Aeronautics Limited (HAL) has successfully conducted the engine ground run of its full-scale demonstrator, the **CATS Warrior,** marking a significant advancement in India's unmanned combat aerial vehicle (UCAV) capabilities.
- **Integration with Tejas:** The **CATS Warrior** is designed to operate in conjunction with the **Tejas Light Combat Aircraft (LCA),** serving as a 'loyal wingman' to enhance mission effectiveness and reduce risks to human pilots.
- **Upcoming Unveiling:** HAL plans to showcase the CATS Warrior prototype at **Aero India 2025,** scheduled to take place in Bengaluru from February 10 to 14.

Technological Advancements:

The CATS Warrior is equipped with advanced features, including **semi-autonomous capabilities,** enabling it to perform a variety of missions such as surveillance, reconnaissance, and deep-penetration strikes into enemy territory.

Strategic Importance:

This development is crucial for the Indian Air Force (IAF), which is currently operating with 31 active squadrons against an authorized strength of 42. The integration of unmanned systems like the CATS Warrior can bolster combat capabilities and serve as a force multiplier.

Indigenous Development:

The project showcases India's commitment to self-reliance in defense technology, with HAL's various research and development centers contributing to the design, integration, and production of the CATS Warrior.

Understanding Small Language Models (SLMs) and Their Comparison with Large Language Models (LLMs)

- **Emergence of Small Language Models (SLMs):** In recent developments, there has been a notable shift towards the adoption of **Small Language Models (SLMs)** in various industries. These models are gaining attention for their efficiency and cost-effectiveness compared to traditional **Large Language Models (LLMs).**
- **Industry Adoption:** Major companies, including Infosys, are exploring the development of their own AI models, favoring SLMs for their specialized applications and manageability.

Key Differences Between SLMs and LLMs:

Model Size and Complexity:

- **LLMs**: Characterized by a vast number of parameters, often reaching into the billions or trillions, enabling them to process and generate complex language patterns.
- **SLMs**: Contain significantly fewer parameters, making them less complex but more efficient in specific tasks.

Computational Resources:

- **LLMs**: Require substantial computational power and memory, leading to higher operational costs.
- **SLMs**: Demand fewer resources, making them more accessible and cost-effective for deployment.

- **LLMs**: Trained on extensive datasets, providing broad language understanding but sometimes lacking domain-specific nuances.
- **SLMs**: Often trained on specialized datasets, allowing for better performance in niche areas or specific industries.

Deployment and Scalability:

- **LLMs**: Due to their size, deploying LLMs can be challenging, especially in environments with limited infrastructure.
- **SLMs**: Their smaller size facilitates easier deployment across various platforms, including edge devices.

Advantages of Small Language Models:

- **Efficiency**: SLMs are more efficient to train and deploy, requiring less data and computational power.
- **Cost-Effectiveness:** The reduced need for extensive resources makes SLMs a more economical choice for many applications.
- **Data Security:** SLMs can be tailored to specific datasets, enhancing data security and privacy, which is crucial for enterprises handling sensitive information.

Use Cases:

- **Domain-Specific Applications:** SLMs are particularly effective in specialized fields such as healthcare, legal, and customer support, where domain-specific language understanding is essential.
- **Resource-Constrained Environments:** Ideal for deployment in settings with limited computational resources, such as mobile devices or remote locations.

PM Modi Launches 'Mission Mausam' on IMD's 150th Foundation Day

- **Launch of Mission Mausam:** On January 14, 2025, Prime Minister Narendra Modi inaugurated **Mission Mausam** during the 150th Foundation Day celebrations of the **India Meteorological Department (IMD)** at Bharat Mandapam in New Delhi.
- **Objective**: The mission aims to make India **weather-ready and climate-smart,** enhancing the nation's capacity to predict and manage weather-related events.
- **Technological Advancements:** Mission Mausam plans to develop cutting-edge weather surveillance technologies, including high-resolution atmospheric observations, next-generation radars and satellites, and high-performance computing systems.
- **Global Collaboration:** India's **Flash Flood Guidance system** currently provides critical information to neighboring countries such as Nepal, Bhutan, Bangladesh, and Sri Lanka, showcasing India's role as a regional leader in disaster management.

Historical Perspective:

Established in 1875, the IMD has been pivotal in advancing meteorological services in India, contributing significantly to disaster management, agriculture, and various sectors dependent on weather forecasting.

Environmental Significance:

With the increasing challenges posed by climate change, initiatives like Mission Mausam are essential for developing resilience against extreme weather events and ensuring sustainable development.

DRDO's 'HIMKAVACH' Multi-Layer Clothing System Clears User Trials

- **Successful Trials:** The **Defence Research and Development Organisation (DRDO)** has announced that its **HIMKAVACH** multi-layer clothing system has successfully cleared all user trials under actual operational conditions.
- **Temperature Range:** Designed to function effectively in temperatures ranging from **+20°C to -60°C,** HIMKAVACH is tailored for extreme cold weather conditions, particularly in the Himalayan region.
- **Features**: The system boasts ruggedness, modularity, and all-weather operational capabilities, providing soldiers with the flexibility to add or remove layers based on prevailing weather conditions.

Historical Context:

India's defense forces have long operated in diverse and challenging terrains, necessitating specialized gear to ensure soldier safety and operational efficiency. The development of indigenous solutions like HIMKAVACH reflects a commitment to self-reliance in defense technology.

Economic Impact:

Producing such equipment domestically reduces dependence on imports, potentially leading to cost savings and fostering the growth of local industries involved in defense manufacturing.

Aparna Sen Honoured with Lifetime Achievement Award at WBFJA Ceremony

- **Lifetime Achievement Award:** Eminent director **Aparna Sen** was honoured with the **Satyajit Ray Lifetime Achievement Award** at the annual award ceremony of the **West Bengal Film Journalists Association (WBFJA)** for her significant contributions to Indian cinema.
- **Best Film Award:** The film '**Manikbabur Megh**' received the **Best Bengali Film award.**
  1. **Best Actor:** Actor **Chandan Sen** was recognised as the Best Actor for his role in 'Manikbabur Megh'.
  2. **Best Director:** Directors **Srijit Mukherji** and **Debaloy Bhattacharya** jointly won the Best Director award for 'Badami Haynar Kabale' and 'Padatik'.
- **Special Recognition:** Srijit Mukherji's 'Oti Uttam' earned Special Recognition for Technical Innovation.

Historical Context:

The WBFJA awards have been recognising excellence in Bengali cinema for several decades, celebrating the rich cultural heritage and artistic achievements of the Bengali film industry.

Odisha Joins Ayushman Bharat PM-JAY Scheme

- **Implementation of AB PM-JAY:** On January 13, 2025, Odisha became the 34th state to implement the **Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY),** India's flagship health insurance scheme.
- **Memorandum of Understanding (MoU):** The National Health Authority (NHA) of the Union Ministry of Health and the Department of Health and Family Welfare, Government of Odisha, signed an MoU to onboard Odisha under the AB PM-JAY scheme.
- **Coverage Details:** The scheme will provide a health cover of ₹5 lakh per family per annum, with an additional ₹5 lakh for women members. Approximately 1.03 crore families in Odisha will benefit from this coverage.

- **Integration with Existing Scheme:** AB PM-JAY will be implemented in convergence with Odisha's existing **Gopabandhu Jan Arogya Yojana (GJAY),** aiming to enhance healthcare access and quality for the state's residents.

Historical Context:

The Ayushman Bharat PM-JAY scheme was launched in 2018 to provide health insurance coverage to economically vulnerable families across India, aiming to reduce out-of-pocket expenses and improve access to quality healthcare services.

15 January 2025

Bhargavastra: India's Indigenous Counter-Drone Micro-Missile System

- India has successfully tested its first indigenous micro-missile system, **Bhargavastra**, designed to counter the growing threat of swarm drones.
- Developed by **Economic Explosives Ltd (EEL),** a subsidiary o" the Solar Group, the system underwent successful trials at the **Gopalpur Seaward Firing Ranges** on January 12 and 13, 2025.
- During these tests, Bhargavastra effectively engaged designated virtual targets over 2.5 kilometers away, demonstrating its capability as a cost-effective solution to neutralize large-scale drone attacks.

Technological Advancements:

- **Detection Range:** Bhargavastra can detect small, incoming drones at distances exceeding 6 kilometers.
- **Neutralization Mechanism:** It employs guided micro-munitions for precision targeting and is being integrated with a soft-kill layer to enhance its effectiveness against various UAV threats.
- **Mobility:** The system is designed for rapid deployment across diverse terrains, including high-altitude areas, to meet the operational needs of India's armed forces.

Strategic Importance:

- **Swarm Drone Threats:** The increasing use of swarm drones in modern warfare poses significant challenges, making systems like Bhargavastra crucial for national defense.
- **Indigenous Development:** The successful testing of Bhargavastra underscores India's growing capabilities in developing homegrown defense technologies, reducing reliance on foreign imports.

Economic Implications:

- **Cost-Effectiveness:** By developing such technologies domestically, India can achieve significant cost savings and promote self-reliance in defense manufacturing.
- **Defense Industry Growth:** Projects like Bhargavastra contribute to the growth of the Indian defense sector, potentially leading to increased exports and economic benefits.

C-DOT and IIT Delhi Collaborate on THz Communication for 6G Development

- The **Centre for Development of Telematics (C-DOT)** and the **Indian Institute of Technology Delhi (IIT Delhi)** have entered into an agreement to develop "*Building Blocks for THz Communication Front Ends*" as part of India's 6G initiative.
- This collaboration, under the **Telecom Technology Development Fund (TTDF)** 6G Call for Proposals by the **Department of Telecommunications (DoT)**, aims to accelerate research and development in 6G technologies, aligning with the **Bharat 6G Vision** to provide ubiquitous, intelligent, and secure connectivity for a high-quality living experience.

Technological Advancements:

- **THz Systems Development:** The project focuses on creating essential devices and components for **terahertz (THz) systems**, which are crucial for 6G communications and other applications like military communications and material characterization.
- **Indigenous Fabrication:** With India's recent initiatives to establish chip fabrication facilities, this project aims to develop core components domestically, leveraging facilities at IIT Delhi

in collaboration with **SAMEER (Society for Applied Microwave Electronics Engineering and Research)** Kolkata.

Strategic Importance:

- **Atmanirbhar Bharat:** This collaboration underscores India's commitment to self-reliance in advanced communication technologies, reducing dependence on foreign technology and fostering innovation within the country.
- **Global Leadership in 6G:** By investing in 6G research and development, India positions itself to be at the forefront of next-generation communication technologies, potentially influencing global standards and practices.

Economic Implications:

- **Telecom Sector Growth:** Advancements in 6G technology are expected to drive significant growth in India's telecom sector, leading to new business opportunities, job creation, and enhanced services for consumers.
- **Research and Development:** The project promotes cutting-edge research capabilities and infrastructure in the telecom sector, contributing to the overall development of India's technology ecosystem.

Empowering Tribal Women in Pulicat through Aquaculture Training

- In a significant move towards empowering tribal women and promoting sustainable livelihoods, the **National Bureau of Fish Genetic Resources (NBFGR)** has initiated a training program in aquaculture for 100 tribal individuals in the Pulicat region.
- This initiative aims to enhance the socio-economic status of the tribal community by providing them with skills in aquaculture practices, thereby offering alternative income sources and promoting sustainable development.

Historical Context:

- **Traditional Livelihoods:** The tribal communities in Pulicat have historically depended on fishing and related activities for their livelihood.
- **Challenges Faced:** Over the years, these communities have faced challenges such as declining fish stocks, environmental degradation, and limited access to modern fishing techniques, affecting their income and quality of life.

Social Impact:

- **Women Empowerment:** Training programs in aquaculture have empowered tribal women by providing them with new skills, leading to increased participation in economic activities and decision-making processes.
- **Community Development:** Such initiatives have fostered community development by encouraging collective efforts in aquaculture, leading to improved social cohesion and economic stability.

Economic Implications:

- **Alternative Livelihoods:** Aquaculture offers a viable alternative livelihood for tribal communities, reducing dependence on traditional fishing and providing a steady income source.
- **Entrepreneurship Opportunities:** The skills acquired through training enable individuals to start their own aquaculture ventures, contributing to local economies and promoting self-reliance.

Environmental Considerations:

- **Sustainable Practices:** The training emphasizes sustainable aquaculture practices, ensuring environmental conservation and the long-term viability of aquatic resources.
- **Biodiversity Conservation:** By adopting responsible aquaculture methods, the program contributes to the conservation of local fish species and the overall health of the ecosystem.

New Observatory in Purulia District, West Bengal: A Significant Leap for Indian Astrophysics

- The **S.N. Bose National Centre for Basic Sciences (SNBNCBS),** an autonomous institute under the Department of Science and Technology, has established a new observatory atop **Panchet Hill** in the **Garpanchakot area** of **Purulia district**, West Bengal.
- Inaugurated on January 13, 2025, this facility is poised to enhance scientific observations of astronomical objects, provide training for students in telescope operations and data recording, and foster both national and international collaborations in astronomical research.

Strategic Significance:

Longitudinal Gap Coverage: Positioned at approximately **86° E longitude**, the observatory addresses a notable absence of astronomical facilities along this meridian, which extends from the Arctic Ocean to Antarctica. This placement is crucial for observing transient astronomical phenomena that require continuous monitoring across different longitudes.

Collaborative Efforts:

Partnership with Sidhu Kanu Birsa University (SKBU): SNBNCBS has signed a Memorandum of Understanding (MoU) with SKBU to jointly manage the observatory and share resources, promoting academic collaboration and resource optimization.

Educational Impact:

Student Engagement: The observatory is expected to inspire and motivate students from SKBU and surrounding regions, particularly in Purulia, which is considered a backward district. Access to such a facility can enhance educational opportunities and encourage careers in science and technology.

Chronic Wasting Disease (CWD): Potential Risks to Human Health

- Recent reports have raised concerns about **Chronic Wasting Disease (CWD),** commonly known as "*zombie deer disease,*" and its potential to affect humans. CWD is a fatal, incurable prion disease affecting deer, elk, reindeer, sika deer, and moose.
- It leads to symptoms such as drooling, confusion, unsteadiness, aggression, weight loss, and ultimately death in infected animals.
- The disease is transmitted through body fluids like saliva, urine, blood, and feces.
- Notably, CWD has been identified in feral pigs, raising alarms about its possible transmission to humans.

Historical Context:

Prion Diseases: Prion diseases are a group of rare, fatal brain disorders caused by misfolded proteins. In animals, examples include **bovine spongiform encephalopathy (BSE)** in cows and **scrapie** in sheep and goats. In humans, prion diseases include **Creutzfeldt-Jakob Disease (CJD).**

Scientific Research:

- **Species Barrier:** While there is no strong evidence that humans can get infected with CWD prions from animals, the possibility exists that the disease could evolve to affect humans.
- **Experimental Studies:** Research has shown that the barrier for CWD prions to infect humans is not absolute, indicating a potential risk of transmission.

Public Health Concerns:

- **Consumption Risks:** Hunters and individuals consuming venison from infected animals may be at risk. Cooking does not destroy prions, and there is concern about the disease's spread to humans through consumption.
- **Monitoring and Surveillance:** Health agencies recommend testing harvested animals in areas where CWD is known to be present and advise against consuming meat from infected animals.

Economic Implications:

Agricultural Impact: The potential spread of CWD to livestock, such as domestic swine, could have significant economic consequences for the meat industry. Concerns about market impacts and public health could lead to increased regulations and testing requirements.

77th Army Day

On **January 15, 2025**, India commemorated its **77th Army Day**, a tribute to the valor and dedication of the Indian Army. Chief of Defence Staff (CDS) General Anil Chauhan extended his greetings to all ranks, emphasizing the Army's unwavering commitment to national security and unity.

Key Highlights from General Chauhan's Address:

- **Adaptation to Modern Warfare:** General Chauhan highlighted the rapid evolution of warfare, driven by technological advancements and shifting geopolitical dynamics. He stressed the necessity for the Indian Army to continually upgrade its tactics, techniques, and procedures to maintain a strategic advantage over adversaries.
- **Technological Integration:** The CDS underscored the importance of technological assimilation, stating that the Indian Army will observe the year 2025 as the 'Year of Technology Absorption,' focusing on the integration of new technologies into warfighting systems.

Historical Context:

Army Day Significance: Army Day is celebrated annually on January 15th to mark the day in 1949 when General (later Field Marshal) K.M. Cariappa took over as the first Indian Commander-in-Chief of the Indian Army from General Sir Francis Butcher, the last British Commander-in-Chief.

Technological Evolution in the Indian Army:

Modernization Efforts: The Indian Army has been progressively incorporating advanced technologies, including cyber warfare capabilities, drone technology, and artificial intelligence, to enhance operational efficiency and combat readiness.

Geopolitical Dynamics:

Regional Security Challenges: India's strategic environment necessitates a robust and technologically adept military to address challenges along its borders and in the broader Indo-Pacific region.

Discovery of the Indo-Burmese Pangolin in Arunachal Pradesh

In January 2025, scientists from the **Zoological Survey of India (ZSI)** announced the discovery of a new pangolin species, the **Indo-Burmese pangolin** (*Manis indoburmanica*), in Arunachal Pradesh. This species is genetically distinct from the previously known **Chinese pangolin** (*Manis pentadactyla)* and **Indian pangolin** (*Manis crassicaudata*).

Discovery Details:

The specimen was located in **Silluk village, East Siang district**, Arunachal Pradesh. After genetic sampling and photography, it was released into the **Borguli range** of the **Daying Ering Memorial Wildlife Sanctuary.**

- Genetic Analysis: **Research indicates that the Indo-Burmese pangolin diverged from the Chinese pangolin approximately** 3.4 million years ago, **exhibiting a** 3.8% genetic difference.**
- **Physical Characteristics:** This species features **dark brown to olive-brown scales** and a **pinkish face,** consistent with other Asian pangolins.
- **Ecological Significance:** Pangolins play a crucial role in controlling insect populations, particularly ants and termites, thus maintaining ecological balance.
- **Conservation Concerns:** Pangolins are among the most trafficked mammals globally, facing threats from poaching and habitat loss. The discovery of a new species underscores the urgency for enhanced conservation measures to protect these vulnerable creatures.
- **Geographical Distribution:** The Indo-Burmese pangolin is believed to inhabit regions of **Arunachal Pradesh**, Assam, and potentially extends to **Nepal, Bhutan, and Myanmar,** at elevations ranging from **180 to 1,830 meters** above sea level.

16 January 2025

ISRO's Successful SpaDeX Mission: A Milestone in India's Space Endeavors

- On January 16, 2025, the **Indian Space Research Organisation (ISRO)** achieved a significant milestone by successfully executing the **Space Docking Experiment (SpaDeX)**.
- This accomplishment positions India as the fourth nation, after the United States, Russia, and China, to demonstrate in-space docking capabilities.
- The SpaDeX mission Involved two 220 kg satellites, aptly named "**Chaser**" and "**Target**", which were launched into a 470 km orbit on December 30, 2024, using the **Polar Satellite Launch Vehicle (PSLV)**.
- At approximately 9 a.m. IST on January 16, these satellites successfully docked, marking a pivotal achievement in India's space technology advancements.

Historical Perspective:

- The development of docking technology has been a critical aspect of space exploration since the 1960s.
- For India, this achievement is a culmination of years of research and development, with preliminary studies for SpaDeX initiated in 2016.
- The project received government approval in 2017, highlighting a strategic commitment to advancing space capabilities.

Economic Implications:

- The successful demonstration of in-space docking technology opens avenues for India in the burgeoning global space market, estimated at $400 billion.
- With ambitions to increase its market share from the current 2% to 11% by 2040, India is poised to offer satellite servicing, space station operations, and interplanetary mission support, thereby attracting international collaborations and investments.

Technological Advancements:

- The SpaDeX mission not only demonstrated mechanical docking but also included experiments such as the transfer of electric power between docked spacecraft and the study of plant growth in microgravity conditions.
- Notably, cowpea seeds sent aboard germinated within four days, indicating potential for sustainable life support systems in long-duration space missions.

India's Cyber Shield: Blocking ₹1,800 Crore in Online Fraud within 90 Days

- In a significant stride towards bolstering cybersecurity, India has successfully thwarted online fraud amounting to ₹1,800 crore over a span of 90 days.
- This achievement is attributed to the implementation of an online 'suspect registry,' which has been instrumental in preventing approximately 6 lakh fraudulent transactions.

Key Highlights:

- **Online 'Suspect Registry'**: Introduced to identify and monitor potential cybercriminals, this registry has played a pivotal role in averting substantial financial losses.
- **Preventive Measures:** Beyond blocking transactions, authorities have frozen 8.67 lakh mule accounts and deactivated over 7 lakh SIM cards and 1.4 lakh mobile devices linked to fraudulent activities.

Economic Impact:

- The surge in digital transactions has been paralleled by a rise in cybercrimes.
- Between January and October 2023, financial frauds amounted to ₹5,574 crore, a significant increase from ₹2,296 crore in 2022.

Regulatory Framework:

- India's cybersecurity landscape is governed by multiple legislations, including the Information Technology Act, 2000, which addresses cybercrimes and prescribes penalties.
- Organizations are permitted to employ cybersecurity measures such as beacons, honeypots, and sinkholes within the legal framework.

Technological Initiatives:

- Collaborations with tech giants have further strengthened cybersecurity.
- For instance, Google's 'DigiKavach' program, launched in 2023, aims to protect users from online fraud by studying scam operations and implementing countermeasures.

Reconstitution of India's Atomic Energy Commission

The Government of India has **reconstituted the Atomic Energy Commission (AEC),** incorporating key officials to strengthen its leadership. The reconstituted AEC includes:

- **T V Somanathan**, Cabinet Secretary
- **Manoj Govil**, Expenditure Secretary
- **Pankaj Kumar Mishra**, Member (Finance)
- **Ajit Doval**, National Security Adviser
- **Vikram Misri**, Foreign Secretary
- **Ajit Kumar Mohanty**, Secretary, Department of Atomic Energy, serving as the Chairman

This reconstitution was formalized through a notification issued on October 21, 2024, and published in the Gazette on January 9, 2025.

Historical Context:

- The AEC was first established on August 3, 1948, under the Department of Scientific Research.
- It was reconstituted as the "Atomic Energy Commission of India" on March 1, 1954, with enhanced powers and autonomy.
- The first Chairperson was Homi J. Bhabha (1948–1966).

Functions and Responsibilities:

- The AEC is the governing body of the Department of Atomic Energy (DAE), which operates under the direct charge of the Prime Minister of India.
- The Commission formulates policies for the DAE, overseeing nuclear energy production, research, and development.

Strategic Significance:

- The inclusion of high-ranking officials such as the National Security Adviser and the Foreign Secretary underscores the strategic importance of nuclear energy in India's national security and foreign policy.
- This composition ensures a cohesive approach to nuclear policy, aligning it with broader national objectives.

India Launches Fast Track Immigration – Trusted Traveller Program (FTI-TTP)

- On January 16, 2025, Union Home Minister and Minister of Cooperation, **Shri Amit Shah**, inaugurated the **Fast Track Immigration – Trusted Traveller Program (FTI-TTP)** at seven major airports: Mumbai, Chennai, Kolkata, Bengaluru, Hyderabad, Cochin, and Ahmedabad.
- This initiative, under the leadership of Prime Minister **Shri Narendra Modi,** aims to provide world-class immigration facilities, making international travel seamless and secure.

Key Features of FTI-TTP:

- **Online Registration**: Travellers can enroll through the official portal: https://ftittp.mha.gov.in . Applicants need to fill in their details and upload the required documents.
- **Biometric Data Collection:** Biometric information of registered applicants will be captured either at the Foreigners Regional Registration Office (FRRO) or during airport transit.
- **E-Gate Processing:** Registered travellers will scan their boarding pass and passport at e-gates. Biometric authentication will follow, and upon successful verification, the e-gate will open, granting immigration clearance.
- **Cost:** Initially, the program is free for Indian citizens and Overseas Citizens of India (OCI) cardholders.

Expansion Plans:

- FTI-TTP is set to be implemented at 21 major airports across India.
- The first phase includes Delhi, Mumbai, Chennai, Kolkata, Bengaluru, Hyderabad, Cochin, and Ahmedabad.

Strategic Vision:

This initiative aligns with the 'Viksit Bharat'@2047 vision, aiming to enhance infrastructure and services as India progresses towards becoming a developed nation by 2047.

India Commissions INS Surat, INS Nilgiri, and INS Vaghsheer

- On January 15, 2025, Prime Minister **Narendra Modi** dedicated three frontline naval assets to the nation: **INS Surat, INS Nilgiri,** and **INS Vaghsheer**.
- The commissioning ceremony took place at the Naval Dockyard in Mumbai, marking a significant enhancement of the Indian Navy's capabilities.

INS Surat

- **Class**: Visakhapatnam-class (Project 15B) destroyer.
- **Specifications**:
    - Length: 163 meters.
    - Beam: 17 meters.
    - Displacement: 7,400 tonnes.
    - Speed: Up to 30 knots.
- **Features:**
    - Equipped with state-of-the-art weapon-sensor packages.
    - Advanced network-centric capabilities.
    - 75% indigenous content.

- **Construction**: Built at Mazagon Dock Shipbuilders Limited (MDL), Mumbai. Keel laid on November 9, 2019; launched on May 17, 2022; delivered to the Indian Navy on December 20, 2024.

INS Nilgiri

- **Class**: Project 17A stealth frigate.
- **Specifications:**
  - Length: 149 meters.
  - Displacement: 6,700 tonnes.
- **Features**:
  - Enhanced stealth features, including sloped superstructure and infrared suppression systems.
  - Equipped with advanced sensors and weaponry, including BrahMos supersonic cruise missiles and Barak-8 surface-to-air missiles.
  - Designed by the Indian Navy's Warship Design Bureau.
- **Construction**: Keel laid on December 28, 2017; launched on September 28, 2019; delivered to the Indian Navy on December 20, 2024.

INS Vaghsheer

- **Class:** Scorpene-class (Project 75) diesel-electric attack submarine.
- **Features:**
  - Equipped with advanced stealth capabilities and precision-guided weapons.
  - Designed for anti-surface and anti-submarine warfare.
- **Construction:** Built at MDL in collaboration with France's Naval Group. Delivered to the Indian Navy on January 9, 2025.

Strategic Significance:

The induction of these vessels enhances India's maritime security and power projection capabilities, especially in the Indian Ocean Region.

Indigenization Efforts:

The high indigenous content in these platforms reflects India's push towards self-reliance in defense manufacturing.

Regional Dynamics:

The commissioning aligns with India's efforts to counterbalance naval expansions by neighboring countries, ensuring stability and security in regional waters.

Electrokinetic Mining: A Breakthrough in Sustainable Rare Earth Extraction

- Chinese researchers from the Guangzhou Institute of Geochemistry at the Chinese Academy of Sciences have developed an innovative method for extracting rare earth elements (REEs) using Electrokinetic Mining (EKM) technology.
- This technique has achieved an unprecedented 95% recovery rate of REEs, while significantly reducing environmental impact and resource consumption.

Key Features of Electrokinetic Mining (EKM):

- **High Recovery Efficiency:** EKM has demonstrated a recovery rate exceeding 95% for REEs during industrial-scale testing.

- **Environmental Benefits:**
  - Reduces ammonia-nitrogen emissions in groundwater and surface water by 95%.
  - Minimizes the use of leaching agents by 80%.
  - Decreases mining time by 70%.
  - Lowers energy consumption by 60%.
- **Innovative Strategies:** The research team developed conductive plastic electrodes and implemented high-voltage blocking strategies to enhance the efficiency and stability of the EKM process.

Environmental Impact of Traditional Methods:

- Conventional ammonium-salt-based in-situ mining methods for REEs have led to significant environmental degradation, including soil and water contamination.
- The introduction of EKM offers a more sustainable alternative, addressing these ecological concerns.

Global Significance of Rare Earth Elements:

- REEs are critical components in various technologies, including electronics, renewable energy systems, and defense applications.
- The ability to extract these elements efficiently and sustainably is vital for technological advancement and environmental conservation.

U.S. AI Export Restrictions and Their Implications for India

- In January 2025, the United States introduced a new framework regulating the export of advanced artificial intelligence (AI) chips, citing national security concerns.
- This policy categorizes countries into tiers, with 18 key allies in **Group 1** enjoying unrestricted access. India, however, is placed in **Group 2,** subjecting it to limitations on the quantity of AI chips it can import.

Key Aspects of the U.S. AI Export Policy:

- **Categorization of Countries:**
  - **Group 1:** Includes 18 key U.S. allies with unrestricted access to advanced AI chips.
  - **Group 2:** Comprises countries like India, facing restrictions on the volume of AI chip imports.
- **Export Restrictions:**
  - Group 2 nations are limited to importing fewer than 1,700 Graphics Processing Units (GPUs) per company annually.

Implications for India:

AI Development:

- India's National AI Mission aims to develop infrastructure with over 10,000 GPUs through public-private partnerships, supported by a ₹10,000 crore investment over five years.
- The U.S. export restrictions could hinder these plans by limiting access to necessary hardware.

Strategic Positioning:

- India's exclusion from Group 1 may be influenced by its historical ties with Russia and perceptions regarding its technology regulatory framework.

Global AI Dynamics:

- The U.S. export controls aim to prevent adversaries from acquiring advanced technologies with potential military applications.
- However, these measures also impact strategic partners like India, necessitating diplomatic engagements to balance security concerns with technological collaboration.

India's Response:

Indian authorities, including the Ministries of Commerce and Industry and Electronics and Information Technology, are assessing the impact of the U.S. proposal to address potential challenges.

Government Announces 8th Pay Commission for Central Government Employees

On January 16, 2025, Union Minister **Ashwini Vaishnaw** announced the formation of the **8th Pay Commission**, which is set to revise the salaries and pensions of central government employees and pensioners. The commission's recommendations are expected to come into effect on **January 1, 2026.**

Key Details:

- **Implementation Date:** The revised pay scales are anticipated to be effective from January 1, 2026.
- **Beneficiaries:** Approximately **1.1 crore** individuals, including central government employees and pensioners, are expected to benefit from the commission's recommendations.
- **Expected Salary Hike:** Based on a 2.86 fitment factor, the minimum basic salary of a government employee could increase to ₹51,480, up from the current minimum salary of ₹18,000.

Historical Context:

- Since India's independence, seven pay commissions have been constituted to review and recommend changes in the salary structures of government employees.
- Each commission typically operates on a 10-year cycle, with the 7th Pay Commission's recommendations implemented in 2016.

Economic Impact:

- The implementation of the 8th Pay Commission is expected to have significant financial implications for the government, potentially increasing public expenditure.
- However, it may also boost consumer spending, thereby stimulating economic growth.

Political Considerations:

The announcement comes shortly before the Delhi elections, which has led to discussions about the timing and its potential influence on voter sentiment.

India and Spain to Celebrate 2026 as 'Dual Year' Highlighting Culture, Tourism, and AI

During his official visit to Spain, External Affairs Minister **S. Jaishankar** announced that **2026** will be marked as a '**dual year**' between **India and Spain** to celebrate **culture, tourism,** and

advancements in **artificial intelligence (AI)**. This initiative aims to strengthen bilateral ties and foster collaboration in these key areas.

Key Highlights:

- **Bilateral Trade:** India and Spain currently enjoy an annual trade worth **USD 10 billion,** with collaborations spanning **railways, clean technology, drones, and space exploration**. The 'dual year' is expected to further enhance these economic engagements.
- **Diaspora Contributions:** Minister Jaishankar lauded the Indian diaspora in Spain for their significant contributions to the economy and society, emphasizing their role in strengthening bilateral relations.

Cultural Exchange:

- The 'dual year' will facilitate cultural exchanges, promoting mutual understanding and appreciation of each nation's heritage.
- This includes events showcasing traditional arts, music, and literature.

Tourism Development:

By highlighting tourism, both countries aim to boost travel and tourism sectors, encouraging people-to-people connections and economic growth.

Artificial Intelligence Collaboration:

Focusing on AI reflects a commitment to technological advancement, with potential collaborations in research, development, and application of AI technologies benefiting various sectors.

Odisha Government Announces ₹20,000 Monthly Pension and Free Healthcare for Emergency Detainees

- On January 13, 2025, the Odisha government declared a monthly pension of ₹20,000 and free medical treatment for individuals detained in Odisha during the Emergency period from June 25, 1975, to March 21, 1977.
- This initiative aims to honor those who suffered imprisonment under the Maintenance of Internal Security Act (MISA) and other related laws.

Key Details:

Eligibility Criteria:

- Individuals who were detained in Odisha during the Emergency period and are alive as of January 1, 2025.
- Detention under MISA, Defence of India Rules, or Defence and Internal Security of India Rules.

Benefits Provided:

- Monthly pension of ₹20,000.
- Free medical treatment as per the provisions of the Health and Family Welfare Department.

Application Process:

- Submit an application in the prescribed format to the Collector and District Magistrate.
- Include documents and names of three prominent co-detainees.
- Provide an affidavit supporting detention under the relevant act.
- Applications will be scrutinized before benefits are granted.

Historical Context:

- The Emergency period (1975-1977) was declared by then Prime Minister Indira Gandhi, leading to widespread arrests and suppression of political dissent.
- Many individuals were detained under MISA and related laws for opposing the government's policies.

Economic Impact:

- The pension scheme acknowledges the sacrifices made by individuals during the Emergency, providing financial support in their later years.
- Free healthcare ensures access to medical services, addressing the health needs of the elderly population.

Political Significance:

- This move reflects the state's commitment to recognizing and compensating those who endured hardships during a turbulent period in India's history.
- It may also influence public sentiment by addressing historical grievances.

India's Projected Economic Growth: 2024-2026

- **World Bank** projects **India's economic growth** to remain steady at **6.7% annually** over the next two fiscal years starting April 2025.
- **South Asia's growth** is projected to rise to **6.2% in 2025-26**, driven by strong growth in India.
- **Services sector** in India is expected to enjoy sustained expansion, and **manufacturing activity** will strengthen, supported by government initiatives.
- **Investment growth** is projected to be steady, with moderating public investment offset by rising private investment.
- India's growth is projected to slow to **6.5% in the fiscal year 2024-25**, reflecting a slowdown in investment and subdued manufacturing growth.
- **Private consumption growth** has remained resilient, primarily driven by improved rural incomes and a recovery of agricultural output.
- Excluding India, growth in the region is estimated to have increased to **3.9% in 2024**, driven by recoveries in Pakistan and Sri Lanka.
- **Bangladesh** faced political turmoil in mid-2024, which weighed on activity and deteriorated investor confidence.

Key Highlights:

- **Upward Revision:** The World Bank revised India's GDP growth estimate for the fiscal year 2024-25 to **7% from an earlier 6.6%**, attributing this to increased government spending on infrastructure and a rebound in private consumption.
- **Regional Impact:** Strong domestic demand in India has positively influenced the broader South Asian region, leading the World Bank to raise South Asia's growth forecast to **6.4% in 2024**.

Economic Challenges:

Despite robust growth projections, India faces challenges such as **high urban unemployment**, averaging 17%, and a decline in global market share in labor-intensive sectors like apparel and footwear.

Climate Concerns:

- **Climate change** poses a significant risk to India's economic trajectory.
- The nation is already experiencing impacts like heat stress and extreme weather events, which threaten sectors such as agriculture and water resources.

Social Factors:

- Enhancing **women's safety** and increasing their participation in the workforce are crucial for sustaining economic growth.
- Addressing safety concerns can lead to higher female employment, thereby boosting GDP.

'One Plate, One Bag' Initiative Launched for Plastic-Free Maha Kumbh 2025

In preparation for the **Maha Kumbh 2025** at Prayagraj's Triveni Sangam, the **Rashtriya Swayamsevak Sangh (RSS)** has introduced the **'One Plate, One Bag' campaign** to promote eco-friendly practices and eliminate plastic usage during the event.

Key Highlights:

Distribution of Reusable Items:

- The campaign involves distributing **cloth bags, steel plates, and glasses** to pilgrims and vendors, aiming to replace single-use plastic items.
- Approximately **70,000 cloth bags** have been distributed from six centers, and over **2 million steel plates and glasses** have been collected nationwide for use in community kitchens and food outlets.

Leadership and Support:

- The initiative was inaugurated by **RSS Sah-Sarkaryavah Krishna Gopal** in Sector 18 on the Old GT Road.
- It has garnered support from local organizations and authorities, aligning with **Uttar Pradesh Chief Minister Yogi Adityanath's** call for eco-friendly practices during the Mahakumbh.

Environmental Impact:

- The Maha Kumbh, attracting millions of devotees, has historically generated significant plastic waste, posing environmental challenges.
- The 'One Plate, One Bag' initiative aims to mitigate this by promoting sustainable alternatives, thereby reducing pollution and protecting the **Ganga river ecosystem**.

Social and Cultural Significance:

- The campaign reflects a growing awareness and responsibility towards environmental conservation within religious and cultural events in India.
- By integrating eco-friendly practices into the **Maha Kumbh**, organizers set a precedent for future large-scale gatherings, emphasizing the importance of sustainability in preserving cultural heritage.

India's Labour Market Outperforms Amid Global Slowdown: ILO Report

- The **International Labour Organization (ILO)** has released a report highlighting a sluggish recovery in the global labour market, with **India emerging as a notable exception**.
- While many countries grapple with employment challenges post-pandemic, India's labour market has demonstrated resilience and growth.

Key Highlights:

- **Global Scenario:** The ILO report indicates that the global labour market recovery remains slow and uneven, with several regions experiencing stagnation or decline in employment rates. Factors contributing to this trend include economic uncertainties, geopolitical tensions, and the lingering effects of the COVID-19 pandemic.
- **India's Performance:** Contrary to the global trend, India has showcased a robust recovery in its labour market. The report attributes this to proactive government policies, increased public investment in infrastructure, and a surge in digital employment opportunities.
  - India's growth underpins GDP growth performance in Southern Asia.
  - Southern Asia's GDP is expected to have grown by **6.2% in 2024** and to grow by **5.8% in 2025.**
  - India has one of the fastest growth rates in the world, **6.9% in 2024** and forecast to be **6.4% in 2025.**
  - India's growth is driven by monetary policy easing, strong domestic demand, and public investment.

Economic Factors:

- India's economic policies, such as the **Atmanirbhar Bharat Abhiyan** (Self-Reliant India Campaign), have played a pivotal role in stimulating domestic industries and creating employment.
- Additionally, reforms in labour laws have provided a more conducive environment for both employers and employees.

Social Aspects:

- The expansion of social security schemes and skill development programs has enhanced workforce participation.
- Initiatives like the **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)** have equipped millions with industry-relevant skills, facilitating employment.

Technological Impact:

- The accelerated adoption of digital technologies has opened new avenues for employment.
- The rise of the gig economy and remote work opportunities have contributed to the resilience of India's labour market.

ISRO's Successful Germination of Cowpea Seeds in Space

- The **Indian Space Research Organisation (ISRO)** has achieved a significant milestone by successfully germinating **cowpea seeds (Vigna unguiculata)** in space.
- This experiment was conducted aboard the **PSLV-C60 mission's POEM-4 platform**, marking a pivotal step in India's space agriculture endeavors.

Key Highlights:

- **Rapid Germination:** The cowpea seeds sprouted within just **four days** under microgravity conditions, demonstrating the feasibility of plant growth in space environments.
- **Controlled Environment:** The experiment utilized the **Compact Research Module for Orbital Plant Studies (CROPS)**, an automated platform developed by ISRO's **Vikram Sarabhai Space Centre (VSSC)**. CROPS is designed to cultivate and maintain vegetation in outer space, providing a controlled environment for plant growth.
- The **CROPS project** aims to develop **sustainable agricultural practices** for **extraterrestrial environments**.

Significance for Space Missions:

Successful plant cultivation in space is crucial for long-duration space missions, as plants can serve as a sustainable food source and contribute to life support systems by recycling carbon dioxide and producing oxygen.

Technological Advancements:

The CROPS module monitored various parameters, including soil moisture, temperature, relative humidity, and gas levels, using camera imagery to observe plant growth. This technological capability is essential for developing autonomous life support systems in space habitats.

Israel and Hamas Agree to Ceasefire and Hostage Release

- **Israel** and **Hamas** have agreed to a **ceasefire deal** after a **15-month conflict** in the **Gaza Strip**.
- The deal was mediated in the **Qatari capital** and promises the release of **dozens of hostages** held by Hamas and **hundreds of Palestinian prisoners** in Israel.

- The ceasefire will allow **displaced people** in Gaza to return to their homes and bring in **humanitarian aid**.
- The agreement was confirmed by officials from the **U.S.** and **Hamas**, while an Israeli official mentioned that details are still being finalized.

Historical Context:

- The Israel-Hamas conflict has a long history marked by periodic escalations and ceasefires.
- Previous truces have often been fragile, with underlying tensions leading to renewed conflicts.

Political Implications:

The ceasefire and hostage release could influence political dynamics within Israel and the Palestinian territories, potentially affecting leadership standings and future negotiations.

International Response:

- Global actors, including the United Nations and neighboring countries, have historically played roles in mediating and responding to such agreements.
- Their reactions to this development will be crucial in determining the ceasefire's durability.

India Agrees 'In Principle' to Unique Arrangement for Six Eastern Nagaland Districts

- The Government of India has agreed 'in principle' to grant **financial, executive, and legislative autonomy** to the proposed **Frontier Nagaland Territory (FNT)**, encompassing six eastern districts of Nagaland.
- This decision emerged from a six-hour meeting between the **Eastern Nagaland People's Organisation (ENPO)** and government representatives at the Chumoukedima police complex.

Key Highlights:

- **Autonomy Agreement:** The central government has consented to provide the proposed FNT with significant autonomy, addressing longstanding demands from the region.
- **ENPO's Stance:** ENPO President Chingmak Chang emphasized that the organization would not finalize any agreement without assurances of financial, executive, and legislative autonomy.

Historical Context:

The demand for a separate Frontier Nagaland Territory stems from perceptions of neglect and underdevelopment in the eastern districts compared to other parts of Nagaland.

Socio-Economic Factors:

The proposed autonomy aims to tackle issues such as unemployment and the modernization of village guards, seeking to uplift the socio-economic status of the region.

Political Implications:

Granting autonomy to the FNT could set a precedent for other regions with similar demands, influencing the broader political landscape in India.

India's Performance in QS World Future Skills Index 2025

The **QS World Future Skills Index 2025** has positioned **India at the 25th spot globally**, with a notable score of **99.1 in the 'Future of Work' indicator**, reflecting the nation's preparedness to recruit for the most in-demand future skills.

Key Highlights:

- **Future of Work:** India ranks **2nd globally** in this category, indicating a high level of readiness to meet the demands of emerging job markets.
- **Skills Fit:** With a score of **59.1**, India stands at the **lowest position among the top 30 countries** in aligning educational outcomes with employer needs.
- **Academic Readiness:** India is ranked **26th globally**, reflecting its capacity to deliver skills necessary for future industries.
- **Economic Transformation:** Securing the **40th position** with a score of **58.3**, this parameter assesses India's readiness to leverage skills-led industrial growth.

Demographic Advantage:

India's youthful population provides a competitive edge in adapting to future work demands, contrasting with aging demographics in other nations.

Educational Alignment:

The lower ranking in 'Skills Fit' suggests a need for better synchronization between educational institutions and industry requirements to enhance employability.

New Insights into Huntington's Disease Progression

- Recent research has unveiled critical insights into the progression of **Huntington's disease**, a fatal hereditary brain disorder.
- Despite the presence of the causative genetic mutation from birth, symptoms typically manifest later in life.
- The study reveals that the mutation, characterized by an expanded **CAG DNA sequence**, is initially benign.
- Over time, these repeats expand further, and once they exceed approximately 150 repeats, they produce toxic proteins leading to neuronal death.
- This expansion elucidates the delayed onset of symptoms, which commonly appear between ages 30 and 50 and progressively worsen over 10 to 25 years.

Key Findings:

- **Genetic Mutation Dynamics:** The mutation involves a repetition of the **CAG DNA sequence** at least 40 times. Initially harmless, these repeats expand over time.Once they surpass about 150 repeats, they generate toxic proteins, causing neuronal death.
- **Delayed Symptom Onset:** This gradual expansion explains why symptoms of Huntington's disease typically do not appear until later in life, despite the mutation being present from birth.

Historical Context:

- Huntington's disease has been recognized for its hereditary nature and late-onset symptoms.
- However, the precise mechanisms underlying the delayed manifestation have remained elusive until this study.

Government Launches 'JaiHind' App to Promote Battlefield Tourism

- The Indian government has introduced the **'JaiHind' mobile application** to enhance **battlefield tourism** across the nation.
- This initiative aims to educate citizens about India's rich military history and valor by providing detailed information on significant battlefields and war memorials.

Key Highlights:

- **Comprehensive Information:** The 'JaiHind' app offers users insights into various historical battle sites, including their historical significance, locations, and related events.
- **Interactive Features:** Users can access multimedia content such as photographs, videos, and narratives that bring to life the stories of bravery associated with each site.
- **Tour Planning:** The app assists tourists in planning visits by providing logistical details, nearby accommodations, and travel routes to these historical locations.

Historical Context:

- India's diverse history encompasses numerous significant battles that have shaped its cultural and political landscape.
- Prominent sites include the **Battle of Plassey**, the **Battle of Panipat**, and the **Kargil War** memorials.

Economic Impact:

Promoting battlefield tourism is expected to boost local economies by increasing footfall in these areas, leading to the development of infrastructure and the creation of employment opportunities.

Educational Value:

The initiative serves as an educational tool, fostering a sense of patriotism and awareness among citizens, especially the younger generation, about the sacrifices made in India's military history.

Government Introduces Tariff Cap to Revitalize PM-WANI Public Wi-Fi Scheme

- The Indian government has implemented a **tariff cap** to rejuvenate the **Prime Minister's Wi-Fi Access Network Interface (PM-WANI)** scheme, aiming to enhance public Wi-Fi accessibility across the nation.
- The **Telecom Regulatory Authority of India (TRAI)** has proposed that the broadband connectivity costs for **Public Data Offices (PDOs)** under PM-WANI should not exceed twice the applicable rate for retail home broadband services.

Key Highlights:

- **Objective:** The initiative seeks to make internet access more affordable and widespread, particularly in underserved and rural areas.
- **Implementation:** By capping tariffs, the government aims to incentivize **telecom operators** to support PDOs, thereby expanding the reach of public Wi-Fi hotspots.
- **Expected Impact:** This move is anticipated to stimulate the proliferation of low-cost internet services, benefiting a larger segment of the population.

Historical Context:

- Launched in 2020, PM-WANI aimed to establish 10 million public Wi-Fi hotspots by 2022, with a long-term goal of 50 million by 2030.
- However, progress has been slower than anticipated, with only 2,07,642 hotspots deployed as of July 2024.

Economic Implications:

Reducing internet costs is expected to boost digital literacy, enhance access to online services, and stimulate economic growth by enabling more people to participate in the digital economy.

Challenges:

Despite the tariff cap, challenges such as resistance from telecom operators and the availability of inexpensive mobile data packages may affect the scheme's success.

18 January 2025

Lokpal of India Celebrates Its First Foundation Day

- On **16th January 2025**, the **Lokpal of India** commemorated its **first Foundation Day** at the Manekshaw Centre in New Delhi.
- The event was graced by the **Chief Justice of India, Shri Justice Sanjiv Khanna**, and other notable dignitaries, including:
    - **Shri Justice N. Santosh Hegde**, former Supreme Court Judge and former Lokayukta of Karnataka.
    - **Padma Bhushan Shri Anna Hazare**, renowned social activist, who joined virtually.
    - **Shri R. Venkataramani**, Attorney General of India.
    - Judges from the Supreme Court and High Courts, Lokayuktas from various states, and officials from organizations like the **CAG**, **CBI**, and **CVC**.
- The **Chairperson of the Lokpal**, **Shri Justice A.M. Khanwilkar**, highlighted the institution's role as a significant milestone stemming from a transformative civil society movement demanding an ombudsman to combat corruption.
- He emphasized the evolving challenges posed by the nexus between politicians, bureaucrats, and business interests, necessitating continued vigilance and effective mechanisms.

Historical Perspective:

- The demand for an anti-corruption ombudsman in India dates back to the 1960s.
- However, it gained significant momentum during the **India Against Corruption movement** in the early 2010s, led by activists like **Anna Hazare**, culminating in the enactment of the **Lokpal and Lokayuktas Act, 2013**.

Political Perspective:

- The establishment of the Lokpal marked a pivotal moment in India's political landscape, reflecting the government's response to public demand for greater accountability and transparency.
- The institution serves as a mechanism to investigate allegations of corruption against public officials, including the Prime Minister, ministers, and members of Parliament.

Economic Perspective:

- Corruption has long been a barrier to economic growth and equitable development in India.
- By addressing corruption, the Lokpal aims to create a more conducive environment for economic activities, ensuring fair allocation of resources and fostering investor confidence.

Social Perspective:

- Corruption disproportionately affects the marginalized sections of society, leading to unequal access to services and opportunities.
- The Lokpal's mandate to combat corruption is expected to promote social justice and uphold the rights of the disadvantaged.

Environmental Perspective:

- Corruption can lead to the exploitation of natural resources and environmental degradation.
- By ensuring accountability in public offices, the Lokpal can contribute to sustainable environmental governance.

Enhancing Telecom Security and Connectivity: Launch of Sanchar Saathi Mobile App and National Broadband Mission 2.0

- On **17th January 2025**, the **Union Minister of Communications, Shri Jyotiraditya M. Scindia**, introduced several citizen-centric telecom initiatives aimed at bolstering India's digital infrastructure and security. The key highlights include:
- **Sanchar Saathi Mobile App**: A user-friendly platform designed to enhance telecom security and empower citizens. Available on both Android and iOS, the app offers features such as:
  - **Chakshu - Reporting Suspected Fraud Communications (SFC)**: Allows users to report suspicious calls and SMS directly from their phone logs.
  - **Know Mobile Connections in Your Name**: Enables citizens to identify and manage all mobile connections issued in their name, preventing unauthorized usage.
  - **Blocking Lost/Stolen Mobile Handsets**: Facilitates swift blocking, tracing, and recovery of lost or stolen devices.
  - **Verify Mobile Handset Genuineness**: Provides an easy method to check the authenticity of mobile handsets, ensuring the purchase of genuine devices.
- **National Broadband Mission (NBM) 2.0**: Building upon the success of NBM 1.0, which saw the establishment of nearly 8 lakh towers and an increase in broadband subscriptions from 66 crore to 94 crore, NBM 2.0 aims to:
  - Connect the remaining 1.7 lakh villages across the country.
  - Ensure that at least 60 out of every 100 rural households have access to broadband connectivity.
  - Achieve a minimum fixed broadband download speed of 100 Mbps, creating a robust digital infrastructure for rural India.
- **Intra Circle Roaming at DBN Funded 4G Mobile Sites**: This initiative allows multiple telecom service providers to offer services from the same tower, enabling a seamless service experience for subscribers, especially in remote regions.

Historical Perspective:

- India's telecom sector has undergone significant transformation over the past few decades, evolving from a state-controlled monopoly to a competitive market with multiple private players.
- The liberalization policies of the 1990s and subsequent reforms have paved the way for rapid growth and technological advancements.

Political Perspective:

- The government's proactive approach in launching initiatives like the Sanchar Saathi Mobile App and NBM 2.0 reflects its commitment to digital empowerment and security.
- These measures align with the broader vision of a 'Digital India,' aiming to bridge the digital divide and promote inclusive growth.

Economic Perspective:

- Enhanced connectivity and telecom security are crucial for economic development.
- By providing reliable and secure communication networks, these initiatives can boost e-commerce, digital payments, and other online services, contributing to GDP growth and job creation.

Social Perspective:

- Improved telecom services and security measures directly impact social well-being.
- Access to reliable communication facilitates education, healthcare, and social interactions, while security features protect citizens from fraud and misuse.

Technological Perspective:

- The introduction of advanced tools like the Sanchar Saathi App showcases India's technological capabilities in developing solutions tailored to its unique challenges.
- Such innovations are essential for maintaining the integrity and resilience of the nation's telecom infrastructure.

Cabinet Approves Refarming of 687 MHz Spectrum for Mobile Services

- On **January 18, 2025**, the **Union Cabinet** approved the **refarming of 687 MHz spectrum** to enhance mobile services across India.
- This decision aims to repurpose underutilized spectrum bands for modern telecommunications, thereby improving network coverage and capacity.
- **Union Minister Jyotiraditya Scindia** indicated that further refarming initiatives are anticipated, based on recommendations from a designated committee of secretaries.

Historical Perspective:

- Spectrum refarming involves reallocating frequency bands from outdated technologies to current services.
- Historically, such practices have been instrumental in adapting to technological advancements and optimizing resource utilization.

Economic Perspective:

Enhanced spectrum availability can stimulate economic growth by facilitating better connectivity, supporting digital services, and attracting investments in the telecom sector.

Technological Perspective:

Refarming allows for the deployment of advanced technologies like **5G**, leading to improved data speeds, reduced latency, and the proliferation of Internet of Things (IoT) applications.

Union Cabinet Approves Third Launch Pad at Satish Dhawan Space Centre

- On **January 16, 2025**, the **Union Cabinet** approved the establishment of a **third launch pad** at the **Satish Dhawan Space Centre (SDSC)** in **Sriharikota**, Andhra Pradesh.
- This strategic move aims to bolster India's space launch capabilities, accommodating the increasing frequency of missions and supporting upcoming projects like the **Next Generation Launch Vehicle (NGLV)** and **Gaganyaan**, India's human spaceflight program.

Historical Perspective:

The **Satish Dhawan Space Centre**, operational since 1971, has been the cornerstone of India's space endeavors, hosting numerous significant launches, including the **Chandrayaan** and **Mangalyaan** missions.

Economic Perspective:

The addition of a third launch pad is expected to enhance India's position in the global space market, attracting international collaborations and commercial launch opportunities, thereby contributing to economic growth.

Technological Perspective:

This development will facilitate the testing and deployment of advanced technologies, including the NGLV, designed for heavier payloads and reusable launch systems, marking a significant leap in India's space capabilities.

Extreme Weather and Armed Conflicts: Top Global Risks for the Next Decade

- The **World Economic Forum (WEF)** has released its **Global Risks Report 2025**, highlighting the most pressing global risks identified by over 900 experts worldwide.

Key Findings:

Immediate Risks (2025):

- **State-based armed conflict** has emerged as the most severe immediate global risk, with nearly one-quarter of respondents ranking it as the top concern for the year.
- **Extreme weather events**, previously the foremost concern, now rank as the second most critical risk.

Short-Term Risks (Next 2 Years):

- **Misinformation and disinformation** continue to be significant threats, maintaining a high ranking in the short-term risk landscape.
- **Cyber espionage and warfare** have also risen in prominence, reflecting growing concerns over digital security.

Long-Term Risks (Next 10 Years):

- **Environmental threats** dominate the long-term risk horizon, with **extreme weather events** and **biodiversity loss** identified as the most critical challenges.

Historical Perspective:

- The shift from economic concerns to geopolitical and environmental risks underscores a changing global landscape.
- In previous years, issues like inflation and economic downturns were predominant, but recent events have elevated the prominence of conflicts and climate-related challenges.

Economic Perspective:

- The rise in armed conflicts poses significant threats to global economic stability, disrupting trade, investment, and supply chains.
- Additionally, the increasing frequency of extreme weather events can lead to substantial economic losses, particularly in vulnerable regions.

Technological Perspective:

- The persistent threat of misinformation, exacerbated by the rapid advancement of artificial intelligence, highlights the need for robust digital governance frameworks.
- The potential misuse of AI technologies for spreading disinformation necessitates proactive measures to safeguard information integrity.

SEBI Mandates Disclosure of Information Ratio for Mutual Fund Schemes

- On **January 18, 2025**, the **Securities and Exchange Board of India (SEBI)** issued a directive requiring all mutual fund houses to disclose the **Information Ratio (IR)** of their schemes in monthly and quarterly performance reports.

- This move aims to enhance transparency and assist investors in making informed decisions by providing a clearer picture of a fund's performance relative to its benchmark.

Understanding the Information Ratio (IR)

- **Definition**: The Information Ratio measures a fund manager's ability to generate excess returns relative to a benchmark, adjusted for the volatility of those returns.
- **Calculation**: It is calculated by dividing the **excess return** (the difference between the fund's return and the benchmark's return) by the **tracking error** (the standard deviation of the excess return).
- **Interpretation**:
  - A **higher IR** indicates that the fund manager has consistently outperformed the benchmark, delivering higher risk-adjusted returns.
  - A **lower or negative IR** suggests underperformance or inconsistent returns compared to the benchmark.

Economic Perspective:

This mandate is expected to foster a more competitive environment among mutual funds, encouraging fund managers to adopt strategies that consistently outperform benchmarks, thereby potentially enhancing investor returns.

Regulatory Perspective:

SEBI's directive aligns with its ongoing efforts to strengthen regulatory frameworks, ensuring that mutual funds operate with greater accountability and transparency, ultimately protecting investor interests.

US Treasury Secretary-elect's Stance on Russian Oil: Implications for India

- In a recent statement, **Scott Bessent**, the United States Treasury Secretary-elect, emphasized the incoming administration's intent to adopt a stringent approach towards countries purchasing oil from Russia.
- This position is part of a broader strategy to economically isolate Russia in response to its ongoing geopolitical actions.
- India, being a significant importer of Russian oil, is poised to be directly impacted by this policy shift.

India's Oil Imports from Russia

- **Surge in Imports**: Following the imposition of international sanctions on Russia due to its actions in Ukraine, India capitalized on discounted Russian oil, substantially increasing its imports. This strategic move elevated Russia to one of India's top oil suppliers.
- **Economic Benefits**: The procurement of Russian oil at reduced prices has been economically advantageous for India, aiding in managing its energy costs and supporting domestic economic stability.

Potential Implications of the US Policy

- **Diplomatic Pressure**: The US administration's firm stance may lead to increased diplomatic efforts to persuade India to curtail its Russian oil imports. This could strain India-US relations, necessitating adept diplomatic navigation to balance strategic interests.
- **Economic Considerations**: Reducing or ceasing imports of discounted Russian oil could compel India to seek alternative suppliers, potentially at higher costs. This shift may have downstream effects on inflation and economic growth.

- **Geopolitical Dynamics**: India's energy strategy is intricately linked to its geopolitical positioning. Adapting to the US's tough stance on Russian oil will require India to reassess its foreign policy and energy security frameworks.

Massive Distribution of Property Cards under SVAMITVA Scheme: A Leap Towards Rural Empowerment

- On **January 18, 2025**, Prime Minister **Shri Narendra Modi** presided over a landmark event, distributing **65 lakh property cards** under the **SVAMITVA Scheme**, bringing the total number of property cards distributed to **2.25 crore**.
- This initiative aims to provide rural citizens with legal ownership documents, thereby fostering economic empowerment and reducing property disputes.

Key Highlights:

- **Event Scale:** The e-distribution ceremony was conducted via video conferencing, covering over **50,000 villages** across **10 states** and **2 Union Territories**, marking an unprecedented milestone in rural governance.
- **Beneficiary States and UTs:** Chhattisgarh, Gujarat, Himachal Pradesh, Madhya Pradesh, Maharashtra, Mizoram, Odisha, Punjab, Rajasthan, Uttar Pradesh, and the Union Territories of Jammu & Kashmir and Ladakh.

Economic Perspective:

The distribution of property cards enables rural residents to access formal credit facilities by using their property as collateral, thereby promoting entrepreneurship and economic development in villages.

Social Perspective:

Legal ownership of property helps in reducing disputes and fosters social harmony within communities. Additionally, recognizing women as property owners contributes to gender equality and women's empowerment.

Technological Perspective:

The SVAMITVA Scheme utilizes advanced drone technology for mapping rural residential land, ensuring accurate and efficient documentation of property boundaries.

India and Singapore Celebrate 60 Years of Diplomatic Relations

- On **January 16, 2025**, India and Singapore commemorated six decades of diplomatic ties with a significant event in New Delhi.
- During this ceremony, **President Droupadi Murmu** and **Singapore President Tharman Shanmugaratnam** unveiled a special logo symbolizing the enduring relationship between the two nations.
- The logo incorporates elements from both countries' national symbols, including the colors of the Indian and Singaporean flags and their national flowers—the lotus and the orchid, respectively.
- The number '60' prominently featured in the design highlights this milestone in bilateral history.

Economic Perspective:

The 60th anniversary serves as a catalyst to further strengthen economic ties, focusing on sectors such as fintech, digital technologies, and the semiconductor ecosystem. Both nations are exploring

avenues to enhance trade and investment relations, aiming to bolster economic growth and innovation.

Cultural Perspective:

This milestone offers an opportunity to deepen cultural exchanges, fostering mutual understanding and appreciation between the peoples of India and Singapore. Initiatives may include collaborative cultural events, educational programs, and people-to-people interactions.

Geopolitical Perspective:

The celebration underscores the strategic partnership between India and Singapore, highlighting shared values and mutual trust. It reflects a commitment to regional stability and cooperation in addressing global challenges.

BMW India Unveils First Locally Produced Electric SUV: The X1 Long Wheelbase All Electric

- On **January 17, 2025**, at the **Auto Expo 2025**, **BMW India** introduced its inaugural locally manufactured electric vehicle, the **BMW X1 Long Wheelbase All Electric**.
- This premium SUV is priced at ₹49 lakh (ex-showroom), aligning its cost with that of the petrol and diesel variants, thereby enhancing its accessibility to a broader segment of the Indian market.

Key Features:

Design and Dimensions:

- The X1 Long Wheelbase boasts a length of 4,616 mm and a wheelbase of 2,800 mm, making it the largest in its segment and one of the most spacious five-seater SUVs available in India.
- It features a closed-off grille with silver accents, dual LED headlamps, dual-tone alloy wheels, flush door handles, and a contrasting black roof, contributing to its modern and dynamic appearance.

Interior and Technology:

- The cabin includes a panoramic sunroof, a Harman Kardon audio system, a floating center console, a curved display, and an Advanced Driver Assistance Systems (ADAS) suite, enhancing both comfort and safety.

Performance and Range:

- Equipped with a 66.4 kWh battery, the X1 Long Wheelbase offers a range of approximately 531 km on a single charge, catering to the needs of urban and intercity travel.

Economic Perspective:

- The introduction of the X1 Long Wheelbase All Electric signifies BMW India's commitment to the Indian market and the government's push for electric mobility.
- By offering a premium electric SUV at a competitive price point, BMW aims to attract environmentally conscious consumers seeking luxury and sustainability.

Environmental Perspective:

- This launch aligns with global efforts to reduce carbon emissions and promote sustainable transportation.
- The X1 Long Wheelbase All Electric contributes to India's transition towards cleaner energy sources in the automotive sector.

India Triumphs in the 2025 Kho-Kho World Cup Final

The 2025 **Kho-Kho World Cup** concluded with a resounding victory for **India** in both the men's and women's finals, showcasing the country's dominance in this indigenous sport.

Men's Final:

- India defeated **Nepal** with a convincing performance, securing their title as the global champions.
- The match highlighted India's strategic excellence and fitness levels, overcoming Nepal's spirited effort.
- Key players like **Ravi Kumar** and **Sanjay Yadav** delivered exceptional performances, earning praise for their agility and quick reflexes.

Women's Final:

- The Indian women's team also triumphed over Nepal, showcasing superior teamwork and coordination.
- Captain **Pooja Sharma** led from the front, demonstrating strong leadership and skill throughout the game.

This victory marked a significant milestone for India, strengthening its reputation as the powerhouse of Kho-Kho.

Historical Context:

- Kho-Kho originated in **ancient India**, with references found in **Mahabharata** and other historical texts.
- The sport gained formal recognition in the early 20th century when **rules and a governing structure** were established.

Social Perspective:

- The sport promotes **community engagement** and inclusivity, often played in rural areas.
- Events like the Kho-Kho World Cup foster **cultural exchange** among participating countries, as teams from Asia, Africa, and Europe compete.

Economic Impact:

- Hosting and participating in such tournaments boost local economies and provide a platform for corporate sponsorships and investments.
- Players gain opportunities for **monetary rewards** and endorsements, raising their socio-economic status.

India Open 2025: Viktor Axelsen and An Se-Young Clinch Titles

The **India Open 2025**, a prominent **BWF Super 750 badminton tournament**, concluded with Viktor Axelsen and An Se-Young emerging victorious in the men's and women's singles finals, respectively.

Men's Singles Final:

- Denmark's **Viktor Axelsen**, the reigning world champion, defeated **Kunlavut Vitidsarn** of Thailand in a thrilling match.
- Axelsen's dominance was evident as he showcased exceptional control, court coverage, and power, securing his **third India Open title**.

Women's Singles Final:

- South Korea's **An Se-Young** overcame China's **Chen Yufei** in a tightly contested final.
- An Se-Young's strategic play and agility helped her win her **second India Open title**, reaffirming her status as one of the top players in women's badminton.

Notable Indian Performances:

- While no Indian players reached the finals, stars like **PV Sindhu**, **Lakshya Sen**, and **Satwiksairaj Rankireddy-Chirag Shetty** made commendable runs in earlier rounds, with Lakshya Sen reaching the semifinals.

Historical Context:

- The **India Open** is an annual badminton tournament that began in **2008** and is now part of the prestigious **BWF World Tour Super 750 series**.
- Indian badminton has seen a resurgence in recent years, with players like **Saina Nehwal** and **Kidambi Srikanth** bringing international recognition to the tournament.

Economic Perspective:

- The India Open is a platform for **corporate sponsorships** and branding, with companies like **Yonex** and **Bank of Baroda** among its key sponsors.
- The tournament attracts global audiences, boosting local tourism and hospitality industries in host cities like **New Delhi**.

"The World After Gaza" by Pankaj Mishra: A Guide to Challenging Times

Pankaj Mishra, a prominent author and essayist, has released his latest book, **"The World After Gaza: A Guide to Challenging Times"**, offering a profound exploration of the global socio-political landscape post the recent Gaza crisis.

Key Highlights of the Book:

- The book critically analyzes the **ongoing conflict in Gaza**, its historical roots, and its implications on **global geopolitics**.
- Mishra delves into themes like **humanitarian crises**, **power dynamics in international relations**, and the role of **media narratives** in shaping public opinion.
- It discusses the **intersection of colonial legacies, modern-day nationalism, and global capitalism**, which exacerbate conflicts in regions like Gaza.
- The book provides insights into the challenges of **multilateralism** and the future of global governance amidst rising tensions between major powers.

Historical Context:

- The conflict in Gaza has its roots in the **Arab-Israeli conflict** following the establishment of Israel in 1948.
- Key milestones include the **Six-Day War (1967)**, the **Oslo Accords (1993)**, and multiple military operations in Gaza over the past two decades.
- Mishra links these historical events to the persistent instability and humanitarian crises in the region.

Political and Economic Perspective:

- Mishra critiques the **failure of international institutions** like the United Nations in resolving the crisis.
- He examines the **economic dimensions** of the conflict, such as the blockade on Gaza, which has led to severe economic deprivation.

- The book also explores the influence of global powers, including the US, China, and Russia, in shaping the conflict's trajectory.

Odisha and Singapore Collaborate to Establish Fintech Hub in BBSR

Odisha, in partnership with **Singapore**, is set to establish a **fintech hub** in **Bhubaneswar**, marking a significant step in strengthening its position as a tech-driven economy.

Key Highlights:

- The collaboration was formalized during a high-level meeting between representatives of the **Government of Odisha** and **Singapore fintech stakeholders**.
- The fintech hub will serve as a **center for innovation**, fostering startups, financial technology firms, and promoting digital financial inclusion.
- Focus areas include **blockchain technology**, **artificial intelligence (AI)**, **digital payments**, and **cybersecurity**.
- Singapore, known for its robust fintech ecosystem, will provide expertise in infrastructure development, regulatory frameworks, and skill development.
- Bhubaneswar, as part of the **Smart Cities Mission**, is strategically positioned with its growing IT infrastructure and educated workforce.

Economic Perspective:

- This collaboration will position Odisha as a **global fintech destination**, attracting **foreign direct investment (FDI)** and boosting the state's economy.
- The fintech hub will drive **startups and entrepreneurship**, supported by initiatives like **Startup Odisha** and **Ease of Doing Business reforms**.

Political and Diplomatic Perspective:

- This partnership strengthens **India-Singapore bilateral relations**, particularly in the tech and innovation sectors.
- Odisha's proactive governance, under policies like **Vision 2030**, aligns with India's broader goals of digital transformation and economic resilience.

RG Kar Medical College Case: Sanjay Roy Sentenced to Life Imprisonment

In a significant legal development, **Sanjay Roy**, a police volunteer, has been sentenced to **life imprisonment** for the **rape and murder** of a 31-year-old trainee doctor at **R.G. Kar Medical College and Hospital** in Kolkata.

Key Highlights:

- The incident occurred in **August 2024**, when the victim's body was discovered in a seminar room on the hospital campus.
- The case sparked **nationwide protests** and demands for enhanced safety measures for women and medical professionals.
- Initially investigated by local police, the case was transferred to the **Central Bureau of Investigation (CBI)** due to concerns over the handling of the investigation.
- Despite public outcry for the **death penalty**, the court imposed a life sentence, stating the crime did not meet the "rarest of rare" criteria necessary for capital punishment.
- The convict maintains his innocence and has the option to **appeal the verdict** in higher courts.

Historical Context of Death Penalty in India:

- The **death penalty** in India is reserved for the "rarest of rare" cases, a principle established in the **Bachan Singh vs State of Punjab (1980)** judgment.
- This standard ensures that capital punishment is applied sparingly and judiciously.

Legal and Ethical Dimensions:

- The court's decision to impose a life sentence, despite public demand for the death penalty, reflects the judiciary's adherence to established legal standards.
- The convict's right to appeal ensures the **due process of law** is upheld.

Oxfam Report: UK's Wealth Extraction from India During Colonial Era

A recent report by **Oxfam International**, titled **"Takers, Not Makers"**, reveals that between 1765 and 1900, Britain extracted approximately **$64.82 trillion** from India. This wealth extraction significantly enriched the UK's elite and middle classes.

Key Highlights:

- **Wealth Extraction:** The report estimates that over the 135-year period, Britain drained $64.82 trillion from India, with more than half of this amount, approximately $33.8 trillion, benefiting the UK's richest 10%.
- **Impact on India's Economy:** India's share of global industrial output declined sharply from 25% in 1750 to just 2% by 1900, primarily due to British protectionist policies that suppressed India's industrial growth.
- **Modern Implications:** Oxfam highlights that the legacies of colonialism continue to shape modern global inequality, with systemic wealth extraction from the Global South to the Global North, benefiting the richest individuals in the Global North.

Historical Context of Colonial Wealth Extraction:

- **Economic Policies:** British colonial policies, such as the imposition of heavy taxes and the deindustrialization of India, were designed to extract wealth and resources, leading to significant economic disparities.
- **Social Impact:** The extraction of wealth contributed to widespread poverty and underdevelopment in India, with long-lasting effects on its social and economic structures.

Social Perspective:

- **Inequality:** The report underscores the deep-seated inequalities that arose from colonial exploitation, which have persisted into the modern era, affecting economic opportunities and social mobility.
- **Reparations Debate:** The findings have reignited discussions on reparations and the need for addressing historical injustices through economic and social measures.

Economic Perspective:

- **Global Inequality:** The extraction of wealth from colonies like India has contributed to the widening economic gap between the Global North and South, with lasting effects on global economic dynamics.
- **Development Challenges:** The historical exploitation has left many former colonies with economic structures that are heavily dependent on external factors, hindering sustainable development.

Environmental Perspective:

- **Resource Depletion:** Colonial extraction often involved the unsustainable use of natural resources, leading to environmental degradation and loss of biodiversity in colonized regions.
- **Long-Term Impact:** The environmental consequences of colonial exploitation have had lasting effects on ecosystems, affecting agriculture, water resources, and overall ecological balance.

India's 6-Point Plan to Strengthen Economic Ties with the EU

On January 18-19, 2025, during a high-level meeting with Maros Sefcovic, the European Commissioner for Trade and Economic Security, India's Commerce and Industry Minister, Piyush Goyal, outlined a comprehensive six-point plan aimed at enhancing economic relations between India and the European Union (EU).

Key Highlights:

- **Strategic Framework:** The discussions focused on establishing a new framework for an India-EU strategic agenda in trade and investment, emphasizing mutual benefits and sustainable growth.
- **Six Broad Principles:** Minister Goyal presented six broad principles to guide the partnership, though specific details of these principles were not disclosed in the available sources.
- **Collaborative Approach:** Both parties agreed to work together to address global challenges, promote sustainable development, and enhance economic cooperation through dialogue and joint initiatives.

Historical Context of India-EU Relations:

- **Trade Relations:** India and the EU have been engaged in trade negotiations since 2007, aiming to establish a Broad-based Trade and Investment Agreement (BTIA). However, these negotiations have faced challenges due to differences in trade regimes and regulatory environments.
- **Strategic Partnership:** Over the years, India and the EU have developed a strategic partnership encompassing various areas, including trade, technology, climate change, and security. The establishment of the Trade and Technology Council in April 2022 marked a significant step in deepening this partnership.

Economic Perspective:

- **Trade Opportunities:** The six-point plan is anticipated to open new avenues for trade, investment, and technological collaboration, benefiting sectors such as manufacturing, information technology, and renewable energy.
- **Market Access:** Improved economic ties could provide Indian businesses with better access to the European market, while also offering European companies opportunities in India's expanding economy.

Celebrating Nine Years of Startup India: A Journey of Innovation and Growth

On January 16, 2025, India commemorated the ninth anniversary of the **Startup India** initiative, a transformative program launched in 2016 to foster entrepreneurship and innovation across the nation. Over the past nine years, the initiative has significantly contributed to India's economic growth and positioned the country as the world's third-largest startup ecosystem.

Key Highlights:

- **Startup Recognition:** As of January 15, 2025, the Department for Promotion of Industry and Internal Trade (DPIIT) has recognized **1,59,157 startups**, a substantial increase from approximately 500 in 2016.
- **Employment Generation:** These startups have created over **17.2 lakh direct jobs**, with significant contributions from sectors such as IT services, healthcare, professional and commercial services, and education.
- **Funding and Investment:** The government has mobilized approximately **₹13 trillion** in funding for startups, facilitating their growth and scalability.
- **Private Equity and Venture Capital:** Collaborations with private equity and venture capital firms have been instrumental in supporting innovation and accelerating the journey of startups from ideation to execution.

Historical Context of Startup India:

- **Launch and Objectives:** Initiated in 2016, Startup India aimed to create a conducive environment for startups by providing easier access to capital, mentorship, and a simplified regulatory framework.
- **Policy Reforms:** The initiative introduced several policy reforms, including tax exemptions, self-certification, and a mobile application to facilitate registration and compliance.

Social Perspective:

- **Empowerment of Youth and Women:** The program has empowered countless youngsters, turning their innovative ideas into successful startups. Notably, **73,151 startups** have women directors, highlighting the initiative's role in promoting gender inclusivity.
- **Skill Development:** Startup India has contributed to skill development, providing training and resources to entrepreneurs, thereby enhancing their capabilities and fostering a culture of innovation.

Economic Perspective:

- **Contribution to GDP:** Startups have become a significant contributor to India's GDP, driving innovation, creating jobs, and attracting foreign investment.
- **Sectoral Growth:** Key sectors such as IT services, healthcare, and education have experienced substantial growth, with startups leading the charge in technological advancements and service delivery.

Environmental Perspective:

- **Sustainable Practices:** Many startups are focusing on sustainability, developing eco-friendly products and services, and contributing to environmental conservation efforts.
- **Green Technologies:** The initiative has encouraged the development of green technologies, promoting renewable energy solutions and reducing carbon footprints.

Combating Spam: TRAI and Government Initiatives

The **Telecom Regulatory Authority of India (TRAI)**, in collaboration with the Indian government, has implemented several measures to combat spam and unsolicited commercial communications (UCC). These initiatives aim to protect consumers from fraudulent activities and enhance the overall telecom experience.

Key Measures:

Regulatory Framework:

- **Telecom Commercial Communications Customer Preference Regulations (TCCCPR), 2010:** Enacted to curb unsolicited marketing calls and messages, this regulation allows subscribers to opt for 'fully blocked' or 'partially blocked' categories to control the type of promotional content they receive.

Technological Solutions:

- **Blockchain Integration:** TRAI has explored the use of blockchain technology to enhance the efficiency of regulatory processes and improve subscriber experiences.
- A study titled "*Telechain: Bridging Telecom Policy and Blockchain Practice*" discusses a consortium blockchain-based architecture to address UCC in India.

Recent Directives:

- **Blacklisting Unregistered Callers:** In August 2024, TRAI directed telecom service providers to halt all promotional calls from unregistered callers and blacklist them for up to two years.
- This measure aims to tackle the surge in spam and phishing calls, protecting consumers from financial losses.

Public Awareness:

- **Advisories and Alerts:** TRAI regularly issues advisories to inform consumers about fraudulent activities, such as SIM closure fraud, where scammers impersonate TRAI to deceive users into closing their SIM cards.
- Consumers are advised to report such incidents to their telecom operators or through the Sanchar Sathi portal.

Evolution of Regulations:

- The TCCCPR, 2010, was a significant step in addressing the nuisance of unsolicited marketing communications in India.
- Over the years, TRAI has amended these regulations to incorporate technological advancements and emerging challenges.

Impact on Telecom Industry:

- While these measures aim to protect consumers, they also pose challenges for legitimate businesses relying on telemarketing, necessitating a balance between regulation and industry needs.

21 January 2025

RBI Tightens Oversight on Asset Reconstruction Companies' Borrower Settlements

On January 20, 2025, the **Reserve Bank of India (RBI)** introduced new guidelines to enhance the transparency and accountability of **Asset Reconstruction Companies (ARCs)** in settling borrower dues.

Key Highlights:

- **Board-Approved Policy:** ARCs are now required to formulate a policy, approved by their Board of Directors, detailing the procedures for settling borrower dues. This policy must encompass eligibility criteria for one-time settlements, acceptable concessions based on exposure levels, and methods to ascertain the realisable value of securities.
- **Independent Advisory Committee (IAC):** For settlements involving dues exceeding ₹1 crore, an IAC comprising experts in technical, financial, or legal fields must evaluate the borrower's financial status, projected earnings, and recovery prospects before making recommendations to the ARC.
- **Board Deliberation:** The ARC's Board, including at least two independent directors, must review the IAC's recommendations and consider alternative recovery strategies. Their decisions and underlying reasons must be thoroughly documented in the meeting minutes.
- **Lower-Value Settlements:** For dues of ₹1 crore or less, ARCs can process settlements based on the Board-approved policy. To prevent conflicts of interest, officials involved in acquiring the financial asset are prohibited from participating in the settlement approval process. Additionally, the Board must quarterly review reports outlining trends and recovery timelines for these accounts.
- **Wilful Defaulters and Fraud Cases:** Settlements involving borrowers labeled as wilful defaulters or frauds will adhere to the stringent procedures applicable to high-value accounts, regardless of the settlement amount. This approach ensures strict handling of such cases without affecting ongoing criminal proceedings.
- **Legal Compliance:** ARCs must ensure that settlements align with existing laws and obtain consent decrees from judicial authorities when recovery proceedings are in progress, maintaining the integrity of settlements in line with legal actions.

Previous Framework:

Prior to these guidelines, ARCs operated with relatively flexible policies regarding borrower settlements, leading to inconsistencies and potential conflicts of interest.

Consumer Protection:

The new guidelines aim to protect borrowers from arbitrary settlement practices, ensuring fair treatment and transparency in the resolution of dues.

Regulatory Oversight:

The RBI's proactive measures reflect its commitment to strengthening the financial sector's integrity and fostering trust between financial institutions and borrowers.

Impact on Recoveries:

- While the guidelines promote structured settlements, they may initially slow down the recovery process.
- A report indicated that recoveries by ARCs from retail loan portfolios slowed to 35% following the introduction of a one-time settlement scheme, as ARCs adopted more measured steps to ensure realizations.

The emphasis on meticulous documentation and reporting may encourage ARCs to adopt digital record-keeping practices, contributing to environmental sustainability by reducing paper usage.

Discovery of 23 Blood-Sucking Fly Species in Andaman and Nicobar Islands

- A recent entomological survey conducted in the **Andaman and Nicobar Islands** has led to the identification of **23 species of blood-sucking flies**, including **three species previously unrecorded in India**.
- The study was conducted by researchers from the **Zoological Survey of India (ZSI)**.
- This significant finding enhances the understanding of the region's biodiversity and has implications for public health and ecological studies.

Key Highlights:

- **Species Diversity:** The survey documented 23 species belonging to the genus *Lipoptena*, known for their hematophagous (blood-feeding) behavior. Notably, three species—*Lipoptena cervi*, *Lipoptena fortisetosa*, and *Lipoptena mazamae*—were recorded in India for the first time.
- **Ecological Significance:** Blood-sucking flies play a crucial role in ecosystems as vectors of pathogens affecting both wildlife and humans. Understanding their diversity and distribution is essential for monitoring potential disease outbreaks and implementing control measures.
- **Research Implications:** The discovery underscores the rich and understudied biodiversity of the Andaman and Nicobar Islands, highlighting the need for continued entomological research in the region. It also provides a foundation for future studies on the ecological interactions and evolutionary history of these species.

Previous Studies:

- Prior to this survey, the diversity of blood-sucking flies in the Andaman and Nicobar Islands was not extensively documented, with only a few species reported.
- This new research significantly expands the known species list and provides a baseline for future biodiversity assessments.

Public Health Concerns:

- Blood-sucking flies are known vectors of various diseases, including trypanosomiasis and bartonellosis.
- The identification of these species in the region necessitates public health monitoring to prevent potential disease transmission to humans and livestock.

Pioneering Remote Heart Surgeries Conducted Over 286 km in India

- In a groundbreaking medical achievement, two complex heart surgeries were successfully performed **remotely** over a distance of **286 kilometers** in India.
- The surgeries were conducted by **doctors in Chennai** and **patients in Madurai**.
- This feat was made possible through the integration of advanced robotic technology and high-speed 5G connectivity, marking a significant milestone in telemedicine and remote surgical procedures.

- **Remote Surgical Procedure:** A team of skilled cardiac surgeons operated from a central hub, utilizing robotic surgical systems to perform intricate heart surgeries on patients located 286 km away. The procedures were executed with precision, demonstrating the potential of remote surgeries in overcoming geographical barriers.
- **Technological Integration:** The success of these surgeries hinged on the seamless integration of robotic surgical instruments and high-speed 5G networks. The low latency and high reliability of 5G connectivity ensured real-time transmission of high-definition video and control commands, facilitating precise surgical movements.
- **Patient Outcomes:** Both patients reportedly recovered well post-surgery, showcasing the efficacy and safety of remote surgical interventions. This success paves the way for broader adoption of tele-surgery, especially in regions lacking specialized medical expertise.

Historical Context:

- **Evolution of Telemedicine:** Telemedicine has evolved from basic remote consultations to complex procedures, with advancements in technology enabling real-time interactions between patients and healthcare providers across vast distances.
- **Previous Milestones:** Prior to this achievement, remote surgeries were limited by technological constraints, particularly in terms of network latency and reliability. The advent of 5G technology has addressed many of these challenges, making remote surgeries more feasible.

Economic Perspective:

- **Cost Implications:** While the initial setup for remote surgeries may be expensive, in the long run, it can reduce costs associated with patient travel, hospital stays, and resource allocation.
- **Healthcare Efficiency:** Remote surgeries can optimize the utilization of skilled surgeons, allowing them to operate on patients in multiple locations without the need for physical presence, thereby increasing overall healthcare efficiency.

Introduction of 'Entity Locker' for Streamlined Business Document Management

- On January 20, 2025, the **National eGovernance Division (NeGD)**, under the **Ministry of Electronics and Information Technology (MeitY)**, unveiled **Entity Locker**, a secure, cloud-based platform designed to revolutionize the storage, sharing, and verification of business and organizational documents.
- This initiative aligns with India's Digital Public Infrastructure goals, as highlighted in the Union Budget 2024-25, aiming to enhance digital governance and ease of doing business.

Key Features:

- **Real-Time Document Access and Verification:** Entity Locker integrates with multiple government databases, providing businesses with instantaneous access to essential documents. This connectivity facilitates simplified compliance processes and ensures efficient document management.
- **Secure Sharing Mechanisms:** The platform employs consent-based methods for the secure sharing of sensitive information, ensuring that data is exchanged safely between authorized parties.
- **Role-Based Access Management:** Utilizing Aadhaar-authenticated access controls, Entity Locker ensures accountability by tracking all document-related activities, thereby enhancing security and transparency.

- **Ample Cloud Storage:** Businesses are provided with 10 GB of encrypted cloud storage, allowing for the secure management of critical documents.
- **Digital Signature Authentication:** The platform supports legally valid digital signatures, streamlining document authentication processes and reducing administrative overhead.

Benefits:

- **Operational Efficiency:** By consolidating storage and security, Entity Locker reduces administrative burdens, minimizes document processing times, and eliminates operational bottlenecks.
- **Regulatory Compliance:** Built-in features simplify adherence to regulations and reporting requirements, ensuring that businesses remain compliant with minimal effort.
- **Seamless Integration:** Entity Locker's integration with systems such as the Ministry of Corporate Affairs, the Goods and Services Tax Network (GSTN), and the Directorate General of Foreign Trade (DGFT) provides businesses with instant access to critical documents, facilitating streamlined corporate annual filings and vendor verifications.

Iran and Russia Forge 20-Year Comprehensive Strategic Partnership

On January 17, 2025, Iranian President **Masoud Pezeshkian** and Russian President **Vladimir Putin** signed a **20-year Comprehensive Strategic Partnership Treaty** in Moscow, aiming to strengthen bilateral relations across various sectors.

Key Provisions of the Treaty:

- **Defense Cooperation:** The treaty emphasizes enhanced defense collaboration, including joint military exercises, intelligence sharing, and mutual support against common threats.
- **Energy Collaboration:** Both nations plan to foster partnerships between their energy firms, investing in oil and gas development projects. Additionally, they intend to pursue long-term projects for the peaceful use of nuclear energy, such as constructing nuclear power plants.
- **Trade and Economic Relations:** The agreement includes creating a modern payment system independent of third-party countries, facilitating settlements in national currencies, and promoting direct interbank cooperation.
- **Cultural and Scientific Exchange:** The partnership extends to science, education, and culture, aiming to deepen people-to-people connections and collaborative research initiatives.

Previous Agreements:

- In 2001, Tehran and Moscow signed a 20-year comprehensive agreement, which expired in 2021.
- The new treaty renews and expands upon this partnership, reflecting a deepening of ties between the two nations.

Geopolitical Implications:

The timing of the treaty, just days before the inauguration of U.S. President-elect Donald Trump, signals a strategic move by Iran and Russia to strengthen their alliance amidst anticipated shifts in U.S. foreign policy.

Sanctions and Economic Cooperation:

Facing Western sanctions, both countries aim to bolster their economies through mutual cooperation, reducing reliance on Western financial systems and fostering economic resilience.

Foundation Day of Tripura, Manipur, and Meghalaya: History and Significance

- On **January 21, 2025**, the states of **Tripura**, **Manipur**, and **Meghalaya** celebrated their **53rd Statehood Day**, commemorating their official recognition as full-fledged states of India on January 21, 1972.
- This significant milestone was achieved under the **North Eastern Areas Reorganisation Act of 1971**, which aimed to reorganize the northeastern region of India for better administrative efficiency and to acknowledge the unique cultural identities of these areas.

Historical Context

Pre-Statehood Status:

- **Tripura and Manipur** were princely states that merged with the Indian Union in 1949. Post-merger, they were designated as Union Territories, which limited their administrative autonomy.
- **Meghalaya** was initially part of the state of Assam. Due to distinct ethnic and cultural identities, there was a growing demand for a separate state.

Journey to Statehood:

- The **North Eastern Areas Reorganisation Act of 1971** was a legislative measure that facilitated the creation of new states in the northeastern region. This act granted full statehood to Tripura, Manipur, and Meghalaya, enabling them to have their own governments and greater control over their affairs.

Significance of Statehood Day

- **Cultural Recognition:** Statehood acknowledged and preserved the unique cultural identities, traditions, and languages of these regions, fostering a sense of pride among the inhabitants.
- **Political Empowerment:** Attaining statehood provided these regions with greater representation in the Indian Parliament and more autonomy in governance, allowing for tailored policies that address local needs.
- **Economic Development:** With statehood, Tripura, Manipur, and Meghalaya gained access to increased central funds and development programs, facilitating infrastructure development and economic growth.

10th Anniversary of Beti Bachao Beti Padhao (BBBP) Scheme

- On **January 22, 2025**, the **Ministry of Women and Child Development** will inaugurate the **10th-anniversary celebrations** of the **Beti Bachao Beti Padhao (BBBP) scheme** at **Vigyan Bhawan, New Delhi**.
- The event will be graced by Union Minister of Health and Family Affairs, Shri J. P. Nadda, Union Minister of Women and Child Development, Smt. Annpurna Devi, and Minister of State, Smt. Savitri Thakur.

Key Highlights of the Inaugural Event:

Dignitaries Present:

- Union Minister of Health and Family Affairs, Shri J. P. Nadda
- Union Minister of Women and Child Development, Smt. Annpurna Devi
- Minister of State, Smt. Savitri Thakur

Participants:

- Women officers from the armed forces, paramilitary forces, and Delhi police

- Women officers of Deputy Secretary and above levels from Central Ministries
- Girl students (My Bharat volunteers), Anganwadi supervisors/workers, and representatives of State and district levels

International Representation:

- Representatives from organizations such as UNICEF, UN Women, UNDP, UNFPA, World Bank, and The German Agency for International Cooperation (GIZ)

Activities:

- Oath-taking ceremony
- Launch of a compendium of best practices
- Introduction of Mission Vatsalya and Mission Shakti portals

Celebration Timeline:

- **January 22 to March 8, 2025:** The 10th-anniversary celebrations will span this period, culminating on **International Women's Day**.
- **State and District Level Events:** Similar events will be organized at state and district levels, with special programs on January 22, January 26, and March 8. Activities will include rallies, cultural events, felicitation ceremonies, and campaigns under **SANKALP: Hub for Empowerment of Women**, engaging diverse stakeholders, including schoolgirls, women achievers, and community groups.
- **Nationwide Campaigns:** Throughout the celebration, nationwide campaigns through print, digital, and social media will amplify the scheme's message. In alignment with sustainable practices, a plantation drive will also be conducted.

Launch of BBBP:

The Beti Bachao Beti Padhao scheme was launched on **January 22, 2015**, by Prime Minister Shri Narendra Modi in Panipat, Haryana, as a response to the critical issue of gender imbalance and the declining Child Sex Ratio (CSR) in India.

Achievements Over the Decade:

- **Sex Ratio at Birth (SRB):** Improvement from 918 in 2014-15 to 930 in 2023-24.
- **Gross Enrolment Ratio of Girls at Secondary Level:** Increase from 75.51% in 2014-15 to 78% in 2023-24.
- **Institutional Deliveries:** Rise from 61% to 97.3%.
- **First-Trimester Antenatal Care Registrations:** Improvement from 61% to 80.5%.

Initiatives Under BBBP:

- **Yashaswini Bike Expedition:** Showcasing women empowerment.
- **Kanya Shiksha Pravesh Utsav:** Re-enrollment of over 100,000 out-of-school girls.
- **Collaboration with Doree TV Show:** Raising awareness about girl child abandonment.
- **National Conference on Skilling: Betiyan Bane Kushal:** Emphasizing workforce participation.

India's Ascent as the 7th Largest Coffee Producer Globally

- India has achieved a significant milestone by becoming the **seventh-largest coffee producer in the world**.
- In the last financial year, the country exported coffee worth **1.29 billion USD**, marking a substantial increase from **719 million USD** in 2020-21.

- In the first half of January 2025 alone, India exported over **9,300 tonnes** of coffee, with **Italy**, **Belgium**, and **Russia** being the top importers.
- While unroasted coffee beans constitute the majority of exports, there is a growing demand for value-added products like roasted and instant coffee, further boosting the export sector.

Domestic Consumption:

- India's domestic coffee consumption has risen from **84,000 tonnes in 2012** to **91,000 tonnes in 2023**.
- This increase is attributed to the proliferation of café culture, higher disposable incomes, and a shifting preference towards coffee over tea among Indian consumers.

Regional Production:

- **Karnataka** leads the nation's coffee production, contributing **248,000 metric tonnes in 2022-23**, followed by **Kerala** and **Tamil Nadu**.

Enhancing Maritime Cooperation: 7th India-France Maritime Cooperation Dialogue

- On **January 20, 2025**, the **7th India-France Maritime Cooperation Dialogue** was convened to bolster bilateral maritime relations and address shared challenges in the Indian Ocean region.
- The dialogue focused on:
    - **Enhancing Maritime Security:** Discussions centered on collaborative strategies to combat piracy, illegal fishing, and other maritime threats.
    - **Promoting Sustainable Maritime Practices:** Emphasis was placed on adopting environmentally responsible practices to preserve marine ecosystems.
    - **Strengthening Naval Interoperability:** The dialogue aimed to improve coordination between the Indian Navy and the French Navy through joint exercises and training programs.

Strategic Importance of the Indian Ocean:

- The Indian Ocean is a vital maritime corridor, facilitating a significant portion of global trade and hosting strategic naval routes.
- India and France, both possessing extensive maritime interests in the region, recognize the necessity of a secure and stable maritime environment.

Historical Context of India-France Naval Cooperation:

- The bilateral naval relationship has been reinforced through regular joint exercises, notably the **Varuna** series, which commenced in 1983 and has evolved into an annual event.
- In 2023, the **Maritime Partnership Exercise (MPX)** was conducted in the Gulf of Oman, involving naval assets from India, France, and the United Arab Emirates, underscoring the commitment to regional maritime security.

Unearthing Odisha's Buddhist Legacy: ASI Excavations at Ratnagiri

Recent Discoveries:

The **Archaeological Survey of India (ASI)** has initiated renewed excavations at the **Ratnagiri Buddhist site** in Jajpur district, Odisha, leading to significant findings:

- **Colossal Buddha Head and Palm:** A massive Buddha head and a giant palm have been unearthed, indicating the presence of large Buddha statues.
- **Monolithic Elephant Sculpture:** A five-foot monolithic elephant sculpture has been discovered, showcasing the artistic excellence of the period.
- **Buddhist Monastery and Votive Stupas:** The excavation revealed a 1,200-year-old Buddhist monastery along with numerous votive stupas, providing insights into the monastic life and religious practices of the time.

Cultural and Trade Links with Southeast Asia:

Odisha, historically known as **Kalinga**, had extensive maritime trade connections with Southeast Asia:

- **Trade Relations:** Kalinga traded goods like pepper, cinnamon, cardamom, silk, camphor, gold, and jewelry with regions such as Bali, Java, Sumatra, Borneo, Burma (Myanmar), and Ceylon (Sri Lanka).
- **Baliyatra Festival:** The state annually celebrates the **Baliyatra** festival, commemorating its 2,000-year-old maritime and cultural links with Southeast Asia.
- **Spread of Buddhism:** These trade routes facilitated the spread of Buddhism from Odisha to Southeast Asian countries, influencing the region's cultural and religious landscape.

Pralay Missile to Debut at Republic Day 2025 Parade

- The **Pralay missile**, India's first tactical quasi-ballistic missile, is set to make its inaugural appearance during the **Republic Day Parade on January 26, 2025**.
- **Development and Induction:** Initiated in 2015, Pralay was ready for induction by 2022, marking a significant advancement in India's missile capabilities.

Key Features of Pralay Missile:

- **Range:** Capable of striking targets between **150 to 500 kilometers**, enhancing the Indian Army's operational reach.
- **Payload Capacity:** Designed to carry warheads ranging from **350 to 1,000 kilograms**, allowing flexibility in mission objectives.
- **Propulsion:** Equipped with a **solid-fuel rocket motor**, ensuring swift and reliable launches.
- **Accuracy:** Features advanced guidance systems achieving a **Circular Error Probable (CEP) of less than 10 meters**, ensuring high precision.
- **Warhead Options:** Capable of deploying various warheads, including **high-explosive fragmentation**, **penetration-cum-blast (PCB)**, and **runway denial submunitions (RDPS)**.
- **Maneuverability:** As a **quasi-ballistic missile**, Pralay can perform mid-air maneuvers, making it more challenging to intercept.

Strategic Significance:

- **Tactical Advantage:** Pralay provides the Indian Armed Forces with the capability to target enemy positions and critical infrastructure in the battlefield, filling a crucial gap in conventional warfare arsenals.
- **Regional Deterrence:** The missile's deployment near borders with adversaries like China and Pakistan serves as a strategic deterrent, showcasing India's advanced missile technology.

DRDO's Breakthrough: Successful Ground Test of Scramjet Engine

- On **January 21, 2025**, the **Defence Research & Development Laboratory (DRDL)**, a Hyderabad-based facility under the **Defence Research and Development Organisation (DRDO)**, achieved a significant milestone by conducting a successful ground test of an **Active Cooled Scramjet Combustor** for a duration of **120 seconds**.

Key Highlights:

- **Hypersonic Speeds:** Hypersonic missiles operate at speeds exceeding **Mach 5** (over 5,400 km/hr), enabling them to penetrate existing air defense systems and execute rapid, high-impact strikes.
- **Scramjet Technology:** The **Supersonic Combustion Ramjet (Scramjet)** engines are air-breathing propulsion systems capable of sustaining combustion at supersonic speeds without any moving parts, making them ideal for hypersonic vehicles.
- **Innovative Flame Stabilization:** Achieving ignition in a scramjet engine is akin to "keeping a candle lit in a hurricane." The DRDL team developed an innovative flame stabilization technique that maintains a continuous flame inside the combustor, even with airspeeds exceeding **1.5 km/s**.
- **Advanced Thermal Management:** A state-of-the-art **Thermal Barrier Coating (TBC)** was developed to withstand the extreme temperatures encountered during hypersonic flight. This advanced ceramic TBC, capable of operating beyond the melting point of steel, was jointly developed by DRDL and the **Department of Science & Technology (DST)** laboratory.

NMDC Resumes Diamond Extraction Near Panna Tiger Reserve

- **NMDC Limited**, India's state-run mining company, has recommenced diamond extraction at the **Panna mine** in Madhya Pradesh after a hiatus of over three years.
- The company plans to extract **6,500 carats of diamonds**, valued at approximately **$3.4 million**, in the current fiscal year.
- Mining operations were previously suspended due to delays in securing environmental clearances, given the mine's proximity to the **Panna Tiger Reserve**.
- The **Supreme Court of India** has granted permission for NMDC to resume mining, subject to specific guidelines to ensure environmental protection.

Key Details:

- **Panna Mine:** Operational since the early 1970s, it is India's only mechanized diamond mine, covering an area of **275.96 hectares (681.91 acres)**.
- **Current Operations:** NMDC is presently processing diamonds from existing ore stockpiles and plans to commence new ore mining within the next two to three months.
- **Recent Output:** Since resuming operations, the company has extracted **3,700 carats**, valued at approximately **$1.93 million**.

- The proximity of the Panna mine to the **Panna Tiger Reserve** necessitates stringent environmental safeguards to protect the habitat of tigers and other wildlife.
- Previous attempts by other mining companies, such as the **Bunder project** by Rio Tinto, were halted due to environmental concerns, highlighting the sensitivity of mining activities in this region.

CheQ Introduces 'Wisor': AI-Powered Credit Card Management Tool

On **January 22, 2025**, fintech company **CheQ**, founded by ex-Flipkart executive **Aditya Soni**, launched **Wisor**, an **AI-powered credit card expert** designed to simplify credit card management for users.

Key Features of Wisor:

- **Interactive Q&A Interface:** Wisor offers a user-friendly chat interface that provides instant, human-like responses to credit card-related queries, eliminating the need for users to search for information across multiple platforms.
- **Smart Spend Analysis:** For the first time in the industry, Wisor delivers detailed comparisons of spending across all cards and merchants in a single view. Users can track month-to-month changes, analyze spending by categories, and gain comprehensive insights into their financial habits.
- **Rewards Optimization:** Wisor consolidates all reward points, cashback, and benefits in one place, advising users on the best ways to maximize them, ensuring no opportunities are missed.

CheQ's Market Presence:

In just two years, CheQ has processed over **$4 billion** in credit card payments and served more than **3 million customers** across India, reflecting its significant impact in the fintech sector.

Significance:

- The introduction of Wisor aligns with the broader trend of integrating **Artificial Intelligence (AI)** into financial services to enhance user experience, promote financial literacy, and provide personalized financial solutions.
- By leveraging AI, tools like Wisor can analyse vast amounts of data to offer tailored advice, helping users make informed financial decisions and manage their credit more effectively.

Oyster Blood Proteins Enhance Antibiotic Effectiveness

Recent research by **Southern Cross University** has unveiled that proteins found in the blood, or **haemolymph**, of the **Sydney rock oyster** possess significant antibacterial properties and can enhance the efficacy of conventional antibiotics.

Key Findings:

- **Antibacterial Properties:** The haemolymph proteins were effective against pathogens responsible for respiratory infections, such as *Streptococcus pneumoniae* and *Streptococcus pyogenes*.
- **Biofilm Disruption:** These proteins can prevent the formation of biofilms—a protective layer formed by bacteria—and disrupt existing biofilms, making bacteria more susceptible to antibiotics.
- **Synergistic Effect with Antibiotics:** When combined with conventional antibiotics, the oyster proteins enhanced the drugs' effectiveness against bacteria like *Staphylococcus*

aureus and *Pseudomonas aeruginosa*, which are known to infect immunocompromised individuals.

- **Safety Profile:** Importantly, the oyster haemolymph proteins were not toxic to human lung cells, suggesting potential for safe therapeutic applications.

Significance:

The discovery offers a promising avenue in the fight against **antimicrobial resistance (AMR)**, a pressing global health concern where bacteria evolve to withstand existing antibiotics, leading to challenging infections and increased mortality.

Government Launches Diamond Imprest Authorization Scheme to Revitalize India's Diamond Industry

The **Government of India** has introduced the **Diamond Imprest Authorization (DIA) Scheme**, set to commence on **April 1, 2025**, aiming to rejuvenate the nation's diamond sector amid declining exports and job losses.

Key Features of the DIA Scheme:

- **Duty-Free Imports:** The scheme facilitates a streamlined process for the duty-free import of natural cut and polished diamonds, specifically targeting stones less than 1/4 carat (25 cents).
- **Eligibility Criteria:** Diamond exporters with a **Two Star Export House** status or higher and annual exports of at least **USD 15 million** are eligible to participate in the scheme.

Context and Significance:

- **Declining Exports:** India's diamond exports have experienced a significant downturn, decreasing from **$25.48 billion in 2021-22** to **$18.37 billion in 2023-24**, primarily due to reduced demand in key markets and supply chain disruptions.
- **Employment Impact:** The downturn in the diamond industry has led to job losses, particularly in regions like Surat, Gujarat, known as the "Diamond City," where many workers have faced reduced incomes and employment challenges.
- **Global Competitiveness:** The DIA Scheme aims to enhance the global competitiveness of India's diamond sector by providing a level playing field for exporters, promoting value addition, and boosting exports.

Mysterious Deaths in J&K's Badhaal Village Lead to Containment Measures

In **Badhaal village**, located in Jammu and Kashmir's **Rajouri district**, a series of **17 unexplained deaths** have been reported between **December 7, 2024, and January 19, 2025**. These fatalities, spanning three families, have prompted authorities to declare the village a **containment zone**.

Containment Measures Implemented:

- **Prohibitory Orders:** All public and private gatherings in the village have been banned under **Section 163 of the Bharatiya Nagarik Suraksha Sanhita (BNSS)**, granting magistrates the authority to issue urgent orders to prevent or remedy dangers.
- **Zoning of the Village:**
  - **Containment Zone 1:** Includes families where deaths have occurred. Their homes are sealed, restricting entry to authorized personnel only.

- o **Containment Zone 2:** Comprises families identified as close contacts of the affected individuals. These members are relocated to **Government Medical College, Rajouri**, for continuous health monitoring.
  - o **Containment Zone 3:** Encompasses all other households in the village. Authorities are monitoring food consumption, enforcing compliance, and maintaining detailed records.
- **Food and Water Regulations:** Affected families and their close contacts are mandated to consume only the food and water provided by the administration. Consumption of any other household food items is strictly prohibited.

Investigative Efforts:

- **Health Screenings:** The health department has screened approximately **3,500 residents** from Badhaal and adjacent villages. Results have not indicated any viral or bacterial infections.
- **Potential Causes:** Some medical professionals suggest that **neurotoxins** might be responsible for the deaths, though investigations are ongoing to confirm the exact cause.

President Trump Announces 'Stargate' Initiative: A $500 Billion AI Infrastructure Investment

- On January 21, 2025, President **Donald Trump** unveiled the **Stargate Project**, a monumental **$500 billion** private sector investment aimed at bolstering the United States' artificial intelligence (AI) infrastructure.
- This initiative is a collaboration between **OpenAI**, **Oracle Corporation**, **SoftBank Group**, and **MGX**, marking a significant stride in AI development and positioning the U.S. at the forefront of technological innovation.

Key Highlights:

- **Massive Investment:** The Stargate Project plans to invest up to **$500 billion** in AI infrastructure across the U.S. by 2029, with an initial commitment of **$100 billion**.
- **Strategic Partnerships:** The venture brings together industry leaders:
  - o **OpenAI**: Spearheading AI research and development.
  - o **Oracle Corporation**: Providing robust cloud and data management services.
  - o **SoftBank Group**: Offering substantial financial backing and technological expertise.
  - o **MGX**: Contributing to the project's expansive vision.
- **Infrastructure Development:** The project includes the construction of **10 data centers** in **Abilene, Texas**, with plans to expand to additional states. These centers will house advanced AI supercomputers, requiring significant energy resources, potentially sourced from fossil fuels, aligning with current energy policies.
- **Job Creation:** Stargate is projected to generate over **100,000 jobs**, stimulating economic growth and enhancing the nation's technological capabilities.

President Trump Signs Executive Order to Withdraw U.S. from World Health Organization

- On January 20, 2025, President **Donald Trump** signed an executive order directing the United States to withdraw from the **World Health Organization (WHO)**.
- This decision marks the second time the U.S. has initiated withdrawal from the WHO, following a previous attempt in July 2020 during Trump's first term, which was reversed by President Joe Biden in January 2021.

Key Provisions of the Executive Order:

- **Withdrawal Directive:** The order mandates the Secretary of State to notify the Secretary-General of the United Nations and WHO leadership of the U.S. withdrawal.
- **Funding Suspension:** It halts future transfers of funds, support, and resources to the WHO.
- **Personnel Recall:** The order calls for the recall of U.S. government personnel working with the WHO.
- **Alternative Arrangements:** It directs the identification of U.S. and international partners to assume activities previously undertaken by the WHO.
- **Policy Review:** The Director of the White House Office of Pandemic Preparedness and Response Policy is tasked with reviewing and replacing the 2024 U.S. Global Health Security Strategy.
- **Pandemic Agreement Negotiations:** The Secretary of State is instructed to cease negotiations on the WHO Pandemic Agreement.

Context and Implications:

- The decision to withdraw from the WHO has been met with significant concern from health experts and international leaders.
- Former UK Prime Minister **Gordon Brown** criticized the move, arguing that it undermines global health efforts and could leave the world unprepared for future pandemics.
- The WHO plays a crucial role in coordinating international health responses, providing guidance during health emergencies, and facilitating research and information sharing.
- The U.S. has historically been a major contributor to the organization's funding and initiatives.
- The withdrawal is expected to impact the WHO's capacity to respond to global health challenges and may lead to a shift in the balance of influence within the organization.

23 January 2025

Parakram Diwas 2025: Honouring Netaji Subhas Chandra Bose's Legacy

- **Parakram Diwas**: Celebrated annually on **January 23**, Parakram Diwas commemorates the birth anniversary of **Netaji Subhas Chandra Bose**, a pivotal figure in India's struggle for independence.
- **128th Birth Anniversary**: In 2025, India observes Netaji's **128th birth anniversary**, reflecting on his enduring contributions to the nation's freedom movement.
- **Official Recognition**: The Government of India designated January 23 as Parakram Diwas in **2021** to honour Netaji's relentless pursuit of India's independence.

Significance of Parakram Diwas:

- **Inspiration for Youth**: Netaji's life exemplifies courage and determination, serving as a motivational force for younger generations.
- **National Unity**: The day fosters a sense of unity and patriotism among citizens, reminding them of the collective effort required for nation-building.

Netaji's Ideologies:

- **Forward Bloc Formation**: Dissatisfied with the Indian National Congress's approach, Netaji formed the **Forward Bloc** in 1939 to consolidate the political left and continue the fight against colonial rule.
- **Advocacy for Complete Independence**: Unlike the dominion status sought by some leaders, Netaji was a staunch proponent of absolute sovereignty for India.

India's Maritime Sector: Aiming for $1 Trillion Investment by 2047

- **Investment Target**: India's maritime sector is set to attract **$1 trillion in investments by 2047**, with an immediate requirement of **₹5 lakh crore by 2030** to fully realize its potential.
- **Port Capacity Expansion**: Plans are underway to **increase port capacity sixfold**, reaching **10,000 million metric tonnes annually by 2047**.
- **Green Hydrogen Initiatives**: Establishment of **green hydrogen production hubs** at major ports, including **Kandla, Tuticorin, and Paradip**, to decarbonize the shipping sector.

Strategic Developments:

- **Mega Ports**: Development of new mega ports at **Vadhavan in Maharashtra** and **Galathea Bay in Nicobar** to enhance India's maritime infrastructure.
- **Vizhinjam International Seaport**: Located in Kerala, this port is poised to become India's first deep-water transshipment terminal, significantly boosting cargo handling capabilities.

Policy Initiatives:

- **Sagarmala Programme**: A comprehensive initiative aimed at port-led development, encompassing port modernization, connectivity enhancement, and coastal community development.
- **Maritime India Vision 2030**: A strategic roadmap outlining 150 initiatives to position India as a global maritime leader, focusing on infrastructure development and policy reforms.

National Health Mission: Strengthening India's Public Health Infrastructure

- **Enhanced Workforce**: The **National Health Mission (NHM)** has significantly bolstered India's healthcare workforce, addressing critical shortages and improving service delivery across the nation.

- **Public Health Achievements**: Under the NHM, there has been a notable reduction in several public health concerns, contributing to improved health outcomes and increased life expectancy.

National Rural Health Mission (NRHM):

- Launched in **2005**, the NRHM aimed to provide accessible, affordable, and quality healthcare to the rural population, especially vulnerable groups.
- Focused on strengthening healthcare infrastructure, enhancing human resources, and promoting community participation.

National Urban Health Mission (NUHM):

- Introduced to address the healthcare needs of the urban poor, particularly slum dwellers and other marginalized groups.
- Emphasizes the establishment of Urban Primary Health Centers and outreach services.

INCOIS Honored with Subhash Chandra Bose Aapda Prabandhan Puraskar 2025

Award Recognition:

- The **Indian National Centre for Ocean Information Services (INCOIS)**, based in Hyderabad, has been awarded the **Subhash Chandra Bose Aapda Prabandhan Puraskar for 2025** in the Institutional Category.
- This prestigious award acknowledges INCOIS's exceptional contributions to disaster management in India.

Award Significance:

- Instituted by the Government of India, the Subhash Chandra Bose Aapda Prabandhan Puraskar is an **annual award** that honors individuals and organizations for their invaluable contributions and selfless service in the field of disaster management.
- Announced every year on January 23rd, the birth anniversary of Netaji Subhash Chandra Bose, the award includes a cash prize of **₹51 lakh** and a certificate for institutions.

INCOIS's Role in Disaster Management:

- **Indian Tsunami Early Warning Centre (ITEWC)**: Established by INCOIS, the ITEWC provides tsunami alerts within 10 minutes, serving India and 28 Indian Ocean countries. Recognized by UNESCO as a top Tsunami Service Provider, it is supported by a network of seismic stations, tide gauges, and other ocean sensors.
- **Cyclone and Storm Surge Forecasts**: INCOIS offers high-wave, cyclone, and storm surge forecasts, aiding in the protection of coastal areas and maritime operations. Notably, during the 2013 Phailin and 2014 Hudhud cyclones, INCOIS's advisories facilitated timely evacuations, reducing risks to coastal populations.
- **Search and Rescue Aided Tool (SARAT)**: Developed to assist the Indian Coast Guard, Navy, and Coastal Security Police in locating individuals or objects lost at sea, enhancing search and rescue operations.
- **SynOPS Visualization Platform**: INCOIS has established the SynOPS platform, which integrates real-time data to strengthen response coordination during extreme events, thereby improving disaster preparedness and response mechanisms.

Mannan Tribe's King to Attend Republic Day Parade

- **Raman Rajamannan**, the king of the **Mannan tribe**, will attend the Republic Day parade in Delhi.
- This marks the **first time a tribal king** will participate in the Republic Day parade.
- The **Scheduled Tribes (SC) Development department** invited him as a guest.
- The SC Development department will cover the travel expenses for Rajamannan and his wife, Binumol.
- During the visit, Rajamannan will meet the President and other prominent leaders.
- The Mannan community is mainly settled in the buffer zone area of the **Idukki Wildlife Sanctuary** at **Kozhimala**.

Mannan Tribe Overview:

- **Location**: Predominantly residing in the **Idukki district** of Kerala, especially in areas like Kumily, Azhuha, Devikulam, and Idukki block panchayats.
- **Cultural Practices**: The Mannan community maintains unique customs and rituals, including a traditional system of governance led by an elected king.
- **Language**: Members of the Mannan tribe in Kerala primarily speak, read, and write in **Malayalam**.

Kovilmala:

- **Significance**: Known as the headquarters of the Mannan community, Kovilmala (also referred to as Kozhimala) is a tribal settlement near Kattappana in Idukki district.
- **Governance**:
  - The community practices a unique form of democratic monarchy, where the king, titled **Raja Mannan**, is elected by the people.
  - The current king, Raman Rajamannan, an economics graduate from Maharaja's College in Ernakulam, ascended the throne following the demise of his uncle, Ariyan Raja Mannan.

Indian Railways' Preparations for Maha Kumbh Mela 2025

- **Indian Railways** has announced the operation of **over 150 special trains** to cater to devotees on **Mauni Amavasya** (January 29, 2025).
- The special trains will run direction-wise from all nine stations in **Prayagraj**.
- This initiative aims to ensure **seamless travel** for millions attending the grand event at the Maha Kumbh.
- The Prayagraj Railway Division has taken several measures, including **organized shelter facilities** for passengers and **colour-coded ticketing** to enhance the travel experience.
- Amit Malviya, senior Public Relations Officer of the Prayagraj Railway Division, stated that most of the special trains will run from **Prayagraj Junction**.
- The scale of arrangements for operating more than 150 special trains on a single day is expected to set a record, surpassing the 85 trains managed during Mauni Amavasya at Kumbh 2019.

Infrastructure Enhancements:

To ensure seamless travel for pilgrims, the Indian Railways is implementing significant infrastructure upgrades, including the construction of elevated tracks and the enhancement of station facilities.

Regional Connectivity:

Special train services are being introduced from various regions, such as **Himachal Pradesh** and **Karnataka**, to **Prayagraj**, facilitating the movement of pilgrims from distant locations.

Gene Editing: A Promising Avenue for Treating Genetic Eye Conditions

- Researchers from the **Institute of Molecular and Clinical Ophthalmology, Basel** (Switzerland) have developed a gene editing technique that could potentially treat **Stargardt disease**, a rare genetic eye disease.
- The technique involves using an **adenine base editor** to make precise changes in DNA and deliver it into the retina using an **adeno-associated viral vector** (AAV).
- The study, titled **"High-efficiency base editing in the retina in primates and human tissues,"** was published in the journal **Nature Medicine**.
- The gene therapy vectors achieved high levels of gene correction in mutation-carrying mice and female nonhuman primates.
- No off-target editing was detected, showing promise for efficient gene editing in other ocular diseases.

Gene Therapy Approaches:

- **Intravitreal Gene Therapy**: This method involves delivering therapeutic genes directly into the vitreous humor of the eye using viral vectors like adeno-associated viruses (AAV). It targets retinal cells to address genetic deficiencies, potentially providing long-term or permanent treatment for conditions such as wet age-related macular degeneration (AMD) and inherited retinal dystrophies.
- **Subretinal Gene Therapy**: In this approach, the therapeutic gene is delivered beneath the retina. For instance, **Voretigene neparvovec** (Luxturna) has been approved for treating Leber's congenital amaurosis by restoring the RPE65 gene function.

Challenges and Considerations:

- **Delivery Efficiency**: Ensuring that gene editing tools reach and effectively modify target cells within the retina remains a significant challenge.
- **Safety Concerns**: Potential risks include unintended genetic modifications and immune responses to viral vectors.
- **Long-term Outcomes**: Ongoing research is necessary to understand the durability and longevity of gene editing treatments in ocular applications.

Mount Ibu's Increased Volcanic Activity in January 2025

Significant Eruptions:

- Indonesia's **Mount Ibu**, located on Halmahera Island in North Maluku province, has exhibited heightened volcanic activity, recording **1,079 eruptions** since January 1, 2025.
- These eruptions have produced ash columns rising between **0.3 to 4 kilometers** above the summit.
- **Major Eruption Event**: On January 15, 2025, Mount Ibu erupted, emitting an ash cloud that ascended approximately **4 kilometers** into the atmosphere.

Alert Status and Evacuations:

- In response to the increased activity, Indonesian authorities elevated the volcano's alert status to the highest level.

- Approximately **3,000 residents** from six nearby villages were evacuated to ensure their safety.

Geological Monitoring:

- The **Pusat Vulkanologi dan Mitigasi Bencana Geologi (PVMBG)** continues to monitor Mount Ibu's activity, providing regular updates on eruption frequency and ash plume heights.

EU Proposes Ban on 'Forever Chemicals' in Consumer Products

EU's Proposal:

- The European Commission plans to propose a ban on the use of **per- and polyfluoroalkyl substances (PFAS)**, commonly known as "forever chemicals," in consumer products.
- This initiative aims to eliminate non-essential uses of PFAS, with exceptions for critical industrial applications.

Health Risks:

- PFAS are synthetic chemicals that do not degrade in the environment, leading to widespread contamination.
- Exposure to PFAS has been linked to various health issues, including liver damage and testicular cancer.
- In the United States, PFAS-related lawsuits have resulted in settlements exceeding $11 billion.

Implementation Timeline:

The proposed ban is not expected to take effect before 2026, as the European Commission is in the process of determining essential industrial uses that may be exempt from the ban.

Global Context:

United Kingdom:

- Scientists have criticized the UK government for not aligning with the EU's approach to banning non-essential uses of PFAS.
- The UK plans to regulate PFAS in smaller groups rather than as a single class, a decision influenced by industry lobbying.
- Experts advocate for a hazard-based approach, similar to the EU's, to effectively address the risks posed by these chemicals.

United States:

- PFAS contamination has been identified in drinking water, soil, and human tissues across the U.S.
- The Environmental Protection Agency (EPA) has set health advisories for certain PFAS compounds, but comprehensive federal regulations are still under development.

Alternative Solutions:

- In response to concerns about PFAS in consumer products, alternatives are being explored.
- For instance, ceramic-coated pans are considered safer substitutes for non-stick cookware traditionally made with PFAS-containing coatings.

India's Projected Surge in Global Consumption by 2050

Significant Increase in Consumption Share:

- According to a report by the **McKinsey Global Institute** titled "Dependency and Depopulation: Confronting the Consequences of New Demographic Reality," **India's share of global consumption is projected to rise from 9% in 2023 to 16% by 2050**.
- By 2050, only **North America**, with a projected 17% share, will surpass India's global consumption share.

Factors Driving the Increase:

- These estimates are based on **purchasing power parity**, adjusting for price differences across countries.
- India's rise in global consumption share is attributed to its **young and growing population** and **increasing incomes**.
- The report highlights a **global demographic shift** driven by **falling fertility rates** in advanced economies, leading to **ageing populations**.
- By **2050**, only **26% of the global population** will reside in **first-wave regions** (those with historically lower fertility rates), down from **42% in 1997**.
- The remaining population will be concentrated in **later-wave regions**, including **India**, **Latin America**, **West Asia**, and **Africa**.
- By **2050**, India's **labour force** will account for **two-thirds of global working hours**.
- Emerging markets, particularly **later-wave regions**, are expected to contribute over **half of global consumption** within the next **25 years**.

Global Demographic Shifts:

- India's share of the global population will decrease from **23% in 2023** to **17% by 2050**.
- India's **demographic dividend** added an average of **0.7% to GDP per capita growth** between **1997 and 2023**.
- Increased **female workforce participation** could significantly boost GDP per capita. If India raises its women's labour force participation rate by **10 percentage points**, GDP per capita could increase by **4-5%**.

India's Space Economy: Current Status and Future Projections

Current Valuation and Future Projections:

- As of 2025, **India's space economy is valued at $8 billion**.
- It is projected to **expand to $44 billion within the next decade**, reflecting significant growth potential.

Key Milestones and Initiatives:

- **Gaganyaan Mission**: India's first indigenous human spaceflight program.
- **Chandrayaan-4 (2027)**: An upcoming lunar exploration mission.
- **Shukrayaan (2028)**: A planned mission to explore Venus.
- **Indian Space Station (2030)**: A project to establish a space station, enhancing India's capabilities in space research and technology.

Private Sector and Innovation:

- The government's space sector reforms have opened avenues for **private investment**, leading to increased participation from **startups** and **foreign direct investment (FDI)**.
- Notable advancements include the **Space Docking Experiment (SPADEX)**, demonstrating docking capabilities, and the development of **Vyom Mitra**, a humanoid robot designed as a precursor to human space exploration.

Global Positioning:

- India aims to increase its share in the global space market by focusing on **small satellite development**, **cost-effective launch services**, and **space data analytics**.
- The establishment of the **Indian National Space Promotion and Authorization Center (IN-SPACe)** serves as a regulatory body to facilitate private sector participation and innovation in the space industry.

Economic Impact:

- The space sector has contributed significantly to India's GDP, with estimates indicating a **multiplier effect of $2.54** for every dollar invested.
- The industry has also created numerous direct and indirect employment opportunities, bolstering economic growth.

Launch of 'SANJAY': India's Advanced Battlefield Surveillance System

Inauguration of SANJAY System:

On January 24, 2025, Defence Minister **Rajnath Singh** inaugurated the **Battlefield Surveillance System (BSS)**, named **SANJAY**, in New Delhi.

System Capabilities:

Data Integration:

- Integrates inputs from various **ground and aerial sensors**.
- Processes data to ensure accuracy and eliminate redundancy.
- Provides a unified surveillance picture via the **Army Data Network** and **Satellite Communication Network**.

Enhanced Battlefield Transparency:

- Offers **real-time situational awareness** to Army Command and Headquarters.
- Supports informed decision-making through a centralized web application.

Advanced Monitoring:

- Equipped with **cutting-edge sensors** and **state-of-the-art analytics**.
- Capable of monitoring vast stretches of land borders to prevent intrusions.

Operational Deployment:

The system will be rolled out to operational **Brigades, Divisions, and Corps** of the Indian Army in three phases between March and October 2025.

Indigenous Development:

- Developed collaboratively by the **Indian Army** and **Bharat Electronics Limited (BEL)**.
- Aligns with the government's **'Aatmanirbhar Bharat' (Self-reliant India)** initiative.

Financial Details:

Developed under the **Buy (Indian)** category at a total cost of **Rs 2,402 crore**.

Strategic Significance:

- Acts as a crucial force multiplier in **Intelligence, Surveillance, and Reconnaissance (ISR)** operations.
- Enhances the Army's ability to operate in both **conventional and sub-conventional operations** within a **network-centric environment**.

India's Deep Ocean Mission: Pioneering Underwater Exploration

Launch of Human Underwater Submersible:

India is set to launch its first **human underwater submersible**, capable of reaching depths up to **500 meters** this year, with plans to achieve **6,000 meters** by next year.

Technological Milestone:

- This initiative positions India among a select group of six nations with the capability to undertake such deep-sea missions.
- The submersible will be operated by **three people** and is designed to explore the **deep sea**.

Indigenous Development:

The submersible is developed entirely with **indigenous technology**, showcasing India's commitment to self-reliance in advanced scientific endeavors.

Economic and Environmental Significance:

The mission aims to explore and harness resources such as **critical minerals**, **rare metals**, and **marine biodiversity**, which are vital for economic growth and environmental sustainability.

Alignment with Other Missions:

The Deep Ocean Mission aligns with India's **Gaganyaan space mission**, reflecting a dual focus on advancing both space and marine exploration.

India Joins Eurodrone Program as Observer

India has officially become an observer state in the **Medium Altitude Long Endurance Remotely Piloted Aircraft System (MALE RPAS)**, commonly known as the **Eurodrone** program. This initiative is managed by the **Organisation for Joint Armament Cooperation (OCCAR)** and led by **Airbus Defence and Space**.

Key Details:

Formal Request and Acceptance:

- India submitted a formal request to join the Eurodrone program as an observer in **August 2024**.
- The acceptance was granted in **January 2025**, shortly before the **Aero India 2025** exhibition in Bangalore.

Program Consortium:

- The Eurodrone program is a collaborative effort among **Germany, France, Italy, and Spain**.

- Major contributors include **Airbus Defence and Space (Germany)**, **Leonardo (Italy)**, **Dassault Aviation (France)**, and **Airbus (Spain)**.

About the Eurodrone:

Purpose and Capabilities:

- The Eurodrone is designed for **long-endurance missions** such as **intelligence, surveillance, target acquisition, and reconnaissance (ISTAR)**, **maritime surveillance**, **anti-submarine warfare**, and **airborne early warning**.

Specifications:

- **Maximum Mission Payload:** 2.3 tonnes
- **Endurance:** Up to 40 hours
- Notably, it is the first RPAS designed for **safe and reliable flight in non-segregated airspace**.

Khelo India Winter Games 2025: A Boost to India's Sporting Excellence

Inauguration in Leh, Ladakh:

- The **Khelo India Winter Games (KIWG) 2025** commenced on **January 23, 2025**, at the **NDS Stadium** in **Leh, Ladakh**.
- The opening ceremony featured ice hockey matches at both the NDS complex and the **Ladakh Scouts Regimental Centre**.
- A total of **19 teams** from various states, Union territories, and institutions like the **Army** and **ITBP** are participating.
- The event sees **594 participants**, including **428 athletes**, in the Ladakh segment.

Prime Minister's Address:

- **Prime Minister Narendra Modi** emphasized the government's commitment to promoting sports nationwide.
- He highlighted the establishment of **100 Khelo India centers in Jammu & Kashmir** and **three in Ladakh**, including a **State Centre of Excellence in Leh** focusing on athletics, archery, and boxing.
- The Prime Minister noted that regions like Jammu & Kashmir and Ladakh have elevated the culture of sports, boosted tourism, and showcased the nation's beauty and diversity.

Event Schedule:

- The Ladakh leg of the KIWG 2025 is scheduled to conclude on **January 27**.
- Subsequently, the games will move to **Gulmarg in Jammu & Kashmir**, with events planned from **February 22 to 25**.
- This marks the second time Ladakh is hosting the winter games, now in their fifth edition.

Notable Achievements:

- On the second day, **Telangana's Nayana Sri Talluri** clinched the first gold medal in the Women's 500-meter Ice Skating event, achieving her third consecutive gold in the Khelo India series.
- Additionally, **Karnataka's Harshith BT** secured a gold medal in the ice-skating competition, highlighting the diverse talent participating in the event.

Indian Cricketers Shine in ICC Women's ODI Team of the Year 2024

Inclusion of Indian Players:

Smriti Mandhana and **Deepti Sharma** have been selected for the **ICC Women's ODI Team of the Year 2024**.

Smriti Mandhana's Performance:

- Mandhana emerged as the highest run-scorer in women's ODIs in 2024, amassing **747 runs in 13 matches**.
- She is also a contender for the **ICC Women's ODI Cricketer of the Year** award.

Deepti Sharma's All-Round Contribution:

Sharma showcased her all-round abilities by scoring **186 runs** and claiming **24 wickets** in 13 matches during 2024.

Composition of the Team:

- The team features players from **England (3)**, **Australia (2)**, **South Africa (2)**, **Sri Lanka (1)**, and the **West Indies (1)**, in addition to the two Indians.
- South African batter **Laura Wolvaardt**, who scored **697 runs in 12 matches** in 2024, has been appointed as the team's captain.

D. Gukesh's Victory over Vincent Keymer in Tata Steel Chess 2025

Tournament Context:

The **87th Tata Steel Chess Tournament** is underway in **Wijk aan Zee, Netherlands**, featuring top global players.

Gukesh's Performance:

- In **Round 5**, **D. Gukesh**, the reigning world champion, secured his second win by defeating **Vincent Keymer**.
- Gukesh gained a pawn advantage and skillfully converted it into a victory.

Standings:

- Following this round, **Praggnanandhaa Rameshbabu** and **Nodirbek Abdusattorov** lead the tournament.
- Gukesh is closely trailing the leaders, maintaining a strong position in the competition.

Gukesh's Recent Achievements:

- At **18 years old**, Gukesh became the **youngest World Chess Champion** after defeating **Ding Liren** in 2024.
- He was recently honored with India's highest sporting accolade, the **Khel Ratna award**.

India's Rising Chess Profile:

- Gukesh's success highlights India's growing prominence in the international chess arena.
- Young talents like **Praggnanandhaa** and **Arjun Erigaisi** further underscore this trend.

Uttar Pradesh Foundation Day 2025: Celebrating Legacy and Leadership

Foundation Day Celebrations:

- Uttar Pradesh commemorated its **76th Foundation Day** on **January 24, 2025**, with events spanning from January 24 to 26 at **Awadh Shilp Gram in Lucknow**.
- The theme for this year's celebrations is "**Development and Heritage: Uttar Pradesh on the Path to Progress**."

Historical Significance:

- Established as the **United Provinces of Agra and Oudh** in 1902 during British colonial rule, the region was renamed **Uttar Pradesh** on January 24, 1950.
- The state has been instrumental in India's political landscape, producing nine Prime Ministers, including **Jawaharlal Nehru**, **Indira Gandhi**, and **Atal Bihari Vajpayee**.

Cultural and Economic Contributions:

- Uttar Pradesh is renowned for its rich cultural heritage, including classical dance forms like **Kathak** and significant contributions to literature and arts.
- Economically, the state is a hub for industries such as **textiles**, **handicrafts**, and **agriculture**, significantly contributing to India's GDP.

Other Aspects:

- **Political Influence:** With the highest number of **Lok Sabha seats (80)**, **Assembly seats (403)**, and **Rajya Sabha seats (31)**, Uttar Pradesh plays a pivotal role in shaping national policies and governance.
- **Demographic Significance:** As India's most populous state, Uttar Pradesh's demographic trends have a substantial impact on national electoral outcomes and policy decisions.

Rhodamine B: Unveiling the Hidden Dangers

Health Risks Associated with Rhodamine B:

- **Rhodamine B** is a synthetic dye predominantly used in the textile, leather, and paper industries.
- Its application in food products, such as **gobi manchurian** and **cotton candy**, has raised significant health concerns.
- Prolonged consumption of foods containing this dye can lead to severe health issues, including **cancer**.

Regulatory Actions in India:

In response to the health hazards posed by Rhodamine B, several Indian states have implemented bans on its use in food items:

- **Karnataka**: The state government prohibited the use of Rhodamine B in **gobi manchurian** and **cotton candy**, emphasizing the potential long-term health risks associated with artificial food colors.
- **Tamil Nadu**: Following laboratory tests that confirmed the presence of Rhodamine B in cotton candy, the state enforced a ban to protect public health.
- **Himachal Pradesh**: The state joined the list of regions banning cotton candy after samples failed food safety tests, highlighting the widespread concern over the use of harmful dyes in food products.

Global Perspective:

- Internationally, the use of Rhodamine B in food products is strictly regulated or banned due to its carcinogenic properties.
- For instance, in California, products containing Rhodamine B are required to carry a warning label, reflecting the global consensus on its potential health risks.

Consumer Awareness:

- The prevalence of Rhodamine B in popular street foods underscores the need for heightened consumer awareness regarding food safety.
- Public education campaigns are essential to inform consumers about the dangers of consuming foods colored with unauthorized dyes.

Supreme Court Ruling: Enforceability of Contractual Rights in Unregistered Partnerships

Supreme Court Judgment:

- In a recent decision, the Supreme Court of India reaffirmed the mandatory nature of **Section 69** of the **Indian Partnership Act, 1932**, ruling that partners of unregistered firms cannot enforce contractual rights against each other under the Act.
- The bench, comprising Justice J.B. Pardiwala and Justice R. Mahadevan, delivered this judgment in the case of **Sunkari Tirumala Rao & Ors. v. Penki Aruna Kumari** (SLP (C) No. 30442/2019).

Case Background:

- The dispute arose from a partnership agreement dated December 11, 2009, where the petitioners acquired a 75% share in a stone crusher business, and the respondent retained 25%.
- The firm, however, was not registered under the Indian Partnership Act. The petitioners sought recovery of ₹30 lakh from the respondent, alleging non-fulfillment of obligations under the agreement.
- The Supreme Court upheld the Andhra Pradesh High Court's decision, which dismissed the suit, citing the bar under Section 69(1) of the Act.

Implications of the Judgment:

- This ruling underscore the importance of registering a partnership firm to ensure the enforceability of contractual rights among partners.
- Unregistered firms are barred from enforcing rights arising from contracts under the Indian Partnership Act, which can lead to legal challenges in the absence of registration.

Section 69 of the Indian Partnership Act, 1932:

- Section 69(1) prohibits a suit among partners of an unregistered firm for the enforcement of a right arising from a contract or conferred by the Act, unless the suit is in the nature of dissolution of the partnership firm and/or rendition of accounts.
- Section 69(2) prohibits the institution of a suit by an unregistered firm against third persons for the enforcement of a right arising from a contract

25 January 2025

National Voters' Day 2025: Democracy in Action

Date & Theme:
- Celebrated on **January 25, 2025**, marking the **15th National Voters' Day (NVD)**.
- Theme: **"Nothing Like Voting, I Vote for Sure"** – emphasizing confidence in electoral participation.

Significance:
- Commemorates the **foundation of the Election Commission of India (ECI)** on January 25, 1950.
- Aims to **boost voter enrolment**, especially among youth, and promote informed participation.

Key Highlights:
Voter Statistics:
- **99.1 crore registered voters** (approaching 100 crore milestone).
- **21.7 crore young voters** (18–29 age group).
- **Electoral Gender Ratio** improved from 948 (2024) to 954 (2025).

Awards & Recognitions:
- **Best Electoral Practices Awards** presented by President Droupadi Murmu to state/district officials for excellence in election management.

Publications & Events:
- Launch of **"India Votes 2024 – A Saga of Democracy"** (coffee table book) and preview of **"India Decides"** docu-drama series.

PM Modi's Message:
- Highlighted voting as a **celebration of democracy** and urged citizens to participate actively. Praised ECI's use of technology for **transparent elections**.

Historical Context:
- NVD was **instituted in 2011** to address declining voter enrolment among youth.
- **First General Elections (1951–52)** were a milestone in India's democratic journey, overcoming scepticism about electoral viability.

ECI's Role:
- Manages elections under **Article 324** of the Constitution.
- Enforces **Model Code of Conduct** and oversees electoral rolls, EVMs, and VVPATs.

Challenges:
- **Voter Apathy**: Urban areas report lower turnout despite awareness campaigns.
- **Accessibility**: Efforts to include marginalized groups (PwD, transgender voters) continue.

Additional Information

India's Macroeconomic Resilience: A Beacon of Global Growth

Global Recognition:

- India remains a **bright spot in the global economy**, with **strong macro fundamentals** driven by robust GDP growth, fiscal prudence, and structural reforms.
- **World Bank** projects **6.7% growth for FY26 and FY27**, outpacing the global average of 2.7%.
- **IMF** aligns with this outlook, forecasting **6.5% growth for 2025–26**, reinforcing India's role as a global growth driver.

Key Economic Indicators:

- **Nominal GDP Growth**: Expected at **10.2% for FY26**, translating to ₹357.2 lakh crore, assuming real GDP growth of **6.2–6.4%** and inflation of **3.8–4%**.
- **Fiscal Deficit**: Projected at **4.5% of GDP (₹15.9 lakh crore)** in FY26, reflecting continued fiscal consolidation.
- **Market Borrowings**: Gross borrowing of **₹14.4 lakh crore** planned for FY26 to manage pandemic-era debt redemptions, with net borrowing at **₹11.2 lakh crore**.

GST Reforms:

- **GST 2.0** reforms proposed to rationalize tax rates and include **electricity, ATF, and petrol/diesel** under GST.
- Calls to exempt/reduce GST on **health insurance products** to boost affordability.

Sectoral Growth Drivers:

- **Services and Manufacturing**: Thriving services sector and revitalized manufacturing base, supported by initiatives like **PM GatiShakti** and **Production Linked Incentive (PLI) Scheme**.
- **Private Consumption**: Strengthened by improved labour markets, credit access, and controlled inflation.

Challenges & External Risks:

- **Global Uncertainties**: Disruptions in the Red Sea due to **Houthi attacks** impacting shipping routes, causing delays and higher freight costs.
- **Inflation Management**: Retail inflation eased to **5.69% in December 2023**, with RBI targeting **4%** amid volatile food prices.

Fiscal Consolidation:

- **Debt Management**: Strategic buybacks (₹1.1 lakh crore) and switches (₹1.46 lakh crore) in FY25 to stabilize debt-to-GDP ratios.
- **Tax Reforms**: Enhanced tax buoyancy from GST and income tax reforms supports fiscal health.

Global Comparisons:

- **China's Slowdown**: Growth decelerating to **4%** in 2025, contrasting India's resilience.
- **Emerging Markets**: India, China, and Brazil account for **60% of global growth** since 2000.

India's WEF 2025 Triumph: Rs 20 Lakh Crore Investment Commitments

Investment Milestone:

- India secured **over ₹20 lakh crore** in investment commitments at the **2025 World Economic Forum (WEF)** in Davos, reinforcing its position as a **global economic bright spot** amid geopolitical uncertainties.
- **Theme**: The event centred on **"Collaboration for the Intelligent Age"**, focusing on innovation, sustainability, and global partnerships.

State-Wise Breakdown:

- **Maharashtra**: Dominated with **80% of total investments** (₹15.7 lakh crore) via **61 MoUs**, targeting sectors like infrastructure, tech, and manufacturing. Expected to generate **16 lakh jobs**.
- **Telangana**: Secured **₹1.79 lakh crore** through **20 MoUs**, focusing on **data centres, green energy, and cutting-edge tech** (e.g., Unilever's new manufacturing units).
- **Uttar Pradesh**: Aimed at becoming a **1 trillion economy**, attracting investments in sectors like beverages.
- **Kerala & Andhra Pradesh**: Highlighted industrial transformation and AI-driven growth, with Kerala holding **30+ one-on-one investor meetings**.

Key Announcements:

- **Infosys** plans to expand its Hyderabad presence, creating **17,000 jobs**.
- **Semiconductor & AI Leadership**: Union Minister Ashwini Vaishnaw emphasized India's rise as a **top-three semiconductor hub** and **"use case capital"** for AI solutions.

Global Recognition:

- India's **unified "Team India" approach** (state and central ministers from diverse parties) showcased **democratic vibrancy, IP rights protection, and inclusive growth**.

Economic Drivers:

- **Sectoral Growth**: Focus on **manufacturing (PLI schemes), green energy, and digital infrastructure** (e.g., PM GatiShakti).
- **FDI Inflows**: India surpassed **$1 trillion in cumulative FDI** since 2000, with a **26% YoY increase** in FY25's first half.

Challenges:

- **Global Risks**: Geopolitical tensions (e.g., Red Sea disruptions) and inflationary pressures.
- **Skill Development**: Need for upskilling in **AI, semiconductors, and renewable tech** to sustain growth.

Global Comparisons:

- India's **6.7% projected GDP growth (FY26)** outpaces global averages, contrasting with China's slowdown to **4%**.

US Supreme Court Approves Extradition of 26/11 Accused Tahawwur Rana to India

Supreme Court Decision:

- On **January 21, 2025**, the US Supreme Court dismissed Tahawwur Rana's final appeal against extradition to India, stating: **"Petition DENIED"**.
- The decision came a day after **Donald Trump's inauguration** as US President, marking the end of Rana's 15-year legal battle in the US.

Rana's Role in the 26/11 Attacks:

- A **Canadian-Pakistani national**, Rana used his immigration consultancy, **First World Immigration Services**, to aid **David Headley** (key conspirator) in conducting reconnaissance for the Mumbai attacks.
- He facilitated Headley's travel to India using **forged documents** and supported Lashkar-e-Taiba (LeT) in planning attacks on locations like the **Taj Mahal Hotel** and **Chabad House**.

US-India Extradition Treaty:

- The extradition was approved under the **1997 bilateral treaty**, with the Biden administration backing India's request.
- Rana faces charges under **Indian Penal Code (IPC)** Sections 121 (waging war against India), 120B (criminal conspiracy), and murder.

Legal Timeline:

- **2009**: Arrested in the US for aiding LeT and plotting attacks in Denmark.
- **2013**: Convicted in the US for supporting terrorism but acquitted of direct 26/11 charges.
- **2020**: India formally sought extradition, supported by the US.

Key Arguments in Court:

- Rana claimed **double jeopardy**, arguing he was acquitted in the US for the same charges.
- The US Solicitor General countered that India's **forgery charges** (e.g., falsifying RBI applications) were distinct.

Implications for India:

- Rana's trial in India may expose **Pakistan's role** in 26/11, including links between LeT and Pakistan's security agencies.
- Strengthens **global counter-terrorism cooperation** and sets a precedent for future extraditions.

India's Rabies Challenge: Lancet Study Highlights Dog Bite Burden

Key Findings:

- **Dog Bite Dominance**: **3 in 4 animal bites** in India are caused by dogs, with **76.8%** of surveyed animal bite cases attributed to them.
- **Annual Burden**:
  - **9.1 million animal bites** nationally, translating to **6.6 per 1,000 population**.
  - **5,726 human rabies deaths** estimated annually, making India responsible for **one-third of global rabies cases**.

Survey Methodology:

- Conducted by **ICMR** from **March 2022–August 2023**, covering **78,800 households** (3.37 lakh individuals) across **15 states and 60 districts**.

Vaccination Gaps:

- **20.5%** of dog bite victims received **no anti-rabies vaccination (ARV)**.
- **49%** of those who started ARV did **not complete the full course**, increasing rabies risk.

Global Targets:

- **"Zero by 30"**: WHO's 2030 goal to eliminate dog-mediated rabies. India's progress hinges on **accelerated dog vaccination** and **One Health strategies**.

Public Health Challenges:

- **Low Awareness**: A 2017–18 survey found **40% of Indians had never heard of rabies**, and only half recognized non-bite transmission routes (e.g., scratches).
- **Stray Dog Population**: **Unvaccinated free-roaming dogs** are a major contributor to rabies, necessitating **humane population control** (e.g., Animal Birth Control program).

Government Initiatives:

- **Rabies-Free Cities**: Launched to create rabies-free zones in Tier 1/2 cities.
- **National Rabies Control Programme (NRCP)**: Administered **46.5 lakh ARV doses** in 2023.

Economic & Social Impact:

- **Child Fatalities**: Multiple reports of children mauled by stray dogs (e.g., Rajasthan, Telangana).
- **Compensation**: Delhi High Court granted ₹2.5 lakh to a mother whose infant died from a dog bite.

NITI Aayog Launches Fiscal Health Index 2025: State Rankings & Key Insights

Launch & Purpose:

- NITI Aayog launched the inaugural **Fiscal Health Index (FHI) 2025** on **January 24, 2025**, to assess the fiscal performance of 18 major Indian states using five sub-indices: **Quality of Expenditure, Revenue Mobilisation, Fiscal Prudence, Debt Index, and Debt Sustainability**.
- The report aims to guide policy reforms for **balanced regional development** and **long-term fiscal stability**, aligning with India's vision of **"Viksit Bharat @2047"**.

State Rankings:

Top Performers:

- **Odisha** (score: 67.8) leads due to strong revenue mobilization, expenditure management, and debt sustainability.
- **Chhattisgarh** (55.2) and **Goa** (53.6) follow, excelling in fiscal prudence.

Improvements & Declines:

- **Jharkhand** improved fiscal prudence and debt management.

- **Karnataka** saw a decline due to weaker expenditure quality and debt management.

Key Objectives:

- Foster **healthy competition among states** through data-driven rankings.
- Address **interstate fiscal disparities** by identifying state-specific challenges (e.g., debt sustainability, revenue gaps).

Policy Implications:

- The FHI emphasizes **cooperative federalism**, urging collaboration between the Centre and states to achieve **fiscal consolidation** and **transparency**.
- It highlights the need for **targeted reforms**, such as improving tax buoyancy and curbing unproductive expenditures.

Statements by Officials:

- **Dr. Arvind Panagariya** (16th Finance Commission Chairman): Stressed the importance of a **stable fiscal path** for balanced regional growth.
- **Shri Suman Bery** (NITI Aayog VC): Described the FHI as a roadmap for **resource management** and **fiscal resilience**.

Long-Term Vision:

- Aligns with India's goal to become a **$30 trillion economy by 2047**, requiring disciplined fiscal governance at state levels.

Himachal Pradesh Statehood Day 2025: A Chronicle of Progress

Date & Significance:

- Celebrated on **25 January 2025**, marking **55 years** since Himachal Pradesh became India's **18th state** on 25 January 1971 under the **State of Himachal Pradesh Act, 1970**.
- Prime Minister Narendra Modi and Home Minister Amit Shah extended greetings, praising the state's natural beauty and cultural heritage.

Historical Journey:

- **Pre-Independence**: Merged 30 princely states in 1948 under British administration, later forming a **Chief Commissioner's Province**.
- **Post-Independence**: Became a **Part C state** (1950) → **Union Territory** (1956) → **Full Statehood** (1971) after merging Punjab's hill areas (1966).
- Key figures: **Dr. Y.S. Parmar** (first CM) and **Indira Gandhi** (announced statehood in 1971).

State Symbols:

- **Animal**: Snow Leopard
- **Bird**: Western Tragopan
- **Flower**: Pink Rhododendron
- **Languages**: Hindi and local dialects.

Economic & Developmental Milestones:

- **Literacy Rate**: Rose from **31.96%** (1971) to **82%** (2025).
- **Per Capita Income**: Increased from **₹651** (1971) to **₹2.35 lakh** (2025).
- **Hydropower Leadership**: Generates surplus electricity via projects on rivers like **Sutlej** (Bhakra Dam) and **Beas** (Pandoh Dam).

Tourism & Infrastructure:

- Declared **"Tourism Capital"** in Kangra, with projects like a ₹3,500 crore airport expansion and wellness centers.
- Major attractions: **Great Himalayan National Park** (UNESCO site), **Khirganga**, and **Dal Lake**.

Governance Challenges:

- **Financial Dependency**: Reliance on central grants (e.g., GST revenue decline) and debt management struggles.
- **Employment**: CM Sukhvinder Sukhu announced **25,000 new jobs** in 2025, building on 42,000 jobs created since 2023.

National Girl Child Day 2025: Empowering India's Future Leaders

Date & Theme:

- Celebrated annually on **January 24**, 2025 marks the 18th National Girl Child Day in India.
- **Theme**: **"Empowering Girls for a Bright Future"**, emphasizing equal access to education, healthcare, and opportunities for girls to thrive.

Historical Context:

- Established in **2008** by the **Ministry of Women and Child Development** to address gender disparities, female foeticide, and child marriage.
- Coincides with the anniversary of **Indira Gandhi's oath-taking** as India's first female Prime Minister on January 24, 1966, symbolizing women's leadership.

Key Objectives:

- Promote **gender equality** and eliminate discrimination in education, healthcare, and employment.
- Combat **child marriage**, **gender-based violence**, and **school dropout rates** among girls 3914.
- Highlight government schemes like **Beti Bachao Beti Padhao (BBBP)** and **Sukanya Samriddhi Yojana (SSY)**.

Challenges Addressed:

- **Education Gap**: Only **77%** of girls aged 15 - 18 are enrolled in schools, with higher dropout rates in rural areas.
- **Health & Safety**: Malnutrition affects **35%** of adolescent girls, and **23%** of women marry before 18.
- **Gender Ratio**: India's child sex ratio improved marginally from **918 (2011)** to **934 (2021)**, reflecting persistent societal biases.

Government Initiatives:

- **Beti Bachao Beti Padhao**: Focuses on improving education, healthcare, and survival rates for girls.
- **Sukanya Samriddhi Yojana**: Savings scheme offering **7.6% interest** and tax benefits for girls' education/marriage.
- **POCSO Act (2012)**: Strengthened child protection against sexual abuse.
- **Mission Vatsalya**: Provides childcare services via helplines and tracking portals.

- **PM CARES for Children**: Supports COVID-19 orphans, ensuring their education and healthcare.

Key Legal Frameworks:
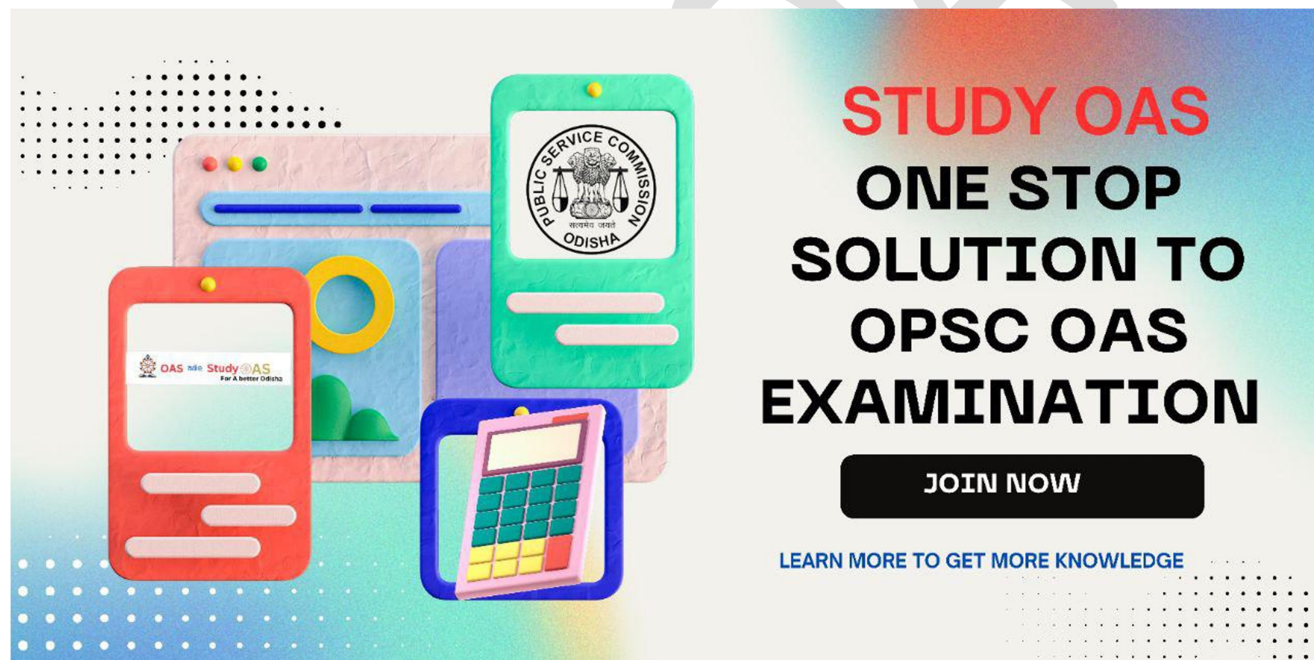
- **Prohibition of Child Marriage Act (2006)**: Penalizes child marriage practices.
- **Juvenile Justice Act (2015)**: Safeguards children in need of care.
- **Right to Education Act (2009)**: Mandates free education for girls up to age 14.

Investment Schemes for Girls:

- **SSY**: Minimum deposit ₹250/year, tax-free maturity for education/marriage.
- **LIC Children's Money Back Policy**: Provides financial support at key life stages.
- **Public Provident Fund (PPF)**: Long-term savings with tax benefits.

Quotes & Wishes:

- *"When girls are educated, their countries become stronger"* – **Michelle Obama**.
- *"Empower a girl, transform a nation"* – Popular **slogan for BBBP campaigns**.

27 January 2025

Jannik Sinner Clinches Third Grand Slam Title at Australian Open 2025

Match Highlights:

- **Victory Details:** Jannik Sinner secured his third Grand Slam title by defeating Alexander Zverev in straight sets: 6–3, 7–6(7–4), 6–3.
- **Historical Significance:** At 23, Sinner became the youngest man to defend the Australian Open title since Jim Courier in 1993 and the youngest to defend his first major title since Rafael Nadal at the 2006 French Open.
- **Match Dynamics:** Sinner showcased exceptional mental resilience, especially during the second set, where he delivered an outstanding backhand under pressure to fend off Zverev's aggressive play.

Additional Context:

- **Zverev's Grand Slam Pursuit:** This defeat marks Zverev's third loss in a Grand Slam final, extending his quest for a major title.
- **Off-Court Challenges:** Sinner faces uncertainty regarding his participation in upcoming tournaments due to an ongoing anti-doping case, with a hearing scheduled before the French Open. He maintains his innocence, attributing the issue to accidental ingestion during physiotherapy.

Azmatullah Omarzai Honored as ICC Men's ODI Cricketer of the Year 2024

Key Highlights:

- **Award Recognition:** Afghanistan's all-rounder **Azmatullah Omarzai** has been named the **ICC Men's ODI Cricketer of the Year 2024**, acknowledging his outstanding contributions in One Day Internationals throughout the year.
- **Batting Prowess:** In 14 ODIs, Omarzai amassed **417 runs** at an impressive average of **52.12**. Notable innings include:
  - An unbeaten **149 runs** against Sri Lanka.
  - A rapid **86 not out off 50 balls** against South Africa, leading Afghanistan to a series-clinching victory.
- **Bowling Contributions:** Complementing his batting, he secured **17 wickets** with a commendable bowling average of **20.47**, making him Afghanistan's second-highest wicket-taker for the year.

Additional Context:

- **Team Impact:** Omarzai's all-round performances were pivotal in Afghanistan achieving **four ODI series victories** in 2024, including triumphs over Ireland, South Africa, Bangladesh, and Zimbabwe.
- **Historical Significance:** This accolade marks a significant milestone for Afghanistan cricket, highlighting the nation's growing prominence in the international arena.

Indian Grandmaster Iniyan Panneerselvam Triumphs at Johor International Open Chess Tournament

Tournament Highlights:

- **Champion's Performance:** Indian Grandmaster **Iniyan Panneerselvam** clinched the title at the **9th Johor International Open Chess Tournament** held in Malaysia.
- **Dominant Score:** The 22-year-old from Erode, Tamil Nadu, achieved an impressive **8.5 points out of 9 games**, finishing **1.5 points ahead** of his nearest competitor.
- **Key Victories:** Iniyan secured wins against four International Masters and one Grandmaster, including a notable final-round victory over Vietnamese GM Nguyen Van Huy.

Additional Context:

- **Early Title Secured:** By the end of the penultimate round, Iniyan had already secured the championship, leading by 1.5 points after defeating Indonesian IM Nayaka Budhidharma.
- **Tournament Participation:** The event featured **84 participants from eight countries**, with 24 titled players competing.

Jyothi Yarraji Sets New National Record in 60m Hurdles in France

Event Highlights:

- **Record-Breaking Performance:** Indian athlete **Jyothi Yarraji** clinched the gold medal in the **60m hurdles** at the **Elite Indoor Meeting** in Nantes, France, clocking a national record time of **8.04 seconds**.
- **Progression to Record:** Yarraji improved her own previous national record of 8.12 seconds twice in the same day:
  - **Heats:** Recorded a time of **8.07 seconds**.
  - **Final:** Surpassed her heat time with **8.04 seconds** to secure the gold.

Additional Context:

- **International Standards:** Despite her record-breaking performance, Yarraji's timing is just shy of the **World Indoor Championships** qualifying mark of **7.94 seconds**.
- **Recent Achievements:** Recently honored with the **Arjuna Award**, Yarraji won the **60m hurdles gold** at the **Asian Indoor Championships** in 2024 with a time of **8.12 seconds** in Tehran, Iran.
- **National Records:** Yarraji also holds the national outdoor **100m hurdles record** with a time of **12.78 seconds**.
- **Upcoming Competitions:** Both Yarraji and fellow hurdler **Tejas Shirse** are preparing for the **National Games** in Uttarakhand next month.

Odisha Warriors Clinch Inaugural Women's Hockey India League Title

Match Highlights:

- **Final Outcome:** The **Odisha Warriors** emerged victorious in the inaugural **Women's Hockey India League (HIL) 2024-25**, defeating **JSW Soorma Hockey Club** with a score of **2-1** in the final held at the Marang Gomke Jaipal Singh Munda Astro Turf Hockey Stadium in Ranchi.

- **Key Performances:**
  - **Rutuja Dadaso Pisal** was instrumental in the Warriors' win, scoring both goals at the 20th and 56th minutes.
  - **Penny Squibb** equalized for Soorma Hockey Club in the 28th minute, but Pisal's late goal secured the championship for the Warriors.

Additional Context:

- **Match Dynamics:** The final was a high-intensity encounter, with both teams displaying strong offensive and defensive strategies. The Warriors capitalized on key opportunities, while Soorma Hockey Club showcased resilience, keeping the contest competitive until the final moments.
- **League Structure:** The Women's HIL 2024-25 featured a league format where each team played against the others twice. Soorma Hockey Club topped the league stage with 13 points from six games, followed by Odisha Warriors with 11 points, leading both teams to the final.

International Day of Clean Energy 2025: Advancing a Sustainable Future

Overview:

- **Date of Observance:** The **International Day of Clean Energy** is observed annually on **26 January**, as declared by the United Nations General Assembly in 2023.
- **Purpose:** This day aims to **raise awareness** and **mobilize action** for a **just and inclusive transition** to clean energy, benefiting both people and the planet.

Significance:

- **Climate Change Mitigation:** Transitioning to clean energy is crucial in combating climate change, as a significant portion of greenhouse gas emissions originates from burning fossil fuels for electricity and heat.
- **Renewable Energy Sources:** Emphasizing the adoption of renewable energy sources—such as **solar**, **wind**, **hydropower**, **biomass**, and **geothermal**—which are abundant, sustainable, and emit minimal greenhouse gases.

Associated Observances:

- **Founding of IRENA:** 26 January also marks the founding date of the **International Renewable Energy Agency (IRENA)** in 2009, an intergovernmental organization that supports countries in their transition to sustainable energy.

Global Initiatives:

- **UN-Energy's Role: UN-Energy** collaborates with over thirty UN entities and partners to support countries in achieving **Sustainable Development Goal 7 (SDG7)**, which focuses on ensuring access to affordable, reliable, sustainable, and modern energy for all.
- **Call to Action:** The observance serves as a reminder of the urgent need to accelerate the transition to clean energy, highlighting the importance of political will and collective efforts to achieve a sustainable future.

International Customs Day 2025: Enhancing Global Trade Efficiency and Security

Observance Details:

- **Date:** January 26, 2025
- **Theme:** "Customs Delivering on its Commitment to Efficiency, Security, and Prosperity"

Significance:

- **Purpose:** International Customs Day recognizes the vital role of customs authorities in facilitating legitimate trade, ensuring border security, and collecting revenue.
- **Global Participation:** Customs administrations worldwide observe this day through various activities, including workshops, conferences, and public outreach events, to highlight their contributions to the global economy.

Historical Context:

- **Establishment:** The inaugural session of the Customs Cooperation Council (CCC) was held on January 26, 1953, in Brussels, Belgium, with the participation of 17 European countries.
- **Evolution:** In 1994, the CCC was renamed the World Customs Organization (WCO), which now comprises customs administrations from 179 countries.

Government Proposes Mandatory Adoption of Indian Standard Time

Key Highlights:

- **Draft Legislation:** The government has introduced the **Legal Metrology (Indian Standard Time) Rules, 2024**, aiming to establish a legal framework that mandates **Indian Standard Time (IST)** as the sole time reference for all legal, administrative, commercial, and official purposes.
- **Scope of Application:** The proposed rules require the exclusive use of IST across various sectors, including:
  - **Commerce**
  - **Transport**
  - **Public Administration**
  - **Legal Contracts**
  - **Financial Operations**
- **Implementation Measures:** Key provisions outlined in the draft include:
  - Prohibition of any time reference other than IST for official and commercial purposes.
  - Mandatory display of IST in government offices and public institutions.
  - Requirement for time synchronization systems to ensure accuracy, reliability, and cybersecurity.

Rationale Behind the Proposal:

- **Precision in Critical Sectors:** The initiative aims to maintain precise timekeeping in essential national infrastructures such as telecommunications, banking, defense, and emerging technologies like 5G and artificial intelligence.
- **Strategic Importance:** Accurate time synchronization is vital for the efficient functioning of various sectors, ensuring coordinated operations and enhancing overall security.

Compliance and Enforcement:

- **Penalties for Non-Compliance:** Entities failing to adhere to the proposed rules will face penalties, emphasizing the importance of uniform timekeeping practices.
- **Periodic Audits:** Regular audits will be conducted to ensure compliance across different sectors, reinforcing the commitment to standardized time usage.

Public Consultation:

- **Stakeholder Engagement:** The government has invited public comments and suggestions on the draft rules until **February 14, 2025**, encouraging participation from various stakeholders to refine and finalize the legislation.

India's Investment and External Commercial Borrowings (ECB) Landscape: Report by SBI

Key Highlights:

Investment Announcements (April-December 2024):

- Total investment announcements reached **₹32.01 lakh crore**, marking a **39% increase** from ₹23 lakh crore in the same period of the previous fiscal year.
- The **private sector** contributed nearly **70%** of these announcements, indicating robust corporate confidence.

Gross Block of Indian Corporates (as of March 2024):

- The gross block stood at **₹106.50 lakh crore**, up from ₹73.94 lakh crore in March 2020.
- An average of over **₹8 lakh crore** has been added annually over the past five years.
- **Capital work in progress** was valued at **₹13.63 lakh crore**, reflecting ongoing project developments.

Household Net Financial Savings (HNFS):

- HNFS improved to **5.3% of GDP** in FY24, up from 5.0% in FY23.
- Savings in physical assets increased to **13.5% of GDP** from 12.9% in the previous fiscal year.

Investment as a Percentage of GDP:

- **Government investment** reached **4.1% of GDP** in FY23, the highest since FY12.
- **Private corporate investment** rose to **11.9% of GDP** in FY23, the highest since FY16, and is projected to further increase to around **12.5%** in FY24.

External Commercial Borrowings (ECBs) (as of September 2024):

- Total outstanding ECBs were **$190.4 billion**.
- The **private sector** held **63%** ($97.58 billion), while the **public sector** accounted for **37%** ($55.5 billion).
- Private companies hedged approximately **74%** of their ECB exposures.

ECBs in FY25 (Up to November 2024):

- Total ECB registrations stood at **$33.8 billion**.
- Nearly half of these were allocated for the import of capital goods, modernization, local capital expenditure, and new projects.

- ECB registrations as a percentage of GDP declined from **1.9% in FY20** to **1.2% in FY24**, suggesting improved domestic financing options.

ECB Cost Trends (April-November 2024):

- The overall cost of ECBs decreased by **12 basis points** year-over-year to **6.6%**.
- In November 2024, the cost further declined to **5.8%**, a reduction of **71 basis points** from the previous month.

Clarification on ECB Data:

- Recent reports have misrepresented India's ECB liabilities, suggesting a stock of $273 billion by early 2025.
- However, as per RBI data from September 2024, the actual outstanding ECB is **$190.4 billion**.
- The discrepancy arises from the incorrect inclusion of **$72.057 billion** in Foreign Portfolio Investments (FPIs) in long-term corporate and government securities, which should not be classified as corporate ECB liabilities.

Padma Awards 2025 Announced

Overview:

The Government of India has announced the **Padma Awards** for the year 2025, honouring individuals for their exceptional contributions across various fields. The awards are categorized into three tiers:

- **Padma Vibhushan:** For exceptional and distinguished service.
- **Padma Bhushan:** For distinguished service of high order.
- **Padma Shri:** For distinguished service in any field.

Key Highlights:

- **Total Awards:** 139
  - **Padma Vibhushan:** 7
  - **Padma Bhushan:** 19
  - **Padma Shri:** 113
- **Diversity:**
  - **Women Awardees:** 23
  - **Foreigners/NRI/PIO/OCI:** 10
  - **Posthumous Awardees:** 13

Notable Recipients:

- **Padma Vibhushan:**
  - **Dr. Duvvur Nageshwar Reddy:** Recognized for contributions to **Medicine** from **Telangana**.
  - **Justice (Retd.) Jagdish Singh Khehar:** Honored in the field of **Public Affairs** from **Chandigarh**.
  - **Smt. Kumudini Rajnikant Lakhia:** Awarded for excellence in **Art** from **Gujarat**.
  - **Shri Lakshminarayana Subramaniam:** Celebrated for contributions to **Art** from **Karnataka**.
  - **Shri M. T. Vasudevan Nair (Posthumous):** Honored posthumously in **Literature and Education** from **Kerala**.

- o **Shri Osamu Suzuki (Posthumous):** Recognized posthumously for contributions to **Trade and Industry** from **Japan**.
  - o **Smt. Sharda Sinha (Posthumous):** Awarded posthumously for excellence in **Art** from **Bihar**.
- **Padma Bhushan:**
  - o **Shri A. Surya Prakash:** Honored in **Literature and Education-Journalism** from **Karnataka**.
  - o **Shri Anant Nag:** Recognized for contributions to **Art** from **Karnataka**.
  - o **Shri Bibek Debroy (Posthumous):** Awarded posthumously in **Literature and Education** from **NCT Delhi**.
  - o **Shri Jatin Goswami:** Celebrated for excellence in **Art** from **Assam**.
  - o **Shri Jose Chacko Periappuram:** Recognized for contributions to **Medicine** from **Kerala**.
  - o **Shri Kailash Nath Dikshit:** Honored in **Archaeology** from **NCT Delhi**.
  - o **Shri Manohar Joshi (Posthumous):** Awarded posthumously in **Public Affairs** from **Maharashtra**.
  - o **Shri Nalli Kuppuswami Chetti:** Recognized for contributions to **Trade and Industry** from **Tamil Nadu**.
  - o **Shri Nandamuri Balakrishna:** Honored for excellence in **Art** from **Andhra Pradesh**.
  - o **Shri P. R. Sreejesh:** Celebrated for contributions to **Sports** from **Kerala**.
  - o **Shri Pankaj Patel:** Recognized for excellence in **Trade and Industry** from **Gujarat**.
  - o **Shri Pankaj Udhas (Posthumous):** Awarded posthumously for contributions to **Art** from **Maharashtra**.
  - o **Shri Rambahadur Rai:** Honored in **Literature and Education-Journalism** from **Uttar Pradesh**.
  - o **Sadhvi Ritambhara:** Recognized for contributions to **Social Work** from **Uttar Pradesh**.
  - o **Shri S. Ajith Kumar:** Celebrated for excellence in **Art** from **Tamil Nadu**.
  - o **Shri Shekhar Kapur:** Honored for contributions to **Art** from **Maharashtra**.
  - o **Ms. Shobana Chandrakumar:** Recognized for excellence in **Art** from **Tamil Nadu**.
  - o **Shri Sushil Kumar Modi (Posthumous):** Awarded posthumously in **Public Affairs** from **Bihar**.
  - o **Shri Vinod Dham:** Celebrated for contributions to **Science and Engineering** from the **United States of America**.

Read Full List Here

28 January 2025

Joint Parliamentary Committee Approves Waqf Amendment Bill with 14 Amendments

Approval Process:

- The **Joint Parliamentary Committee (JPC)** cleared the **Waqf Amendment Bill** on January 27, 2025, adopting **14 amendments** proposed by the BJP-led NDA. Opposition amendments (44 proposals) were rejected in a **16-10 party-line vote**.
- **JPC Chairperson Jagdambika Pal** emphasized that the amendments aim to enhance governance of Waqf properties and streamline their management under the **Waqf Act, 1995**.

Committee Deliberations:

- Over a period of **six months**, the JPC held **34 sittings** totaling **108 hours**, consulting with over **284 stakeholders**.
- A total of **44 amendments** were discussed clause by clause.
- The **opposition proposed amendments** to 43 of the government's 44 proposals; however, these were defeated with **10 votes in support** and **16 against**.

Key Amendments:

- **Removal of 'Waqf by User'**: Existing Waqf properties used for religious purposes can no longer be challenged under this provision, which was omitted from the new bill.
- **Inclusion of Non-Muslims and Women**: Mandates at least **two non-Muslim members** and **two women** on State Waqf Boards and the Central Waqf Council.
- **Central Waqf Council Expansion**: Includes a union minister, three MPs, two ex-judges, and four individuals of "national repute," none required to be Muslim.
- **Donation Restrictions**: Limits donations to Muslims who have practiced their faith for **at least five years**, sparking debates over the term "practicing Muslim".

Opposition Criticism:

- Accused the JPC of **undemocratic proceedings**, alleging amendments were "steamrolled" without proper discussion.
- **Trinamool MP Kalyan Banerjee** called the process a "*black day for democracy*," citing suspended MPs and lack of transparency.
- Opposition leaders argued the bill violates **Articles 15** (non-discrimination) and **30** (minority rights) of the Constitution.

Indore and Udaipur Achieve Wetland City Accreditation

Key Highlights:

- **Historic Recognition: Indore** and **Udaipur** have become the first Indian cities to receive international recognition as **accredited wetland cities** under the **Ramsar Convention**.
- **Global Context:** An independent **Advisory Committee on Wetland City Accreditation** accredited **31 new cities**, including Indore and Udaipur, bringing the total to **74 globally**.

- **Government Acknowledgment:** Union Environment Minister **Bhupender Yadav** highlighted that this achievement reflects India's commitment to holistic urban development without compromising ecological conservation.

About the Ramsar Convention:

- **Purpose:** An **intergovernmental treaty** that provides a framework for the **conservation and wise use of wetlands** and their resources.
- **Global Participation:** Includes **172 member countries** with **85 Indian wetlands** protected under this treaty.

Significance of Wetland City Accreditation:

- **Criteria:** Cities must meet **six international criteria**, including adopting measures for the **conservation of wetlands** and their **ecosystem services**.
- **Objective:** Promotes the **conservation and wise use of urban and peri-urban wetlands**, ensuring **sustainable socio-economic benefits** for local populations.

Ministry of Information & Broadcasting Unveils Initiatives Ahead of WAVES Summit

Launch of WAVES Bazaar:

- The **Ministry of Information & Broadcasting** introduced the **WAVES Bazaar**, a global e-marketplace designed to connect India's creative talent with international markets.
- This platform enables users to showcase content, pitch projects, and establish global connections, facilitating business interactions across various entertainment sectors.

Introduction of WAVES Awards:

- Nominations for the **WAVES Awards** will open on **February 15, 2025**, celebrating excellence in creative disciplines such as **Game of the Year**, **Film of the Year**, and **Advertising Campaign of the Year**.
- Special Selection Awards will honor lifetime achievements and significant contributions in technology and social influence.

Launch of 'Create in India' Challenges:

Three new challenges were announced:
- **Resonate: The EDM Challenge**
- **Make The World Wear Khadi**
- **Wah Ustad** – focusing on classical and semi-classical music.

RBI Announces ₹1.1 Lakh Crore Liquidity Infusion into Banking System

Key Highlights:

- **Objective:** The **Reserve Bank of India (RBI)** has unveiled a plan to inject an additional **₹1.1 lakh crore** into the banking system to address the prevailing liquidity deficit.
- **Methods of Infusion:**
  - **Open Market Operations (OMOs):** The RBI will conduct **open market purchase auctions** of **Government of India securities** totaling **₹60,000 crore**, divided into

three tranches of **₹20,000 crore** each, scheduled for **January 30, February 13, and February 20, 2025**.

- o **Variable Rate Repo Auction:** A **56-day Variable Rate Repo auction** amounting to **₹50,000 crore** is planned for **February 7, 2025**.
- o **Dollar-Rupee Swap Auction:** A **$5 billion dollar-rupee swap auction** with a six-month tenor is set for **January 31, 2025**.

Context and Rationale:

- **Liquidity Conditions:** The banking system has been experiencing a liquidity deficit, with a shortfall exceeding **₹3 lakh crore** reported in the previous week, despite daily variable repo rate auctions.
- **Regulatory Engagement:** The RBI recently engaged with banks to assess the impact of new **liquidity coverage norms**, which require banks to maintain higher levels of **high-quality liquid assets (HQLAs)** to manage potential liquidity crunches.

India Confers Pravasi Bharatiya Samman Award on Trinidad and Tobago's President

Key Highlights:

- **Honoree: Christine Carla Kangaloo**, President of the Republic of Trinidad and Tobago, received the **Pravasi Bharatiya Samman Award** for her outstanding achievements in public affairs and her contributions to enhancing India's global prestige.
- **Presentation:** The award was presented by India's High Commissioner, Dr. Pradeep Rajpurohit, on behalf of President Droupadi Murmu, during a Republic Day reception hosted by the High Commission in Port of Spain.

About the Pravasi Bharatiya Samman Award:

- **Significance:** This is the highest honor conferred upon overseas Indians or organizations run by the Indian diaspora, recognizing exceptional contributions in various fields and strengthening ties between India and the global diaspora.
- **Ceremony:** The award is typically presented during the **Pravasi Bharatiya Divas** conventions, which serve as platforms for collaboration between India and its diaspora.

Prime Minister Inaugurates 'Utkarsh Odisha' – Make in Odisha Conclave 2025 in Bhubaneswar

Key Highlights:

- **Event Inauguration:** On **January 28, 2025**, Prime Minister **Narendra Modi** inaugurated the **'Utkarsh Odisha' – Make in Odisha Conclave 2025** and the accompanying **Make in Odisha Exhibition** in **Bhubaneswar**, Odisha.
- **Significance of the Conclave:**
  - o This edition marks the largest business summit in Odisha to date, with participation from **5-6 times more investors** compared to previous editions.
  - o The conclave aims to position Odisha as a pivotal player in India's **Purvodaya** vision, highlighting the state's potential as a leading investment destination and industrial hub.

Prime Minister's Address:

Eastern India's Role:

- Emphasized that **Eastern India**, particularly Odisha, serves as a **growth engine** for the nation's development.
- Historically, the region boasted significant industrial hubs, ports, and trade centers, with Odisha playing a crucial role in **South East Asian trade**.

Cultural Connections:

- Highlighted Odisha's rich cultural heritage, noting events like **Bali Yatra** that celebrate the state's historical maritime links.
- Mentioned recent engagements with leaders from **Indonesia** and **Singapore**, underscoring Odisha's enduring connections with **South East Asia**.

Investment Opportunities:

- Urged investors to seize the current moment, stating that it's an opportune time to invest in Odisha's developmental journey.
- Assured that investments in the state are poised for success, given the favorable economic and infrastructural environment.

Khelo India Winter Games 2025: Ladakh Tops Medal Tally; Indian Army Retains Ice Hockey Title

Event Overview:

- **Location and Dates:** The first phase of the **Khelo India Winter Games (KIWG) 2025** concluded on **January 27, 2025**, at the **NDS Stadium** in **Leh**, the capital of **Ladakh**.

Medal Tally Highlights:

Ladakh's Performance:

- Secured the top position with a total of **seven medals**, including **four golds**.
- Achieved victories in events such as the **mixed relay** and **women's ice hockey**.

Tamil Nadu:

- Emerged as a strong contender in **skating**, winning **three gold medals**.
- Notably, **Yashashree** clinched gold in the **women's 500m long track** event.

Maharashtra:

- Despite winning the highest number of medals (**10**), secured **two golds**, placing them third in the overall tally.

Ice Hockey Finals:

Men's Category:

- The **Indian Army** team retained their title by defeating the **Indo-Tibetan Border Police (ITBP)** with a score of **2-1**.
- The match remained goalless for the first two periods, with all goals scored in the final period.
- **Rigzin Norboo** and **Padma Norboo** were the goal scorers for the Army, while **Rigzin Norboo** netted the sole goal for ITBP.

- The **Ladakh women's ice hockey team** triumphed over ITBP with a **4-0** victory, avenging their previous year's defeat.
- This win secured them the top position in the women's round-robin league.

Upcoming Events:

- The second phase of the KIWG 2025 is scheduled to take place in **Gulmarg, Jammu & Kashmir**, from **February 22 to 25**, featuring **snow sports** such as **alpine skiing**, **Nordic skiing**, **ski mountaineering**, and **snowboarding**.

Jasprit Bumrah Honored as ICC Men's Cricketer of the Year 2024

Indian fast bowler **Jasprit Bumrah** has been awarded the prestigious **Sir Garfield Sobers Trophy** for the **ICC Men's Cricketer of the Year 2024**, recognizing his exceptional performances across all formats of international cricket during the year.

Key Achievements in 2024:

Test Cricket:

- Bumrah topped the wicket charts with **71 wickets in 13 matches**, boasting an impressive average of **14.92**.
- His standout performance came during the **Border-Gavaskar Trophy** in Australia, where he claimed **32 wickets in five matches** at an average of **13.06**, earning him the **Player of the Series** award.

T20 World Cup 2024:

- Bumrah played a pivotal role in India's triumph at the **ICC Men's T20 World Cup 2024**, held in the West Indies and the USA, contributing significantly to the team's success.

Notable Recognition:

- Bumrah becomes the **fifth Indian cricketer** to receive this esteemed award, following in the footsteps of **Rahul Dravid**, **Sachin Tendulkar**, **Ravichandran Ashwin**, and **Virat Kohli**.

Smriti Mandhana Named ICC Women's ODI Cricketer of the Year 2024

Indian batter **Smriti Mandhana** has been honored with the **ICC Women's ODI Cricketer of the Year 2024** award, recognizing her outstanding performances throughout the year.

Key Achievements in 2024:

Leading Run-Scorer:

- Mandhana amassed **747 runs in 13 innings**, achieving an impressive average of **57.46**.
- She secured the top spot as the highest run-getter in women's ODIs for the year.
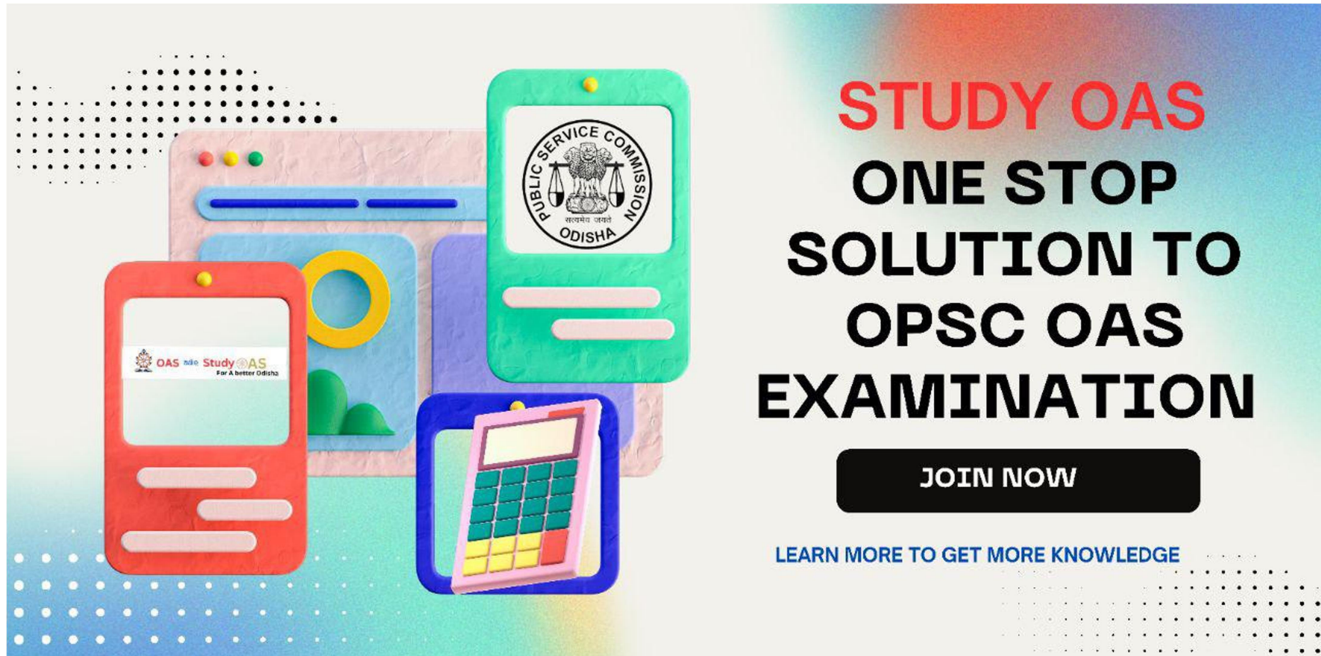
Centuries and Consistency:

- Recorded **four centuries** in 2024, setting a new benchmark in women's ODI cricket.
- Notable performances include consecutive centuries against **South Africa** and a pivotal ton in the series decider against **New Zealand**.
- Delivered a resilient century against **Australia** in Perth, showcasing her ability to perform under pressure.

Boundary Count:

- Demonstrated aggressive batting prowess by hitting over **100 boundaries**, comprising **95 fours** and **six sixes**.

Recognition and Impact:

- This accolade marks the **second time** Mandhana has received the ICC's ODI Women's Cricketer of the Year award, underscoring her sustained excellence at the international level.

29 January 2025

International Saraswati Festival 2025 Inaugurated in Haryana

Inauguration Details:

- Haryana Chief Minister **Nayab Singh Saini** inaugurated the **five-day International Saraswati Mahotsav-2025** on January 29, 2025, at **Adi Badri** in Yamunanagar's Bilaspur sub-division.
- The festival spans from **January 29 to February 2**, with events at Adi Badri, Pehowa in Kurukshetra, Kaithal, and Jind.

Associated Events:

- A **three-day international conference** titled "The Sacred Saraswati River" is scheduled at **Kurukshetra University** starting January 30, 2025.

Development Initiatives:

- The Chief Minister inaugurated and laid the foundation stone for **29 projects** worth ₹54.71 crore in Yamunanagar.
- Emphasis was placed on efforts to **revive the Saraswati River** through river linking and the construction of **Saraswati Sarovars** and reservoirs.

Historical Significance of Saraswati River:

- The **Saraswati River** holds a revered place in Indian civilization, often mentioned in ancient texts as a symbol of purity and knowledge.
- Efforts to **revive the river** aim to reconnect with this rich cultural and spiritual heritage.

Government Initiatives:

- The Haryana government has signed an agreement with **Himachal Pradesh** to ensure a **perennial flow** of water in the Saraswati River.
- Projects include the construction of a **dam on the Som River** and the development of the **Som-Saraswati barrage and reservoir**.

India and Oman Amend Double Taxation Avoidance Agreement (DTAA)

Amendment Agreement:

- On January 28, 2025, during Commerce and Industry Minister **Piyush Goyal's** visit to Muscat, India and Oman agreed to amend their existing **Double Taxation Avoidance Agreement (DTAA)**.
- The original DTAA between the two nations was implemented in **1997**.

Objectives of the Amendment:

- Align the DTAA with **international standards** on cross-border taxation.
- Simplify **tax procedures** to facilitate ease of doing business.
- Promote greater **cooperation** in tax matters between the two countries.

Future Trade Discussions:

- Both nations have agreed to expedite discussions for an early signing of the proposed **Comprehensive Economic Partnership Agreement (CEPA)**, aiming to boost bilateral trade and investments.

Significance of DTAA:

- A **Double Taxation Avoidance Agreement** is a tax treaty signed between two or more countries to help taxpayers avoid paying double taxes on the same income.
- Such agreements are crucial for promoting **cross-border trade and investment**, as they provide clarity and security to investors regarding tax liabilities.

India-Oman Economic Relations:

- Oman is the **third-largest export destination** among the Gulf Cooperation Council (GCC) countries for India.
- The bilateral trade between India and Oman was valued at **USD 8.94 billion** in 2023-24, with exports worth USD 4.42 billion and imports worth USD 4.5 billion.

India's $2 Billion Investment in Critical Minerals Sector

Significant Investment:

- The **Ministry of Mines** has allocated nearly **$2 billion** (approximately ₹16,300 crore) to develop India's **critical minerals sector**, aiming to secure essential raw materials like **lithium**.

Identification of Critical Minerals:

- In **2023**, India identified **30 minerals**, including lithium, as "critical" for its **energy transition** and to meet the growing demand from industries and the infrastructure sector.

Funding Allocation:

The proposed funding of ₹16,300 crore includes contributions from:
- **National Mineral Exploration Trust**: ₹8,700 crore
- **Department of Science and Technology**: ₹1,000 crore
- **Geological Survey of India**: ₹4,000 crore

Global Collaborations:

- India is engaging with countries like **Australia**, **Russia**, and the **United States** to seek technical assistance in developing **lithium processing technology**, a sector currently dominated by China.

Auction Initiatives:

- In late 2023, India launched the first round of its **critical minerals auction**, offering mineral blocks for development. However, only half of the 48 critical mineral blocks auctioned since November 2023 received bids.

BJP Emerges as Wealthiest Political Party in India

Financial Standing as of March 31, 2024:

- The **Bharatiya Janata Party (BJP)** reported a cash and bank balance of **₹7,113.80 crore**, significantly surpassing the **Indian National Congress (INC)**, which reported **₹857.15 crore**.

Expenditure During 2023-24:

- The BJP's expenditure rose by **60%**, totaling **₹1,754.06 crore** in 2023-24, up from **₹1,092 crore** in the previous fiscal year.
- In contrast, the Congress spent **₹619.67 crore** during 2023-24, an increase from **₹192.56 crore** in 2022-23.

Sources of Income:

- The BJP received **voluntary contributions** through electoral bonds amounting to **₹1,685.69 crore** in 2023-24, compared to **₹1,294.15 crore** in the previous year.
- The party also reported **other contributions** totaling **₹2,042.75 crore** during the year, up from **₹648.42 crore** in 2022-23.
- The Congress reported total contributions of **₹1,225.11 crore** in 2023-24, including **₹1,129.67 crore** through grants, donations, and contributions. This includes **₹828.36 crore** received via electoral bonds.

Electoral Bonds:

- Introduced in **2018**, electoral bonds are instruments that allow individuals and entities to donate to political parties without revealing their identity.
- In **2024**, the **Supreme Court of India** banned the use of electoral bonds, citing concerns over transparency and potential misuse.

Comparative Asset Analysis:

- An analysis by the **Association for Democratic Reforms (ADR)** for the fiscal year 2019-20 showed the BJP declaring assets worth **₹4,847.78 crore**, accounting for **69.37%** of the total assets declared by national parties.
- The **Bahujan Samaj Party (BSP)** and the **Congress** followed with assets of **₹698.33 crore** and **₹588.16 crore**, respectively.

'Laapataa Ladies' Nominated for Japan Academy Film Prize

Nomination Announcement:

- Kiran Rao's directorial venture, **'Laapataa Ladies' (Lost Ladies)**, has been nominated for the **Best International Film** category at the **Japan Academy Film Prize 2024**.

Competition:

The film is competing alongside notable international titles such as:
- **'Oppenheimer'** directed by Christopher Nolan
- **'Poor Things'** directed by Yorgos Lanthimos
- **'The Zone of Interest'** directed by Jonathan Glazer
- **'Civil War'** directed by Alex Garland

Award Ceremony:

- The winner will be announced on **March 14, 2025**, during the Japan Academy Film Prize ceremony.

Film's Journey:

- 'Laapataa Ladies' was India's official entry for the **2025 Academy Awards** but did not make it to the shortlist.
- The film was released in Japan on **October 4, 2024**, and received a warm reception, completing a **100-day run** at the Japanese box office.

Production Details:

- Presented by **Jio Studios**, the film is directed by **Kiran Rao** and produced by **Aamir Khan** and **Jyoti Deshpande** under the banners of **Aamir Khan Productions** and **Kindling Productions**.
- The story is based on an award-winning script by **Biplab Goswami**, with screenplay and dialogues by **Sneha Desai** and additional dialogues by **Divyanidhi Sharma**.

India's First Organic Fisheries Cluster Launched in Sikkim

Inauguration Details:

- On **January 6, 2025**, Union Minister **Shri Rajiv Ranjan Singh** inaugurated India's first **Organic Fisheries Cluster** in the **Soreng District of Sikkim**.

Project Funding:

- The Minister also laid the foundation for **50 key projects** worth **₹50 crores** under the **Pradhan Mantri Matsya Sampada Yojana (PMMSY)**, covering all North Eastern Region States except Arunachal Pradesh and Mizoram.

Objectives of the Organic Fisheries Cluster:

Sustainable Aquaculture:

- Promote **ecologically healthy fish farming** by avoiding harmful chemicals, antibiotics, and pesticides.
- Ensure **minimal environmental pollution** and prevent damage to aquatic ecosystems.

Economic Benefits:

- Capitalize on the growing demand for **organic products** in domestic and international markets.
- Enhance **export potential** of organic fish and fish products from Sikkim.

Role of NABARD:

Support and Development:

- The **National Bank for Agriculture & Rural Development (NABARD)** will provide **financial and technical assistance** for necessary fisheries infrastructure and capacity building.
- Facilitate the formation of **fisheries-based Farmer Producer Organizations (FFPOs)** and engage fishers' cooperatives in the state.

Cluster-Based Approach under PMMSY:

Enhancing Competitiveness:

- The **Pradhan Mantri Matsya Sampada Yojana (PMMSY)** adopts a **cluster-based approach** to boost the fisheries sector's competitiveness.
- Aims to **facilitate economies of scale**, generate higher incomes, and promote organized growth in fisheries and aquaculture.

Comprehensive Development:

- Focuses on various areas, including **Pearl, Seaweed, Ornamental Fisheries, Reservoir Fisheries, Fishing Harbour, Saline Water Aquaculture, Cold Water Fisheries, Sea Cage Culture, Freshwater Aquaculture, Brackish-water Fisheries, Island Fisheries Clusters, Organic Fisheries, and Wetland Fisheries**.

Tripura Pioneers Multilingual Governance in Northeast India

Historic MoU Signing:

- On **January 28, 2025**, the **Government of Tripura** signed a **Memorandum of Understanding (MoU)** with the **Digital India Bhashini Division (DIBD)** of the **Ministry of Electronics and Information Technology (MeitY)**.
- This makes Tripura the **first northeastern state** to adopt the **Bhashini initiative** for multilingual governance.

Event Details:

- The MoU was formalized during the **'Bhashini Rajyam'** workshop at **Pragna Bhavan, Agartala**.
- The event was inaugurated by **Shri Pranajit Singha Roy**, Tripura's IT Minister, and attended by key officials including **Shri Kiran Gitte**, Secretary IT, Government of Tripura, **Shri Amitabh Nag**, CEO of DIBD, MeitY, and **Shri Jeya Ragul Geshan B**, Director IT, Government of Tripura.

About the Bhashini Initiative:

Objective:

- **Bhashini** aims to ensure **seamless communication and internet accessibility** for all citizens in **22 Indian languages**.
- By leveraging **voice as a medium**, it seeks to bridge both **digital and literacy divides**.

Technological Capabilities:

- The platform offers features such as:
    - **Real-time translation**
    - **Speech-to-text**
    - **Text-to-speech**
    - **Voice-to-voice translation**
- These services facilitate communication between **Indian regional languages and English**, utilizing **Artificial Intelligence (AI)** and **Natural Language Processing (NLP)** for high-accuracy translations.

Implications for Tripura:

Addressing Language Barriers:

- Many residents, especially in **rural and tribal areas**, face challenges with software systems predominantly in **English or Hindi**.
- Integrating Bhashini can enhance accessibility by supporting regional languages.

Integration with Existing Systems:

- Bhashini can be incorporated into platforms like:
    - **CM Helpline**
    - **eVidhan**
    - **Kisan Sahayata App**
    - **e-Districts**
- This integration will enable **multilingual communication**, enhancing local governance through applications like **Amar Sarkar** and improving education with multilingual technologies.

Significance of the MoU:

Digital Inclusivity:

- This agreement underscores Tripura's commitment to **digital inclusivity**, aiming to **eliminate language barriers** and provide **multilingual access** to essential services.

Regional Identity:

- By promoting the use of regional languages in governance, the initiative enhances **regional identity** and ensures that citizens can engage with government services in their native tongues.

Assam Announces Dibrugarh as Second Capital

Official Declaration:

- On **January 26, 2025**, during the **Republic Day** celebrations, Assam's Chief Minister **Himanta Biswa Sarma** announced that **Dibrugarh** will be developed as the state's **second capital** within the next three years.

Infrastructure Developments:

- A **permanent assembly building** will be constructed in Dibrugarh.
- Starting from **2027**, one session of the **Assam Legislative Assembly** will be held annually in Dibrugarh.

Strategic Significance:

Administrative Decentralization:

- The move aims to **distribute administrative functions** more evenly across the state, reducing the concentration of governance solely in **Dispur**, the current capital.

Economic and Regional Development:

- By designating Dibrugarh as a second capital, the government seeks to **boost economic activities** and infrastructure development in **Upper Assam**, promoting balanced regional growth.

Upcoming Elections:

- This announcement is viewed as a strategic move by the **Bharatiya Janata Party (BJP)** to strengthen its presence in Upper Assam ahead of the **2026 Assembly elections**.

About Dibrugarh:

Geographical Location:

- Dibrugarh is situated approximately **435 kilometers east** of Dispur, along the **southern bank of the Brahmaputra River**.

Economic Importance:

- Known as the **"Tea City of India,"** Dibrugarh is a major hub for tea production.
- The city also has significant reserves of **oil and natural gas**, contributing to its economic prominence.

Educational Institutions:

- Home to **Dibrugarh University**, a leading educational institution in the region.

Serbian Prime Minister Resigns Amid Anti-Corruption Protests

Key Highlights:

- **Resignation Announcement:** On **January 28, 2025**, **Serbian Prime Minister Milos Vucevic** announced his resignation following extensive anti-corruption protests that erupted after a fatal incident in Novi Sad.
- **Catalyst for Protests:** In **November 2024**, a **concrete canopy at the Novi Sad railway station** collapsed, resulting in **15 fatalities**. This tragedy ignited widespread public outrage, leading to sustained demonstrations across the nation.
- **Nature of Protests:** Initially spearheaded by **university students**, the protests expanded to include **teachers, farmers, and various professionals**. Participants accused the government of **corruption** and **negligence**, holding it accountable for the disaster.

Government's Response:

- **Prior Resignations:** Before the Prime Minister's resignation, both the **Transport Minister** and the **Trade Minister** had stepped down in response to the public outcry. However, these actions failed to quell the growing unrest.
- **President's Stance: President Aleksandar Vucic** condemned the protests and suggested that foreign influences were exacerbating the situation. He indicated that the ruling **Serbian Progressive Party** would decide within ten days whether to form a new government or call for **snap elections**, potentially in **April 2025**.

Protesters' Demands:

- **Interim Government:** Demonstrators are advocating for the establishment of an **interim government** composed of experts, with the approval of student leaders, to oversee the nation's affairs until new elections can be held.

China Develops Seabed Radar Enabling Submarines to Detect High-Flying Aircraft

Technological Breakthrough:

- Chinese scientists have developed the world's first **seabed-based radar system** capable of detecting and tracking **high-altitude aircraft** from underwater positions.

Successful Testing:

- An **acoustic sensor array** was deployed at a depth of **1,000 meters** (approximately 3,280 feet) on the seabed.
- This system successfully detected and tracked a **fixed-wing aircraft** flying at an altitude of **5,000 meters** (about 16,400 feet).

Significance in Naval Warfare:

Enhanced Submarine Capabilities:

- Traditionally, **anti-submarine warfare aircraft** possess advanced sensors to detect and attack submarines without being detected.
- With this new radar, submarines can receive **early warnings** and obtain approximate coordinates of overhead aircraft, enabling them to **launch missiles from underwater** to neutralize these threats.

Technical Challenges and Solutions:

Signal Detection:

- Typically, sound waves generated by aircraft are reflected back into the sky upon hitting the sea surface, with only a small fraction penetrating the water.
- The research team theorized that some of these sound waves would reflect off the seabed, return to the surface, and bounce back again, traveling long distances.
- By capturing these faint signals, they aimed to enhance detection sensitivity.

Interference Management:

- A significant challenge was interference caused when reflected signals overlapped with direct signals, leading to false readings.
- The researchers overcame this by identifying and utilizing specific patterns in the signals to accurately determine the altitude and coordinates of the targets.

Potential Limitations:

- The system's detection range is currently limited to less than **20 kilometers** (approximately 12.4 miles).
- It is also unable to detect aircraft flying directly overhead.
- Researchers are working to overcome these limitations to enhance the system's operational effectiveness.

30 January 2025

Martyrs' Day: Honoring Mahatma Gandhi and India's Bravehearts

Date and Significance:

- Every year, on **January 30**, India observes **Martyrs' Day**, also known as **Shaheed Diwas** or **Sarvodaya Day**, to honour those who sacrificed their lives for the nation's freedom.
- This date marks the **assassination of Mahatma Gandhi** in 1948.

Assassination of Mahatma Gandhi:

- On **January 30, 1948**, during an evening prayer meeting at **Birla House** in New Delhi, **Nathuram Godse**, a Hindu nationalist, fatally shot **Mahatma Gandhi**.
- Gandhi, affectionately called **Bapu**, was a central figure in India's struggle for independence, advocating for **non-violence** and **peaceful resistance** against British rule.

Commemoration Activities:

- Leaders, government officials, and citizens gather at **Raj Ghat** in Delhi, Gandhi's memorial site, to pay homage.
- Ceremonies include **prayer meetings**, **all-religion prayers**, and **silent tributes** to honor Gandhi's legacy and the sacrifices of other martyrs.

Nationwide Observance:

- At **11 AM** on January 30, a **two-minute silence** is observed across the country to remember the martyrs.
- Educational institutions and organizations conduct events to educate the younger generation about the importance of the day and the values Gandhi espoused.

Accelerated Ocean Warming: A Quadruple Increase Since the 1980s

Current Findings on Ocean Warming

Significant Increase in Warming Rate:

- Recent studies indicate that the **rate of ocean warming has more than quadrupled** over the past four decades.
- In the late 1980s, ocean temperatures were rising at approximately **0.06 degrees Celsius per decade**; currently, this rate has escalated to **0.27 degrees Celsius per decade**.

Recent Temperature Records:

- The years **2023 and early 2024** experienced **unprecedented ocean temperatures**, underscoring the accelerating trend of oceanic heat accumulation.

Implications of Accelerated Ocean Warming

Impact on Marine Ecosystems:

- Elevated sea temperatures contribute to the **bleaching of coral reefs**, threatening biodiversity.
- Alterations in **fish migration patterns** can disrupt global fisheries and food security.

- Warmer oceans provide more energy for **tropical storms and hurricanes**, potentially increasing their frequency and intensity.
- Changes in sea surface temperatures can influence **global weather patterns**, leading to extreme events such as heatwaves and heavy rainfall.

Additional Information

- **Ocean Heat Content**: The **ocean absorbs over 90% of the excess heat** from greenhouse gas emissions, playing a crucial role in regulating the Earth's climate.
- **Marine Heatwaves**: The frequency of **marine heatwaves** has **doubled since the 1980s**, posing significant risks to marine life and coastal economies.
- **Global Sea Level Rise**: Thermal expansion of seawater, combined with melting polar ice, contributes to **rising sea levels**, threatening low-lying coastal regions.

Menstrual-Related Absenteeism in South Asia: A Significant Concern

Key Findings from Recent Study

Prevalence of Absenteeism:

- Approximately **20% of women and girls in South Asia** refrain from daily activities during menstruation.
- Globally, about **15% of females in low- and middle-income countries** experience menstruation-related absenteeism.

Age Group Most Affected:

- Girls aged **15-19 years** are particularly impacted, with over **17%** not participating in regular activities during their periods.

Geographical Comparison:

- After South Asia, **West and Central Africa** have the next highest prevalence, with **18.5%** of females avoiding daily tasks during menstruation.

Additional Insights

- **Influence of Household Wealth and Menstrual Products**: The study found **no significant correlation** between household wealth or the use of menstrual products (such as sanitary pads or tampons) and menstruation-related absenteeism.
- **Impact of Private Washing Facilities**: Having access to a **private place to wash at home** was associated with a higher prevalence of menstrual-related absence, suggesting that women and girls might prefer to stay home to manage their menstrual health needs.
- **Effect of Contraceptive Use**: Use of **hormonal contraceptives** was linked to reduced absences during menstruation, possibly due to alleviation of symptoms like heavy bleeding or pain.

Broader Context and Implications

Cultural Taboos and Restrictions:

- In many South Asian communities, menstruation is surrounded by **taboos and misconceptions**, leading to restrictions on movement, behavior, and participation in daily activities.
- For instance, in Nepal, traditional practices often isolate menstruating women, considering them impure.

- A significant number of girls miss school during their periods due to lack of access to proper sanitation facilities and menstrual products.
- A study highlighted that more than a **third of girls in South Asia** miss school during menstruation, often due to inadequate access to toilets or sanitary pads.

Health and Hygiene Challenges:

- The stigma associated with menstruation can lead to poor menstrual hygiene management, increasing the risk of infections and other health issues.

Recommendations for Improvement

- **Enhance Menstrual Education**: Implement comprehensive menstrual health education programs to dispel myths and reduce stigma.
- **Improve Sanitation Facilities**: Ensure access to private and hygienic washing facilities in schools and public places to support menstrual hygiene management.
- **Promote Access to Menstrual Products**: Make affordable and effective menstrual products available to all women and girls, especially in low-income and rural areas.
- **Address Cultural Taboos**: Engage community leaders and stakeholders to challenge and change harmful cultural practices and beliefs related to menstruation.

ASER 2024: Progress Amid Persistent Educational Challenges in India

Recovery in Foundational Skills:

- The **Annual Status of Education Report (ASER) 2024**, conducted by the **Pratham Education Foundation**, indicates a rebound in foundational literacy and numeracy skills among rural students, reversing declines observed during the COVID-19 pandemic.
- In government schools, the proportion of **Class 3 students** able to read a **Class 2-level text** increased from **16.3% in 2022** to **23.4% in 2024**, marking the highest level since ASER's inception in 2005.
- Similarly, **Class 5 students** demonstrating the same reading proficiency rose from **38.5% in 2022** to **44.8% in 2024**, approaching the **2018 level of 44.2%**.

Persistent Challenges

- **Regional Disparities**: Despite overall improvements, significant **regional disparities** persist, with some states lagging in educational outcomes.
- **Gender Gaps**: The report highlights ongoing **gender gaps**, particularly in access to education and learning achievements, necessitating targeted interventions.
- **Decline in Government School Enrolments**: A notable **decline in government school enrolments** has been observed, with more parents opting for private institutions, potentially due to perceptions of better-quality education.

SEBI Introduces iSPOT Portal for Reporting Technical Glitches

Overview of iSPOT Portal

- **Launch Announcement**: On January 28, 2025, the **Securities and Exchange Board of India (SEBI)** announced the launch of a web-based platform named **iSPOT** (Integrated SEBI Portal for Technical Glitches).

- **Purpose**: The portal is designed for **Market Infrastructure Institutions (MIIs)**, including stock exchanges, clearing corporations, and depositories, to report technical glitches efficiently.

Key Features of iSPOT

- **Streamlined Reporting**: MIIs are required to submit both **preliminary** and **final Root Cause Analysis (RCA)** reports of technical issues through iSPOT, replacing the previous email-based submission system.
- **Integration**: iSPOT is integrated with the **SEBI Intermediary (SI) portal**, allowing MIIs to access it using their existing login credentials.
- **Enhanced Data Management**: The portal aims to improve **data quality**, **traceability of historical submissions**, and provides **system-generated reports** to monitor compliance more effectively.
- **Automated Notifications**: iSPOT will send automated reminders to MIIs for timely submission of RCA reports following a preliminary report.

Implementation Timeline

- **Effective Date**: The directives outlined in SEBI's circular will come into effect on **February 3, 2025**.

Coal India Limited Recognized Among India's Top 50 Best Workplaces in Manufacturing 2025

Key Highlights

- **Prestigious Recognition**: Coal India Limited (CIL) has been honored as one of **India's Top 50 Best Workplaces in Manufacturing 2025** by the **Great Place to Work® Institute**.
- **Evaluation Process**: This accolade follows a comprehensive assessment involving **347 organizations** within the manufacturing sector, underscoring CIL's commitment to fostering a culture of trust, pride, and camaraderie among its workforce.

About Coal India Limited

- **Company Profile**: CIL is a **Maharatna company** under the **Ministry of Coal, Government of India**, and holds the distinction of being the **world's largest coal producer**.
- **Contribution to Energy Sector**: The company plays a pivotal role in meeting over **80% of India's domestic coal demand**, significantly contributing to the nation's energy security.

Significance of the Recognition

- **Employee-Centric Initiatives**: This recognition highlights CIL's dedication to creating a supportive and empowering environment for its employees, focusing on workforce excellence and well-being.
- **Previous Accolades**: CIL has previously received the 'Great Place to Work' certification, reflecting its consistent efforts in building an inclusive and sustainable organizational culture.

Tamil Nadu Unveils Official Logo and Mascot for 23rd National Para Athletics Championship 2025
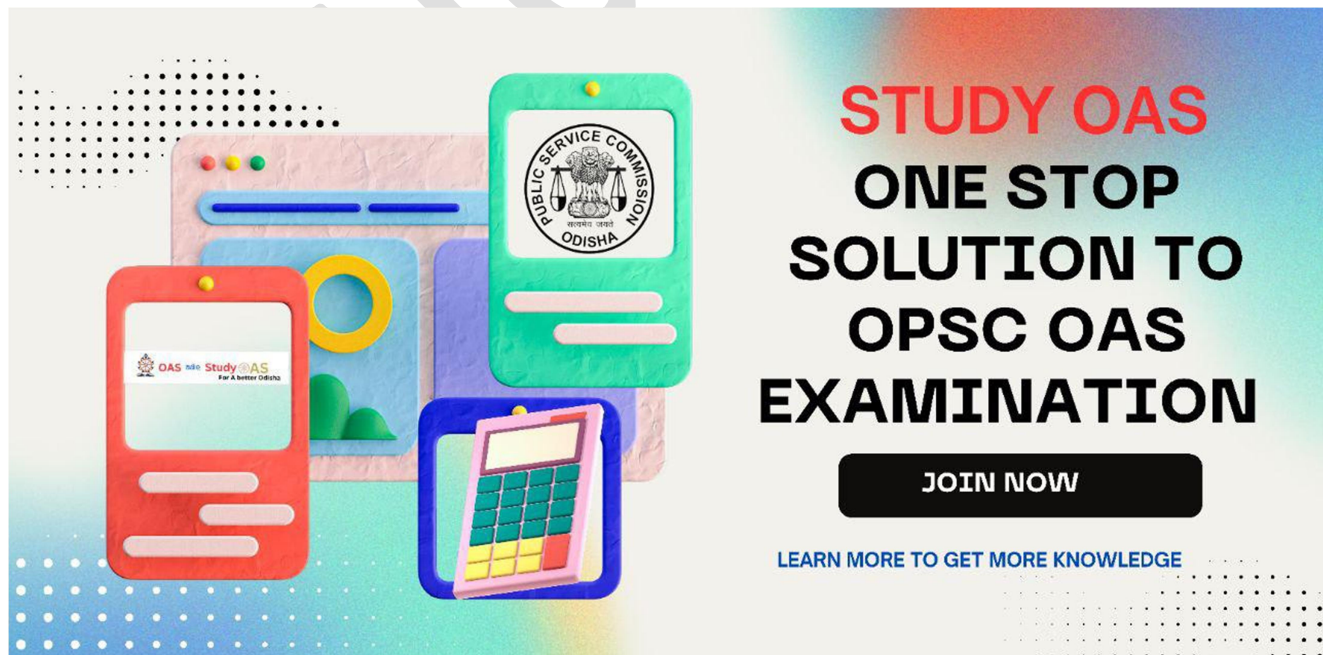
Event Details

- **Championship Schedule**: The **23rd National Para Athletics Championship 2025** is slated to occur from **February 17 to 20, 2025**, in **Chennai, Tamil Nadu**.
- **Participation**: The event is expected to host over **1,700 para-athletes** from across India, celebrating their resilience, determination, and sporting excellence.

Unveiling Ceremony Highlights

- **Date and Venue**: The official logo and mascot were unveiled on **January 29, 2025**, in Chennai.
- **Dignitaries Present**: The ceremony was graced by prominent figures, including:
  - **Atulya Misra**, Additional Chief Secretary of Tamil Nadu
  - **Meghanath Reddy**, Member Secretary of the Sports Development Authority of Tamil Nadu (SDAT) & Organizing Chairman
  - **Jayawant Gundu**, Secretary of the Paralympic Committee of India
  - **Thulasimathi Murugesan**, Arjuna Awardee and Indian para-badminton player
  - **Kirubakara Raja**, Secretary of the Tamil Nadu Paralympic Sports Association

Significance of the Championship

- **Inclusivity and Empowerment**: The championship underscores Tamil Nadu's commitment to the empowerment of para-athletes, providing them with a platform to showcase their talents and inspire the nation.
- **Organizational Support**: The **Sports Development Authority of Tamil Nadu (SDAT)**, in collaboration with the **Tamil Nadu Para Sports Association**, has been instrumental in organizing the event, reflecting the state's dedication to advancing sports and inclusivity.

Economic Survey 2024-25: Key Highlights and Insights

GDP Growth Projections:

- *FY25:* India's **Real GDP** is estimated to grow at **6.4%**, aligning closely with the decadal average.
- *FY26:* Projected growth is between **6.3% and 6.8%**, considering various economic factors.

Sectoral Growth Estimates for FY25:

- **Agriculture:** Expected to rebound with a growth of **3.8%**, supported by favourable monsoons and increased Kharif production.
- **Industry:** Anticipated growth of **6.2%**, driven by construction activities and utilities.
- **Services:** Projected robust growth at **7.2%**, led by financial services, real estate, and public administration.

Inflation Trends:

- **Retail Headline Inflation** softened to **4.9%** during April-December 2024.
- **Consumer Price Inflation** is expected to align with the target of around **4%** in FY26.

Trade and Investment:

- **Overall Exports:** Grew by **6.0%** year-on-year during April-December 2024.
- **Services Exports:** Notable surge of **12.8%** during April–November FY25, up from **5.7%** in FY24.
- **Gross FDI Inflows:** Increased from **USD 47.2 billion** in the first eight months of FY24 to **USD 55.6 billion** in the same period of FY25, marking a year-on-year growth of **17.9%**.

Foreign Exchange Reserves:

- Stood at **USD 640.3 billion** as of December 2024, sufficient to cover **10.9 months of imports** and approximately **90% of external debt**.

Infrastructure and Energy:

- **Capital Expenditure (Capex):** Grew by **8.2%** between July and November 2024, with expectations of further acceleration.
- **Renewable Energy:** Capacity addition in solar and wind power increased by **15.8%** year-on-year in December 2024.

Social Indicators:

- **Unemployment Rate:** Declined to **3.2%** in 2023-24 from **6.0%** in 2017-18.
- **Government Health Expenditure:** Increased from **29.0%** to **48.0%**; the share of out-of-pocket expenditure in total health expenditure declined from **62.6%** to **39.4%** between FY15 and FY22.

Additional Insights:

- **Deregulation for Growth:** The Survey advocates for systemic deregulation to accelerate and sustain economic growth, emphasizing the need for an environment that fosters economic freedom for businesses and individuals.
- **Infrastructure Investment:** A continued increase in infrastructure investment over the next two decades is deemed essential to maintain high growth rates.

- **Self-Reliant India Fund:** A **₹50,000 crore** fund has been launched to provide equity funding to Micro, Small, and Medium Enterprises (MSMEs), aiming to bolster self-reliance in the sector.

Government Approves Mutual Credit Guarantee Scheme to Strengthen MSME Manufacturing Sector

Scheme Introduction:

The Government of India has approved the **Mutual Credit Guarantee Scheme for MSMEs (MCGS-MSME)**, aiming to provide **60% guarantee coverage** through the **National Credit Guarantee Trustee Company Limited (NCGTC)** to **Member Lending Institutions (MLIs)** for credit facilities up to **₹100 crore** sanctioned to eligible MSMEs for the purchase of equipment or machinery.

Key Features of the Scheme:

- **Eligibility:** Borrowers must be **MSMEs** with a valid **Udyam Registration Number**.
- **Loan Limit:** The guaranteed loan amount shall not exceed **₹100 crore**, though the project cost can be higher.
- **Equipment Cost:** A minimum of **75%** of the project cost should be allocated to equipment or machinery.

Repayment Terms:

- For loans up to **₹50 crore**:
- **Repayment Period:** Up to **8 years**.
- **Moratorium Period:** Up to **2 years** on principal instalments.
- For loans above **₹50 crore**:
- Longer repayment schedules and moratorium periods can be considered.
- **Upfront Contribution:** An initial contribution of **5%** of the loan amount is required at the time of applying for the guarantee cover.

Annual Guarantee Fee:

- **Year of Sanction:** No fee.
- **Next 3 Years: 1.5% per annum** of the loan outstanding as of March 31 of the previous year.
- **Thereafter: 1% per annum** of the loan outstanding as of March 31 of the previous year.

Scheme Duration:

Applicable to all loans sanctioned under MCGS-MSME during a period of **4 years** from the date of issuance of operational guidelines or until cumulative guarantees of **₹7 lakh crore** are issued, whichever is earlier.

Additional Insights:

Impact on Manufacturing Sector:

- The manufacturing sector currently contributes **17%** to India's GDP and employs over **27.3 million** workers.
- The scheme is expected to boost manufacturing by facilitating credit availability for purchasing plant and machinery, aligning with the 'Make in India' initiative.

- With global supply chains realigning, India is emerging as an alternative supply source due to its raw materials, low labour costs, and growing manufacturing expertise.
- The high fixed costs of plant and machinery have been a barrier for MSMEs.
- Industry associations have highlighted the need for a credit guarantee scheme, especially for medium-sized enterprises.
- The MCGS-MSME aims to address these challenges by facilitating collateral-free loans for MSMEs seeking debt capital for expansion and growth.

Sachin Tendulkar Honoured with BCCI's Lifetime Achievement Award

Award Announcement:

The **Board of Control for Cricket in India (BCCI)** has announced that **Sachin Tendulkar** will be conferred with the **Colonel C.K. Nayudu Lifetime Achievement Award** at its annual awards ceremony on **February 1, 2025**.

Significance of the Award:

This prestigious award, instituted in **1994** in honour of India's first Test captain, **Colonel C.K. Nayudu**, recognizes individuals who have made unparalleled contributions to Indian cricket.

Sachin Tendulkar's Cricketing Milestones:

- **International Debut:** Made his debut at the age of **16** in a Test match against **Pakistan** in **1989**.
- **Record-Breaking Career:**
    - **Test Matches:** Accumulated **15,921 runs** in **200 matches**, making him the highest run-scorer in Test cricket history.
    - **One Day Internationals (ODIs):** Scored **18,426 runs** in **463 matches**, holding the record for the most runs in ODIs.
    - **Centuries:** The only cricketer to have achieved **100 international centuries**, with **51 in Tests** and **49 in ODIs**.
- **World Cup Triumph:** A pivotal member of the Indian team that won the **2011 ICC Cricket World Cup**, fulfilling a long-cherished dream.

Sunita Williams Sets New Spacewalking Record Amid Extended ISS Mission

Record-Breaking Spacewalk:

- On **January 30, 2025**, **NASA astronaut Sunita Williams** conducted a **5.5-hour spacewalk** alongside fellow astronaut **Barry "Butch" Wilmore**.
- During this mission, Williams surpassed former astronaut **Peggy Whitson's** total spacewalking time of **60 hours and 21 minutes**, setting a new record for cumulative spacewalk duration by a female astronaut.

Mission Context:

- Williams and Wilmore have been aboard the **International Space Station (ISS)** since **June 2024**.

- Their return to Earth has been delayed due to technical issues with the **Boeing Starliner** spacecraft, extending their mission significantly beyond the planned duration.

Spacewalk Objectives:

The primary goals of the spacewalk included:
- Removing a faulty **radio communications unit** that had previously resisted extraction attempts.
- Collecting surface material samples from the **Destiny laboratory** and **Quest airlock** for analysis.

Additional Insights:

- **Extended Mission Challenges:**

The prolonged mission has posed unique challenges, including:
- Extended exposure to microgravity, affecting muscle mass and bone density.
- Psychological impacts of prolonged isolation and confinement.
- Logistical considerations for life support and supplies.
- **Upcoming Plans:** NASA has scheduled their return aboard the **SpaceX Crew-9** mission at the end of **March 2025**, which will conclude their nearly **300-day** stay in space.

Pakistan Moves to Criminalize Organized Begging Amid International Concerns

Government Initiative:

In response to multiple complaints from foreign nations, particularly members of the **Gulf Cooperation Council (GCC)**, **Iraq**, and **Malaysia**, the **Government of Pakistan** has proposed criminalizing **organized begging**.

Legislative Amendment:

The **Interior Ministry** has introduced the **Prevention of Trafficking in Persons (Amendment) Bill 2024**, aiming to incorporate "organized begging" into **Section 3** of the existing law.

International Complaints:

Diplomatic missions have reported an increase in Pakistani nationals engaging in begging during religious pilgrimages such as **Hajj** and **Umrah**, leading to global embarrassment and visa restrictions for Pakistani travellers.

Additional Insights:

- **Organized Begging Networks:** These networks often exploit vulnerable individuals, including children, forcing them into begging activities.
- **Economic Impact:** Reports suggest that the begging industry in Pakistan generates significant revenue, with estimates reaching up to **$42 billion annually**.
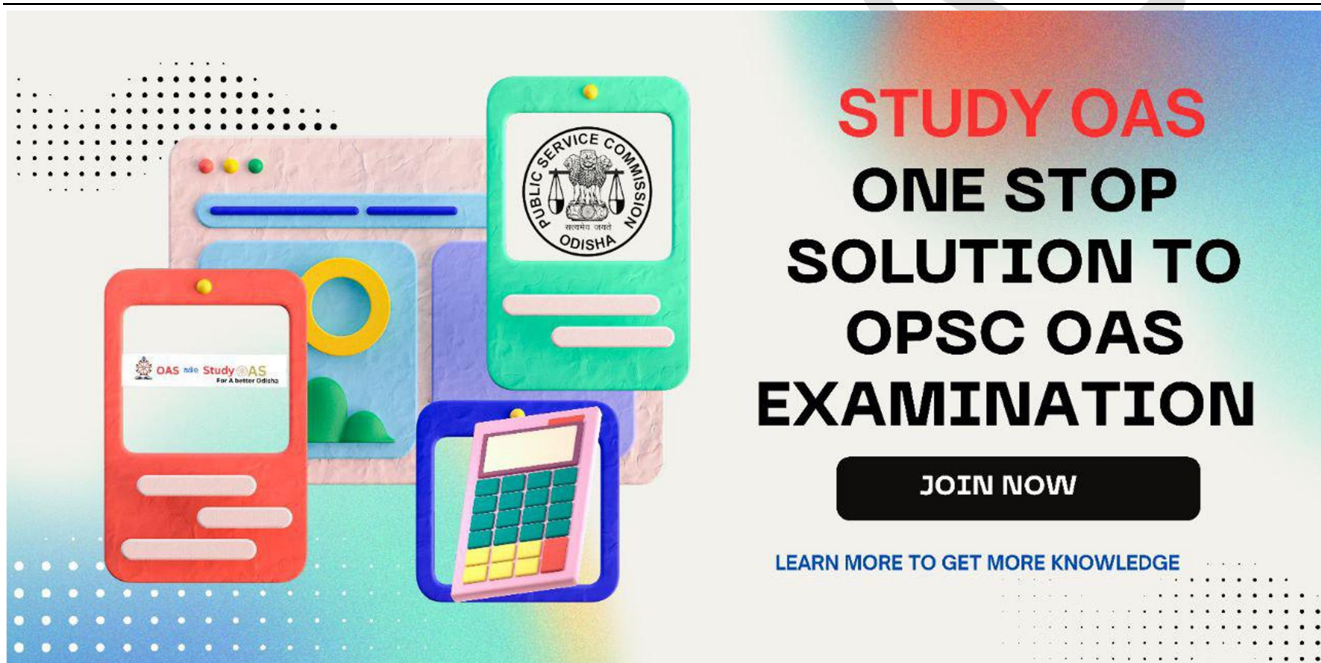

India Leads Global Passenger Load Factor in Domestic Aviation

Current Affairs Details:

- **Record Passenger Load Factor:** In 2024, India's domestic flights achieved a **passenger load factor (PLF)** of **86.4%**, surpassing the United States and China, which recorded PLFs of 84.1% and 83.2% respectively.
- **Passenger Volume:** The **Directorate General of Civil Aviation (DGCA)** reported that India's aviation sector transported **163 million** domestic passengers in 2024.

Additional Insights:

- **Global Context:** Brazil ranked fourth with a PLF of 81.9%, followed by Australia at 81.8% and Japan at 78%.
- **Industry Growth:** The **International Air Transport Association (IATA)** highlighted that both domestic and international travel demand reached record highs in 2024, with total passenger traffic increasing by 10.4% compared to 2023.