

# TNPSC THERVUPETTAGAM CURRENT AFFAIRS JANUARY 2024

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## TNPSC BITS

- ❖ Tamil Nadu and Kerala Chief Ministers jointly released a souvenir to mark the centenary celebrations of Vaikom Satyagraha at Chennai.
- ❖ The Centre appointed Nina Singh as the Director General of CISF.
  - It is making her the first woman to head this elite force.
- ❖ President of India has nominated Justice Sanjiv Khanna of the Supreme Court as Executive Chairperson of the National Legal Services Authority (NALSA).
- ❖ Around 1,300 tabla players performed at the 99th International Tansen Samaroh in Gwalior in Madhya Pradesh.
  - It has entered the Guinness World Records for achieving the “largest tabla ensemble”.
- ❖ Sports entrepreneur Vita Dani has become the first Indian to be inducted as a governing board member of the International Table Tennis Federation's (ITTF) Foundation.
- ❖ P Indira Devi, ICAR Emeritus professor at Kerala agricultural university (KAU) was conferred with the title of the Indian society of agricultural economics (ISAE) fellow 2023.
- ❖ Mr. L.P. Hemanth K. Srinivasulu, the newly appointed Director of the Latin America and Caribbean Trade Council, was honored with the prestigious "Man of the Year-2023."
- ❖ The Ayodhya railway junction was given a new name as Ayodhya Dham.
- ❖ Jacques Delors, a former head of the EU Commission and key figure in the creation of the euro currency, has passed away recently.
- ❖ India has made its first-ever payment in rupees for crude oil obtained from the UAE.
  - It is marking a significant move in the country's initiative to promote the global use of its local currency.
- ❖ Thatchankurichi village in Pudukottai district is to be host Tamil Nadu's first jallikattu of 2024 on January 06.
- ❖ Priya Ravichandran, the first officer from the Fire and Rescue Services Department, has been inducted into the Indian Administrative Service (IAS).
  - She was the first woman officer inducted into the Fire and Rescue Services in Tamil Nadu and would be the first woman from the Fire and Rescue Services to be inducted into the IAS.
- ❖ Para-Military forces will completely switch to 'Sandes App' for all official communication and sharing of documents from the first week of January.



- ❖ The Ministry of Health and Family Welfare launched 'MedTech Mitra (Medical Technology Mitra).
  - It aims to empower MedTech Innovators and advance healthcare solutions.
- ❖ With the world's largest grassroot oil refinery in Jamnagar and OPaL petrochemical complex at Dahej in Bharuch district, Gujarat is now recognised as the 'petro capital' of India.
- ❖ The new airport in Ayodhya has been named after sage poet Maharishi Valmiki.
  - Previously its name decided as Maryada Purushottam Shri Ram International Airport.
- ❖ The former vice-chairman of NITI Aayog Arvind Panagariya has been appointed as the chairman of the 16th Finance Commission.
- ❖ The country's first all-girl Sainik School inaugurated at Vrindavan in Uttar Pradesh's Mathura district.
- ❖ India's Koneru Humpy won the women's individual silver medal at the 2023 World Rapid Chess Championships held in Samarkand, Uzbekistan.
- ❖ Jio is working with IIT Bombay on an artificial intelligence project called Bharat GPT.
- ❖ An appellate court in Qatar has commuted the death sentence handed out to eight former Indian Navy officers, allegedly over charges of espionage.
- ❖ The tenth phase of Sagar Parikrama, a coastal yatra spreading awareness about government welfare schemes began from Chennai Port.
  - This edition covers villages across Andhra Pradesh and Puducherry.
- ❖ The 12th 'Divya Kala Mela,' took place in Surat, Gujarat.
  - It aims to contribute to the economic empowerment of Persons with Disabilities (PwD)/Divyangjan.
- ❖ The Catholic Church has observed the World Day of Peace on January 1, the Solemnity of Mary, Mother of God, since 1968.
- ❖ The Joint Military Exercise 'Desert Cyclone 2024' between India and UAE is held in Rajasthan.
- ❖ Gujarat has set a Guinness record by performing mass Surya Namaskar simultaneously at 108 places in the state including Modhera Sun Temple with more than 4000 people participation.
- ❖ Recently, the Demonstration Fast Reactor Fuel Reprocessing Plant (DFRP) at the Indira Gandhi Centre for Atomic Research in Kalpakkam in Chengalpattu district was dedicated to the nation by PM Modi.
  - It is the first industrial-scale plant in the world that is capable of handling both carbide and oxide spent fuels from fast reactors.



- ❖ Françoise Bettencourt Meyers has become the first woman in the world to be worth over \$100 billion, according to the Bloomberg Billionaires Index.
- ❖ The Uttar Pradesh's first floating airconditioned restaurant run by UPSDTC, was inaugurated on Yamuna River.
- ❖ The Tamil Nadu government has sanctioned 109 additional posts of revenue officials to handle the volume of work involved in Kalaingar Magalir Urimai Thittam (KMUT).
- ❖ For the first time, the commercial arm of the Indian Space Research Organisation (ISRO) will launch a communication satellite - GSAT-20 on a SpaceX rocket.
- ❖ The Kochi-Lakshadweep islands submarine optical fiber connection (KLI-SOFC) project was inaugurated recently.
  - This project will ensure 100 times much faster Internet for the people of Lakshadweep.
- ❖ The Similipal kai chutney made with red weaver ants by the tribal people of Odisha's Mayurbhanj district received the geographical identity tag.
- ❖ The National Highways Authority of India (NHAI) has entered into a three-year MoU with the National Remote Sensing Centre (NRSC) to develop a "Green Cover Index" for the country's extensive network of National Highways.
- ❖ Reliance Industries become the first Indian company to chemically recycle plastic waste-based pyrolysis oil into International Sustainability and Carbon Certification (ISCC)-Plus certified circular polymers.
- ❖ Kenya's Beatrice Chebet shatters the women's world 5km record at the prestigious Cursa dels Nassos road race in Barcelona in Spain by finishing in 14:13\*.
  - The previous women-only world record of 14:29 set by Ethiopia's Senbere Teferi in 2021.
- ❖ Tamil Nadu has included Village Cooking YouTube Channel, to showcasing its rural talent in the creative economy space in Global Investors Meet (GIM) 2024.
- ❖ Adidas is going to set up its first and only global capacity centre (GCC) in Asia outside China in Chennai.
- ❖ The Aviation major Boeing is signed a MoU to invest Rs 300 crore at its global engineering capability centre (GECC) in Chennai.
- ❖ North India's first industrial biotech park was inaugurated at Kathua in Jammu.
- ❖ The International Mind-Body Wellness Day is observed on January 3 to promote self-care, mindfulness, and healthy practices to make people aware of the mind-body connection.



- ❖ IIT Bombay has developed an instrument named GoldN (Golden) for melt-mixing of waste thermoplastic polymers and inorganic particulate fillers to manufacture polymer composites.
- ❖ GlobalSpace Technologies Ltd unveiled 'GoRoga,' an anti-stress wearable.
  - It is India's first in this kind.
- ❖ All India Conference of Directors General and Inspectors Generals of Police 2023 was held at Jaipur, Rajasthan.
- ❖ Tamil Nadu Chief Minister unveiled a blueprint for making the State a \$1 trillion economy by 2030 and Semiconductor and Advanced Electronics Policy, 2024 in the GIM2024.
- ❖ Brazilians Football legend Mario Zagallo, a four-time World Cup-winning player and coach passed away recently.
- ❖ The 19th edition of the NAM summit will be held in Uganda's capital Kampala.
- ❖ In a display of inclusivity and empowerment, the International Purple Fest 2024 has commenced in Goa.
- ❖ Tamil Nadu Government announced that the modern film city to be built in Poonamallee, at a cost of ₹500 crore on 140 acres of land.
- ❖ The Indian Army Chief Gen MM Naravane authored a Book names "Four Stars of Destiny" .
- ❖ Nepal and India signed a power trade agreement on Thursday for Kathmandu to export 10,000 megawatts (MW) of hydroelectricity to India over the next 10 years.
- ❖ Renowned Bengali writer Shirshendu Mukhopadhyay has been awarded the 2023 Kuvempu Rashtriya Puraskar.
- ❖ The Vice Admiral Dinesh K. Tripathi was appointed as new Vice Chief of the Naval Staff.
- ❖ Birmingham University Professor Adrian Michael Cruise honored with Officers of the Order of the British Empire (OBE) for his services to Space Science.
- ❖ Hero MotoCorp's manufacturing facility in Gurugram bagged the CII National Award for Excellence in Water Management, securing the top position in the 'Within the Fence' category.
- ❖ The Inland Waterways Authority of India (IWAI) hosting the first meeting of recently constituted Inland Waterways Development Council (IWDC) in Kolkata.
- ❖ SVAMITVA Scheme had won the prestigious Gold Prize in National Awards for e-Governance 2023 in the category "Use of Emerging Technology for Providing Citizen-Centric Services".
- ❖ The country's first healthy & hygienic food street, 'Prasadam', was inaugurated in Ujjain, Madhya Pradesh.



- ❖ The Assam government launched 'Baayu,' an app-based 100% electric bike taxi service.
- ❖ Kerala's Suchetha Satish performed in a total of 140 languages during a concert titled Concert for Climate in Dubai, UAE.
  - He bagged the Guinness World Record for this.
- ❖ Senior diplomat of India Indra Mani Pandey assumed the position of Secretary General (SG) of BIMSTEC.
- ❖ Microsoft has unveiled a new initiative, the AI Odyssey.
  - It was designed to equip 1,00,000 developers in India with AI technologies and tools.
- ❖ ONGC commenced its 'first oil production' from the deep-water KG-DWN 98/2 Block in the Krishna Godavari (KG) basin off the Bay of Bengal on the Kakinada coast, Andhra Pradesh.
- ❖ Gabriel Attal becomes France's youngest and first openly gay prime minister.
  - He replaced Élisabeth Borne, the second women PM of France.
- ❖ Germany defeated Poland in the tennis final to win the 2024 United Cup.
- ❖ Senior advocate PS Raman is set to be appointed the next advocate general of Tamil Nadu.
  - This is his second stint in the post after having been AG between 2009 and 2011.
- ❖ The 'Indus Food 2024', exhibition to showcase India's vibrant and diverse food ecosystem, was held in Greater Noida, Uttar Pradesh.
- ❖ Famous musician Ustad Rashid Khan passed away recently at Kolkata.
- ❖ The WHO launched International Classification of Diseases (ICD) 11, Traditional Medicine Module 2.
  - The data and terminology relating to diseases based on Ayurveda, Siddha and Unani Medicine have been included in the WHO ICD-11 classification.
- ❖ In a first, India is set to chair and host 46<sup>th</sup> UNESCO's World Heritage Committee session in New Delhi.
- ❖ The union government has appointed IAS officer Senthil Pandian C as ambassador to the World Trade Organisation (WTO) in Geneva.
- ❖ Jaipur's Divyakriti Singh becomes the first Indian woman to get Arjuna Award in equestrian games.
- ❖ The Indian Institute of Technology- Madras (IIT Madras) is all set to open a new campus at Kandy, Sri Lanka.



- ❖ Two scientists from Mauritius and one from Bangladesh have joined the 43rd Antarctic expedition of India, led by the National Centre for Polar and Ocean Research in Goa.
- ❖ The navies of India, Japan, South Korea, Australia, and the US are participating in the multinational maritime exercise Sea Dragon-24.
- ❖ The National Human Trafficking Awareness Day is observed on January 11 in the United States.
- ❖ Lily Gladstone, an Indigenous woman of Blackfoot and Nez Perce background, becomes the first Indigenous person to win a Golden Globe for best actress for Killers of the Flower Moon film.
- ❖ Chennai is the safest city for women in the country as per statistics of the National Crime Records Bureau (NCRB).
- ❖ The Greater Chennai Corporation has been ranked 199 among 446 cities in the country in Swachh Survekshan.
- ❖ TN Chief Minister launched Chennai Sangamam 'Namma Ooru Thiruvizha'.
  - The festival showcases a range of performances by various artists from Tamil Nadu and other States in 18 locations across the city
- ❖ The country's longest bridge over the sea, the 22 km Mumbai Trans Harbour Link, officially the Atal Setu Nhava Sheva Sea Link was inaugurated recently.
- ❖ The Indian Army will observe the year 2024 as the 'Year of Technology Absorption'.
- ❖ The Indian Institute of Technology Madras (IIT-M) and Hyundai Motor India Limited (HMIL) have signed an agreement to establish a hydrogen valley innovation hub.
- ❖ Deepa Bhandare made history by winning the distinguished Best Environment Officer Award of Vasantdada Sugar Institute, becoming the only woman in Maharashtra's sugar industry to achieve this honor.
- ❖ The National Highways Authority of India (NHAI) has started the 'One Vehicle, One FASTag' initiative.
  - It aims to ensure no vehicle uses multiple FASTags.
- ❖ The 27<sup>th</sup> National Youth Festival (NYF) was held in Nashik, Maharashtra.
  - Fifteen youngsters from across the country were honoured with the National Youth Award 2020-2021.
- ❖ Major A. Ranjith Kumar, a native of Tirupur district, received his second Sena Medal (Gallantry) – referred to as "Bar to Sena Medal".
  - He was awarded his first Sena Medal (Gallantry) in 2020 for his key role in an operation in the Kashmir Valley.



- ❖ The new generation Akash surface-to-air missile system, capable of intercepting hostile aircraft, helicopters, and drones at a range of 30 km was successfully tested by DRDO.
- ❖ Renowned author M.J. Akbar, along with co-author K. Natwar Singh, released a new book titled "Gandhi: A Life in Three Campaigns".
- ❖ Rohit Sharma made history by becoming the first male player to participate in 150 T20 Internationals.
- ❖ The three-day International Camel Festival held in Bikaner, Rajasthan.
- ❖ The Indian and Japanese Coast Guards have recently conducted a successful joint exercise named 'Sahyog Kaijin' off the coast of Chennai.
- ❖ The Indian Navy and Royal Thai Navy (RTN) conducted a maiden bilateral exercise, named 'Ex-Ayutthaya'.
  - This name symbolises the significance of 'Ayodhya' in India and Ayutthaya in Thailand.
- ❖ Switzerland agreed to host a global peace summit on Ukraine at the request of Ukrainian President Volodymyr Zelenskiy.
- ❖ The new campus of the National Academy of Customs, Indirect Taxes and Narcotics (NACIN) was inaugurated at Palasamudram in Sri Satya Sai district of Andhra Pradesh.
- ❖ Kachchhi Kharek, the indigenous variety of dates of Kutch, has become the second fruit of Gujarat to get a geographical indication (GI) tag.
  - In 2011, Gir kesar mango was given the GI tag.
- ❖ On January 14th, the world celebrated World Logic Day
  - It was a tribute established by UNESCO in 2019 to emphasize the importance of logic as a cornerstone of reason, rationality, and critical thinking.
- ❖ The Indian Institute of Technology Madras (IIT) Madras has joined hands with Altair to launch an eMobility Simulation Lab.
- ❖ The deployment of artificial reefs off the coast of 42 fishing villages in Thiruvananthapuram district began recently.
  - The project is meant to boost fish resources and promote sustainable management.
- ❖ The Employees' Provident Fund Organisation (EPFO) has removed the Aadhaar card from the list of documents acceptable as date of birth (DOB) proof.
- ❖ Rohit Sharma overtook Glenn Maxwell and Suryakumar Yadav in the list of players with the most centuries (5) in T20 internationals.



- ❖ England's Sue Redfern is set to become the first ICC-appointed female neutral umpire to stand in a bilateral series during the upcoming WT20I between Australia and South Africa.
- ❖ This is the first time that Khelo India Youth Games are being held in South India.
  - The Games will be played across four cities of Tamil Nadu, namely Chennai, Madurai, Trichy and Coimbatore
- ❖ NLC India Ltd (NLCIL) has bagged the Standing Conference of Public Enterprises (SCOPE) Eminence award in the category of Digital Transformation.
  - The award instituted is by SCOPE, an apex body of public sector enterprises.
- ❖ Ahead of the inauguration of the Ram temple in Ayodhya, a monumental 300-foot lamp, declared as the world's largest, is set to be illuminated in the city.
- ❖ e-SAKSHI Mobile Application was launched recently for revised fund flow procedure under MPLAD Scheme.
- ❖ Tata Consultancy Services (TCS) has been rated as the second most valuable IT services brand, according to the 2024 Global 500 IT Services Ranking by Brand Finance.
  - Accenture remains the world's most valuable IT services brand, with a brand value of \$40.5 billion.
- ❖ The India's first Graphene Centre IICG has been established at Makers Village Kochi.
- ❖ Apple has overtaken Samsung as the world's top smartphone seller, ending the Korean tech firm's 12-year run as industry leader.
- ❖ India's First National Highway Steel Slag Road section on NH- 66 Mumbai-Goa National Highway was inaugurated recently.
- ❖ Life Insurance Corporation of India (LIC) surpassed State Bank of India (SBI) to become the country's most valued PSU firm by market valuation.
- ❖ Former Chief Justice of India and Rajya Sabha MP Ranjan Gogoi will receive the highest civilian award in Assam, the 'Assam Baibhav'.
- ❖ Grandmaster R Praggnanandhaa becomes India's No. 1 chess player, surpassing Viswanathan Anand.
- ❖ The Armed Forces Veterans' Day is celebrated on 14<sup>th</sup> January every year to commemorate the first Commander-in-Chief of the Indian Army Field Marshal KM Cariappa retirement in 1953.
- ❖ The revamped Tamil channel of Doordarshan was inaugurated recently.
  - The channel, previously known as DD Podhigai, has been rebranded as DD Tamil.



- ❖ Tamil writer Charu Nivedita's Conversations with Aurangzeb was translated into English by Nandini Krishnan.
- ❖ The Asian Buddhist Conference for Peace (ABCP) had convened its 12th General Assembly in New Delhi.
- ❖ Tata Group secures IPL Title Sponsorship for next 5 years with the highest-ever sponsorship amount in the history of the league.
  - The TATA Group had previously held the title sponsorship rights for the IPL in 2022 and 2023 and is also the title sponsor of the Women's Premier League.
- ❖ REC Ltd wins ICAI Award for Excellence in Financial Reporting for FY 2022-23.
- ❖ The world's largest lock, weighing 400 kg, was offered to Ayodhya Ram temple.
- ❖ REC Limited has successfully issued green bonds worth 61.1 billion Japanese Yen.
  - It is the largest ever Yen-denominated issue from India.
- ❖ India successfully established a "Global Alliance for Global Good - Gender Equity and Equality" to promote women's empowerment and gender equality.
  - It aims to bring together global best practices, knowledge sharing and investments in the identified areas of women's health, education, and enterprise.
- ❖ Tamil Nadu Chief Minister launched the distribution of day-long annadhanam for devotees in three temples - Bhavaniammam temple at Periyapalayam in Tiruvallur district, Angala Parameshwari temple at Melmalayanur in Villupuram district and Masaniammam temple at Anaimalai in Coimbatore district.
- ❖ Prime Minister's recent visit to Srirangam Sri Ranganathaswamy Temple marked as the first by a serving Prime Minister.
- ❖ FIFA President, Gianni Infantino, has been honoured with the prestigious International Sports Personality of the Year award.
- ❖ SpaceX launched private Axiom Mission 3 astronaut mission (Ax3) to the International Space Station with Turkey's first space traveller.
- ❖ Tamil Nadu chief minister inaugurated a Jallikattu arena stadium in Alanganallur, Madurai district.
  - This is the first of its kind in Tamil Nadu and even in the world.
- ❖ Tamil Nadu Chief Minister handed over the Kottai Ameer Communal Harmony Award, 2024 to Alt News' co-founder Mohammed Zubair.
- ❖ Abi Sithar of Tiruppuvanam was adjudged the best bull tamer of the maiden Jallikattu event that took place at Kalaignar Centenary Aeruthazhavuthual Arena at Keelakarai, Alanganallur village, Madurai district.



- ❖ The Kanteimundi brinjal, which is widely cultivated in Nayagarh district of Odisha, has received GI (Geographical Indication) tag.
- ❖ The National Stock Exchange of India emerged as the world's largest derivative exchange in 2023 by the number of contracts traded.
  - It also ranked 3rd in the world in the equity segment by number of trades (electronic order book).
- ❖ Sony Group Corp has officially notified Zee Entertainment Enterprises Ltd that it plans to call off the \$10 billion merger between its India unit and the media network.
- ❖ Chinese Taipei's Tai Tzu Ying won the India Open 2024 women's singles title against Chen Yu Fei of China.
- ❖ Indian wrestler Ravi Kumar Dahiya, secured a bronze medal at the Grand Prix De France Henri Deglane wrestling tournament held in France.
- ❖ The 2nd edition of India-Egypt Joint Special Forces Exercise CYCLONE is being conducted at Anshas, Egypt.
- ❖ The 11th edition of the India-Kyrgyzstan Joint Special Forces Exercise Khanjar, has commenced in Bakloh, Himachal Pradesh.
- ❖ Finance minister Nirmala Sitharaman is poised to make history by delivering her sixth consecutive Budget, comprising five annual Budgets and one interim.
  - This milestone was previously achieved solely by the former Prime Minister Morarji Desai.
- ❖ The world's first large methanol-enabled container vessel has been named "Ane Mærsk" in South Korea.
- ❖ Saudi Arabia is preparing to open its first alcohol store in the capital Riyadh, which will serve exclusively non-Muslim diplomats.
- ❖ India's first Armoured Light Specialist Vehicle (ALSV) Armado makes its debut at the Republic Day Parade 2024.
  - It is a fully indigenous vehicle designed and built by the Mahindra Defence Systems (MDS) for the Indian armed forces.
- ❖ India overtook Hong Kong to claim the fourth position in the global equity market rankings by market capitalisation.
  - India's market cap reached \$4.33 trillion, beating Hong Kong's \$4.29 trillion market cap.
- ❖ India has been elected as the First Vice Chair of the Food and Agriculture Organization FAO COFI Sub-Committee on Fisheries Management.
  - India will serve as member of a FAO Fisheries Bureau on 'Capture Fisheries' for the first time in 57 years.



- ❖ Data Privacy Day was observed on January 28 to raising awareness about online privacy, data protection, and how to safeguard your personal information in the digital world.
- ❖ According to the AISHE survey 2021-22 Uttar Pradesh has the highest number (8375) of colleges in the country, followed by Maharashtra (4692), Karnataka (4430), Rajasthan (3934) and Tamilnadu (2829).
  - Bengaluru Urban district has the maximum colleges (1106) in the country and Karnataka (66) a high number of colleges per lakh population in the country followed by Telangana (52), Andhra Pradesh (49), Himachal Pradesh (47), Puducherry (53) and Kerala (46).
- ❖ More than 1.36 crore school students from all 36 States and UTs participated in the 3rd edition of the Veer Gatha Project.
  - The students sent poems, paintings, essays, videos, etc. to honour the acts of bravery and sacrifice of the officers/personnel of the Armed Forces.
- ❖ Krutrim, Ola Founder's AI Start-Up, emerged as India's First AI Unicorn by securing \$50M.
- ❖ The 43-year-old Rohan Bopanna, who recently became World No. 1 in the ATP men's doubles rankings, is now became the oldest grand slam winner.
- ❖ Every year on January 31, International Zebra Day is observed.

## **TAMIL NADU**

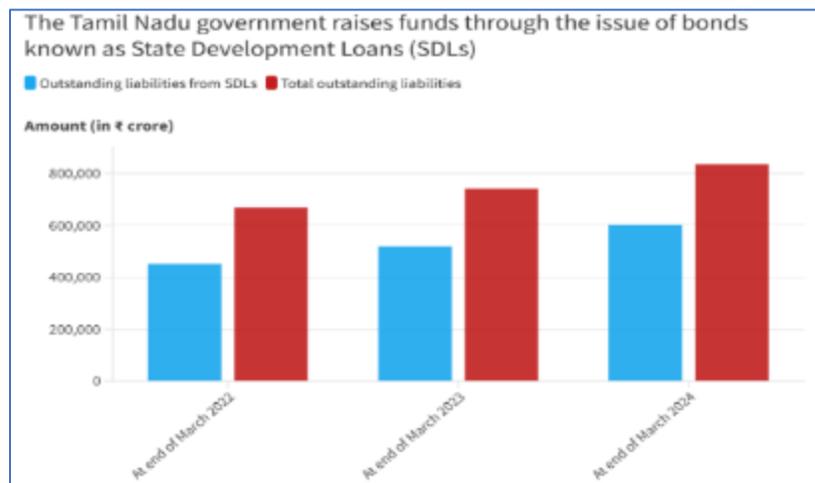
### **PE-VC investments in Tamil Nadu 2023**

- ❖ Private Equity and Venture Capital (PE-VC) companies have invested \$1,378 million through 61 deals in Tamil Nadu-based firms in 2023.
- ❖ This is low about 49.65% compared to 2022.
- ❖ In 2022, PE-VC firms invested \$2,737 million through 75 deals.
- ❖ This year, the State witnessed 61 deals, compared to 81 in the previous year.



### Tamil Nadu borrow in last quarter of 2023

- ❖ The Tamil Nadu government plans to borrow ₹37,000 crore in the fourth quarter of fiscal 2023-24.
- ❖ To bridge the income-expenditure gap (fiscal deficit), the State borrows from the market through the issue of bonds known as State Development Loans (SDLs).
- ❖ This forms a major part of its total outstanding liabilities.
- ❖ So far in fiscal 2023-24 (till December), the State government has raised ₹76,000 crore



### **A Jain learning center**

- ❖ A site at Pulloor, near Kariapatti in Virudhunagar district is believed to have housed a Samana palli in the 8th Century to 10th Century CE.
- ❖ At least four inscriptions have been found at the site.
- ❖ One of the inscriptions mentions that 50 goats were donated during the fourth regnal year of a Pandyan ruler named Maran Sadaiyan.
- ❖ Another inscription in the Vattezhuthu script refers to a donation of 25 goats made by one Palathuraikudi Gopalan during the 12th regnal year of Raja Raja Chola, which was 997 CE.



### **Patent for UAVs**

- ❖ Anna University's invention, tethered aerial platform, has been granted an Indian patent.
- ❖ Tethered aerial drone platform is an unmanned aerial vehicle tethered to the ground.
- ❖ Power is supplied to the drone from the ground through a Kevlar-coated glass fiber cable.
- ❖ The innovation enables unlimited endurance, allowing the drone to carry out various activities without the constraints of battery limitations.
- ❖ The vehicle can also function as a hybrid system wherein the drone can be detached for free flight as well.
- ❖ The patent is effective for 20 years from November 8, 2018.



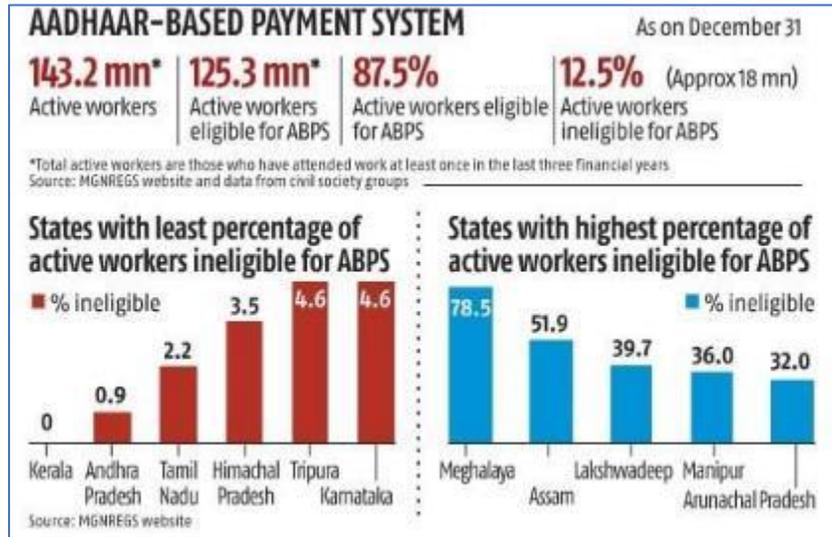
### **Tamil Nadu Coir Policy 2024**

- ❖ It aims to attract investments worth ₹3,000 crore in the sector by 2030 and generate 60,000 jobs.
- ❖ The policy is also aimed at providing a strategic framework that supports the continued expansion of the coir sector.
- ❖ It envisages the setting up of Centres of Excellence and facilitating industry-academia-private research interactions exclusively for new, innovative coir products.
- ❖ Tamil Nadu cultivates coconut in over 4.46 lakh hectares.
- ❖ The State's productivity of coconut stands at 10,484 nuts per ha.
- ❖ The total investment in the coir sector is ₹5,331 crore.
- ❖ The total turnover of coir products in Tamil Nadu is ₹5,368 crore.
- ❖ The export value of coir products is ₹2,186 crore

### **ABPS in Tamilnadu**

- ❖ Tamil Nadu does not seem to be affected by the Centre's move of making Aadhaar-based payment system (ABPS) mandatory for the payment of wages under the MGNREGA.
- ❖ There are about 92.13 lakh active workers attached to 76.62 lakh active job cards.
- ❖ 90.3 lakh active workers (accounting for 98%) have been found to be falling under the category of "ABPS eligible" workers.

- ❖ The State has a total of 91.17 lakh job cards with about 1.25 crore workers.
- ❖ But, the number of active job cards is 76.62 lakh only.
- ❖ As for the State’s performance in generation of person days, Tamil Nadu stands first at the all-India level.



**New excavation sites in Tamilnadu**

**PROPOSED NEW SITES FOR EXCAVATION**

Site name	District	Reason for excavation
Thirumalapuram	Tenkasi	In search of evidence of <b>origin of high tin bronze</b>
Kongalnagaram	Tiruppur	Sangam age <b>artefacts and Tamil Brahmi script</b>
Marungur	Cuddalore	Evidence of <b>dating in Iron age</b>
Chennanur	Krishnagiri	<b>Neolithic period</b>

- ❖ Tamil Nadu has sought permission from the Archaeological Survey of India (ASI) for carrying out excavations in four new places this year.
- ❖ The four sites would be: Marungur in Cuddalore; Kongalnagaram in Tiruppur; Thirumalapuram in Tenkasi; and Chennanur in Krishnagiri districts.
- ❖ One of the significant findings last year was the discovery of 2,030 graffiti marks, including four with Tamil-Brahmi inscriptions, from Thulukarpatti in Tirunelveli district.



### **Repowering policy for wind projects**

- ❖ The State government unveiled a 'Tamil Nadu Repowering and Life Extension Policy for Wind Power Projects' at the Global Investors' Meet.
- ❖ With the roll-out of the new policy, the State will regain the pole position in the wind energy sector, which it lost to Gujarat.
- ❖ Gujarat had an installed wind energy capacity of 11,176.12 MW as of November 30, 2023.
- ❖ Tamil Nadu's installed wind energy capacity stood at 10,377.97 MW.
- ❖ Under the repowering project, wind energy generators replace old wind turbines with new ones.
- ❖ The total wind energy repowering potential of the country stands at 25,406 MW, of which Tamil Nadu has the largest share, at 7,387 MW.

### **1 trillion USD economy by 2030**

- ❖ Economists Raghuram Rajan and Arvind Subramanian, members of the Tamil Nadu Chief Minister's Economic Advisory Council, speak on 'The Big Bets for Tamil Nadu's Trillion Dollar Economy' at Global Investors Meet 2024.
- ❖ To achieve the goal, the State has to grow 18% for the next seven to eight years.
- ❖ No country at any point of time has done 18% ever.
- ❖ China has grown for 10-11% over 40 years.
- ❖ China's share of global exports in labour intensive sectors is 40%, while India's share is 35%.
- ❖ If China drops to 35% and India can take its share to 12%.
- ❖ Low-cost manufacturing in the state would create more employment opportunities for the unskilled workforce.
- ❖ While Tamil Nadu's debt level is high, it is not a matter of concern when compared to other States.

### **T.N. Global Investors Meet - first day**

- ❖ The Tamil Nadu Global Investors Meet (GIM) 2024 was hosted by the government at the Chennai Trade Centre.
- ❖ The previous two editions of the GIM were held in 2015 and 2019 under the erstwhile AIADMK regime.
- ❖ The GIM, will act as a catalyst for economic and industrial growth.
- ❖ The event has witnessed encouraging response and is expected to bring pride and investment to Tamil Nadu.



- ❖ Multiple policies have been announced by the State.
- ❖ The CM inaugurated First Solar's fully integrated solar manufacturing plant in Sriperumbudur.
- ❖ A slew of MOUs was exchanged through the day.
- ❖ The State government signed a pact with Vietnamese electric vehicle (EV) maker VinFast for setting up its plant in Thoothukudi.
- ❖ Tata Electronics signed an MoU to invest ₹12,082 crore for an enclosure manufacturing and mobile phone assembly unit in Krishnagiri district.
- ❖ Hyundai Motor India has committed additional investments of ₹6,180 crore for setting up a unit to manufacture internal combustion engine (ICE) and EV passenger cars, and EV batteries in Kancheepuram district.
- ❖ It will collaborate with IIT-Madras on "Hydrogen Valley Innovation".
- ❖ Qualcomm announced a significant expansion in Chennai with a new facility for their Design Centre.
- ❖ Apple's supplier Pegatron inked a pact for investing ₹1,000 crore on a computing, communications, and consumer electronics manufacturing unit in Chengalpattu.
- ❖ JSW Energy will invest around ₹10,000 crore for its expansion plans in Thoothukudi and Tirunelveli districts.
- ❖ Godrej Consumer Products Ltd. is investing around ₹515 crore and TVS Group will be investing ₹5,000 crore to provide employment to around 500 persons.
- ❖ Mitsubishi will be investing ₹200 crore for a project in Gummidipoondi near Chennai.
- ❖ AP Moller Maersk has signed an MoU for transport and logistics solutions and Global Capability Centres across Tamil Nadu.
- ❖ Reliance Industries Limited, said the company is committed to making new investments in Tamil Nadu in renewable energy and green hydrogen sectors.
- ❖ Jio has invested over ₹35,000 crore in Tamil Nadu, bringing the fruits of digital revolution to 35 million subscribers in every town and village in the State.
- ❖ Godrej Consumer Products Limited said the company aspires to develop the Chengalpattu facility as a "lighthouse factory".
- ❖ Here the "best in sustainability, safety and automation is done with an inclusive and gender-balanced workforce".
- ❖ The government has given incentives on its commitment to employ at least 50% of women and 5% of employees from the LGBTQI community and persons with disabilities.



### Total Investments via GIM 2024



- ❖ The Tamil Nadu Global Investors Meet 2024 has attracted record investments of ₹6.64 lakh crore.
- ❖ It is much higher than the estimated sum of about ₹5 lakh crore and doubled the investment that was attracted in the previous GIM held in 2019.



- ❖ This is achieved through 631 Memoranda of Understanding (MoUs) that would generate nearly 27 lakh jobs across sectors.
- ❖ Some of the big-ticket investment proposals were made by Tata Power (₹70,800 crore), Adani Group (₹42,768 crore), Sembcorp (₹36,238 crore), Leap Green Energy Pvt. Ltd. (₹17,400 crore) and Chennai Petroleum Corporation Limited (₹17,000 crore).
- ❖ Giving sectoral-wise break-ups are
  - ₹3,79,809 crore had been mobilised through the Department of Industries, Investment Promotions and Commerce;
  - ₹1,35,157 crore by the Energy department;
  - ₹62,939 crore through the Housing and Urban Development department and
  - ₹22,130 crore through the Information Technology and Digital Services department;
  - Besides, ₹63,573 crore had been generated by the MSME sector.

### **SEZ in Tamil Nadu 2024**

- ❖ Tamil Nadu has the highest concentration of Special Economic Zones (SEZs) in the country, with 54 of them in operation.
- ❖ It is accounting for one-third of the State's exports.
- ❖ The SEZ started as a policy in 2002 and became an Act in 2005.

### **Top Indian city for women in 2023**

- ❖ Chennai emerged as the top Indian city for women in 2023 in terms of inclusivity and conduciveness to working women.
- ❖ Tamil Nadu cities topped both categories that the study covered – 49 cities in the million-plus population category and 64 cities in the less than a million-population category.
- ❖ Chennai topped the million plus category and Tiruchirappalli came on top of the less than a million category.
- ❖ The state also had a total of seven cities such as Coimbatore (Million plus), Tiruchirappalli, Vellore, Salem, Erode, and Tirupur (Less than a million) featuring in the lists.
- ❖ Chennai also retains its Social Inclusion Score rank in the first place.
- ❖ Its Industrial Inclusion Score rate slipped by 1 and is second to Bengaluru on this scale.

CHENNAI TOPS AMONG MILLION+ POPULATION CITIES				TIRUCHIRAPPALLI TOPS AMONG LESS THAN MILLION POPULATION CITIES			
Rank	City	State	City Inclusion Score	Rank	City	State	City Inclusion Score
1	Chennai	Tamil Nadu	48.42	1	Tiruchirappalli	Tamil Nadu	40.39
2	Bengaluru	Karnataka	43.53	2	Vellore	Tamil Nadu	38.22
3	Pune	Maharashtra	43.5	3	Kochi	Kerala	37.62
4	Mumbai	Maharashtra	40.64	4	Thiruvananthapuram	Kerala	37.46
5	Hyderabad	Telangana	39.58	5	Shimla	Himachal Pradesh	37.41
6	Kolkata	West Bengal	36.09	6	Salem	Tamil Nadu	36.69
7	Ahmedabad	Gujarat	35.49	7	Erode	Tamil Nadu	36.02
8	Delhi	Delhi	31.46	8	Tiruppur	Tamil Nadu	36.01
9	Coimbatore	Tamil Nadu	28.66	9	Gurugram	Haryana	35.02
10	Jaipur	Rajasthan	24.12	10	Puducherry	Puducherry	34.41

### STEPS survey

- ❖ The Tamil Nadu STEPS Survey-2 aimed at estimating the prevalence of Non-Communicable Diseases (NCD) risk factors has commenced across the State.
- ❖ This would help the State chalk out interventions to reduce the burden of NCD risk factors.
- ❖ STEPS Survey 2020 indicated a community prevalence of 33.9% for hypertension, 17.6% for diabetes, and control rate for hypertension (7.3%) and diabetes (10.8%) among patients put on treatment in Tamil Nadu.
- ❖ Our earlier assessment found a 10.8% control rate for diabetes.
- ❖ Our target was to increase the control rate of diabetes from 10.8 to 16.8%, and for hypertension, from 7.3 to 10.3%.

### 10<sup>th</sup> Tamil World Economic Conference

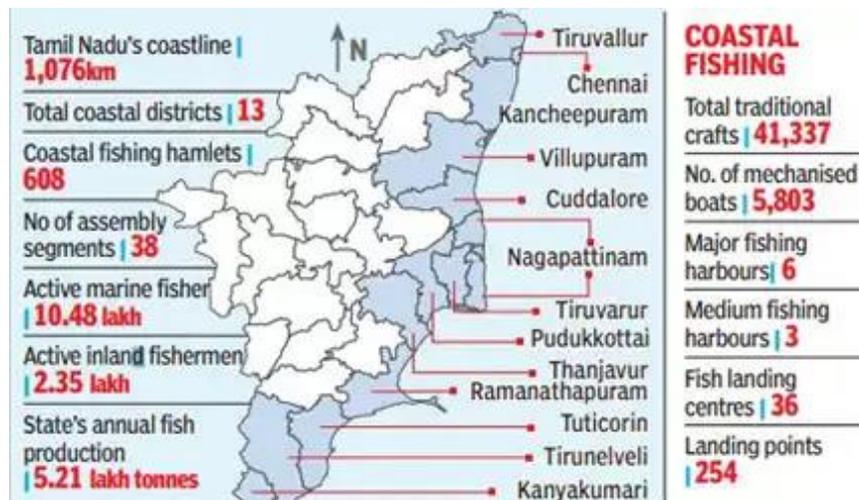
- ❖ The 10<sup>th</sup> World Tamils Economic Conference and Global Economic Summit held at Chennai.
- ❖ The Summit provides a platform to allow businessmen operating flourishing businesses in various countries, to share their knowledge and wisdom under one roof.
- ❖ This summit also helped in showcasing the ancient culture and the rich literature of Thiruvalluvar to the world.

## New Biodiversity Heritage Sites

- ❖ After Arittapatti in Madurai district, four more places in Tamil Nadu may be declared Biodiversity Heritage Sites this year.
- ❖ Now, the state has a proposal to approve of and notify Kasampatti (Dindigul), Sendirakkilai Sacred Grove (Cuddalore), Idayapatti (Madurai) and Kuriyanapalli Forest Block (Krishnagiri) as Biodiversity Heritage Sites (BHS).
- ❖ The Arittapatti Biodiversity Heritage Site (Madurai district) was notified as the first such Biodiversity Heritage Site of Tamil Nadu, in November 2022.



## Tamil Nadu Coastal Restoration Mission



- ❖ The State government has issued orders to implement the Tamil Nadu Coastal Restoration Mission over the next five years.
- ❖ The project cost is about ₹1,675 crore with the World Bank support.
- ❖ The mission includes projects to strengthen coastal biodiversity, improve coastal livelihood through sustainable tourism, and reduce plastic waste in marine environments.



- ❖ The mission has four focus areas:
  - Enhancing coastal biodiversity;
  - Coastal protection;
  - Improving livelihood through the creation of blue flag beaches and sustainable tourism; and
  - Pollution abatement.
- ❖ A special purpose vehicle, named Tamil Nadu Blue Carbon Agency, will be established to
  - Monitor the restoration of mangroves and seagrass;
  - Control erosion; restore the corals at Kariyachalli Islands of the Gulf of Mannar ecosystem; and
  - Strengthen coastal management systems.
- ❖ The mission includes previously launched projects such as
  - Establishing a biodiversity and conservation park at Kadambur, Chengalpattu;
  - Sea turtle conservation centres at Nagapattinam and in Chennai; and
  - An international dugong conservation centre at Manora, Thanjavur.

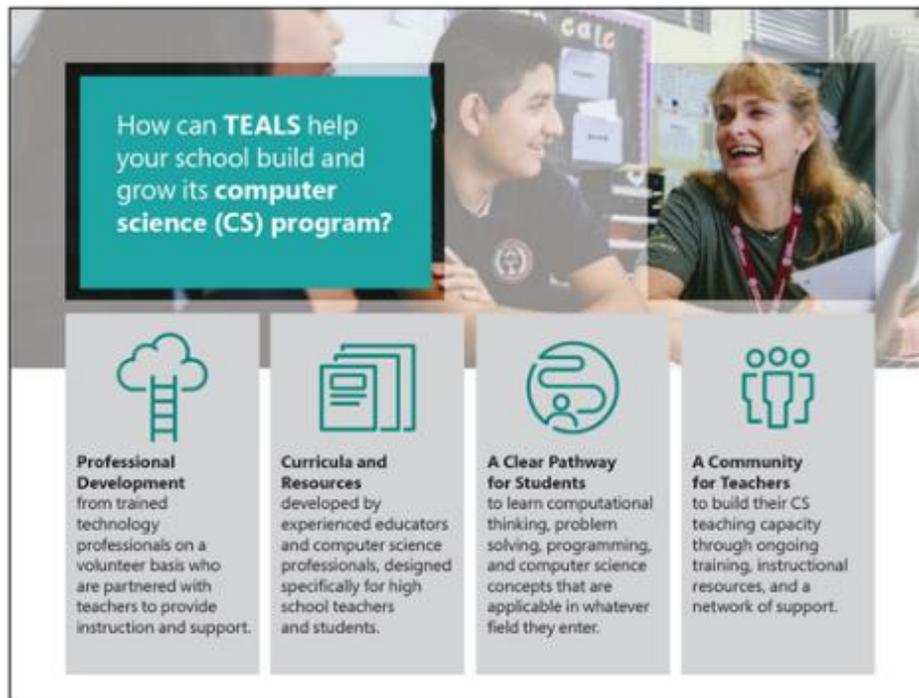
### **World Tamil Diaspora Day**

- ❖ January 12 was celebrated as World Tamil diaspora Day every year.
- ❖ This year was special as 58 selected youngsters from different countries went on a tour to various parts of Tamil Nadu under the 'Reaching Your Roots' programme.
- ❖ The CM presented awards to 13 persons of Tamil origin who have excelled in various fields on the occasion.
- ❖ Earlier, the Non-Resident Tamils Welfare and Rehabilitation Department created by the T.N. government.
- ❖ It has been providing free legal aid to people of Tamil origin in foreign countries, in cases of legal crises faced by them, and is also helping repatriating any Tamils suffering due to health conditions/those caught in conflicts or war situations.

### **TEALS program**

- ❖ The School Education Department of Tamilnadu has partnered with Microsoft to expand the Technology Education and Learning Support (TEALS) program to more schools.

- ❖ The project was started on a pilot-basis in 14 schools of three districts -- 10 government schools, two government-aided schools and two private schools.
- ❖ Now, the project is in the process of being expanded to 100 schools.
- ❖ The teachers have been trained to teach the students HTML, C++, Python, game development and AI.
- ❖ The programme now aims to empower the teachers to train the students.
- ❖ The curriculum is designed by Microsoft and they hold online classes for the teachers.



**How can TEALS help your school build and grow its computer science (CS) program?**

- Professional Development**  
from trained technology professionals on a volunteer basis who are partnered with teachers to provide instruction and support.
- Curricula and Resources**  
developed by experienced educators and computer science professionals, designed specifically for high school teachers and students.
- A Clear Pathway for Students**  
to learn computational thinking, problem solving, programming, and computer science concepts that are applicable in whatever field they enter.
- A Community for Teachers**  
to build their CS teaching capacity through ongoing training, instructional resources, and a network of support.

## **Rescue, treatment and rehabilitation centre for Elephants in Tamilnadu**



- ❖ The Tamil Nadu government sanctioned ₹19.5 crore for the establishment of a rescue, treatment and rehabilitation centre (RTRC) for wildlife at Pethikuttai near Sirumugai in Coimbatore district.
- ❖ This will be the state-of-the-art centre would come up on 53 hectares.
- ❖ It would be equipped with modern operation theatres and diagnostic tools with trained professionals.
- ❖ The rehabilitation zone is the largest of the four zones where all the temporarily disadvantaged animals meant for release will be held and rehabilitated.
- ❖ It will have five enclosures that will cater to the needs of all the key species likely to be admitted.

### **Arogyam Paramam Dhanam**



- ❖ Tamil Nadu has decided to go ahead with the rebranding exercise and retain the tagline 'Arogyam Paramam Dhanam' in line with the directive of the Government of India.
- ❖ All AB-HWCs in the State will now be rebranded as 'Maruthuva Nallavazhu Nilayam' in both English and Tamil.
- ❖ It will have the tagline of 'Arogyam Paramam Dhanam' in English and 'Noyatra Vazhve Kuraivatra Selvam' in Tamil.
- ❖ In November 2023, the Union Ministry of Health and Family Welfare asked the States to rename the Ayushman Bharat-Health and Wellness Centres (AB-HWC) as 'Ayushman Arogya Mandir' with the tagline of 'Arogyam Paramam Dhanam' in English and Hindi.



### **Tamilnadu Government awards 2023**

- ❖ The Chief Minister presented awards to nine individuals for their contributions towards Tamil language and social justice.
- ❖ The following awards instituted by the Tamil Development Department
  - Ayyan Tiruvalluvar Award - Thavathiru Balamuruganadimai Swami for 2024;
  - The Peraringnar Anna Award to 'Pathamadai' Paramasivam (2023);
  - Perunthalaivar Kamarajar Award to U. Balaraman (2023);
  - Mahakavi Bharathiar Award to Palani Bharathi (2023);
  - Paavendar Bharathidasan Award to M. Mutharasu (2023);
  - Tamil Thendral Thiru Vi Ka Award to S. Jayaseela Stephen (2023); and
  - Muthamizh Kavalalar K.A.P. Viswanatham Award to R. Karunanidhi (2023).
- ❖ The Thanthai Periyar Award, instituted by the Backward Classes, Most Backward Classes and Minorities Welfare Department was presented to Suba. Veera Pandian.
- ❖ The Ambedkar Award instituted by Adi Dravidar and Tribal Welfare Department for 2023 went to P. Shanmugam of the Tamil Nadu Tribal Association.

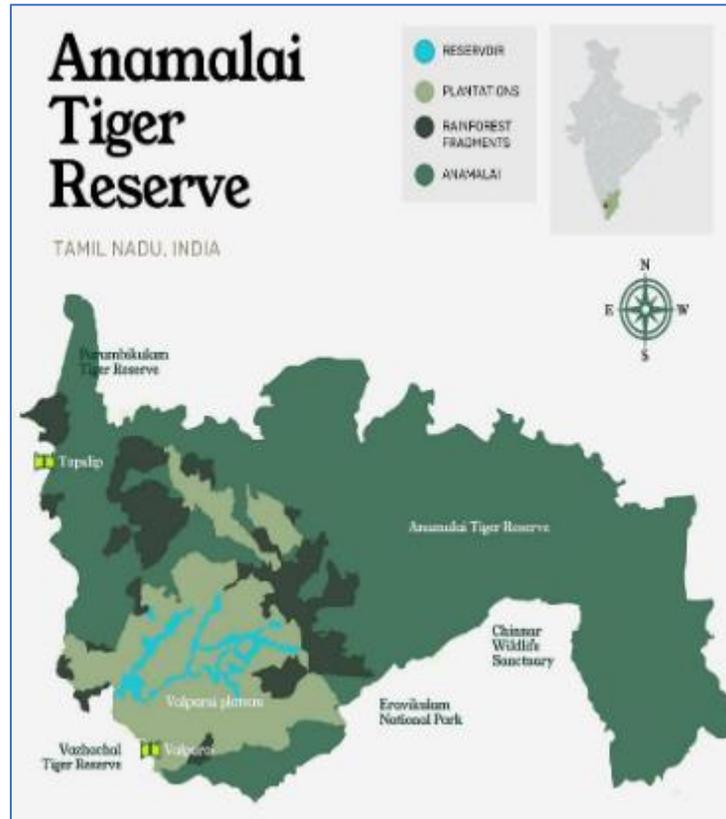
### **Target of paddy Procurement**

- ❖ Tamil Nadu Civil Supplies Corporation (TNCSC) is planning to procure more than 20 lakh tonnes of the crop this time.
- ❖ As on January 11, the Corporation procured about 5.46 lakh tonnes since the beginning of the procurement year in September.
- ❖ The TNCSC has planned to open as many as 3,000 direct purchase centres (DPCs) in a phased manner.
- ❖ In 2022-23, the procurement was about 44.22 lakh tonnes from around 5.22 lakh farmers.
- ❖ Of the total quantity of paddy procured, the share of the delta was two-thirds.

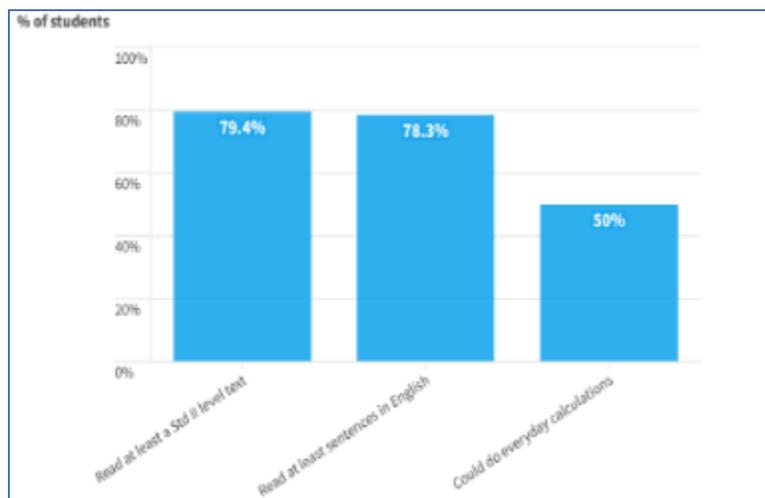
### **Native trees in Anamalai Tiger Reserve**

- ❖ The Tamilnadu Forest Department has taken up mass removal of invasive species in the Ulandy range in the core area of the Anamalai Tiger Reserve (ATR).
- ❖ Also, they planned to plant saplings of native trees.
- ❖ The works are implemented under the Restoration of Degraded Forests Landscape Project with financial assistance from the National Bank for Agriculture and Rural Development (NABARD).

- ❖ Under the project, for which NABARD has given a loan of ₹457 crore, the government aims at restoring 33,290 hectares of degraded forest lands in the State in five years.
- ❖ A total of 270 hectares of land is to be restored in all forest ranges of the ATR.



**Beyond Basics' survey - Perambalur**





- ❖ The ASER 2023 'Beyond Basics' survey was conducted in 28 districts across 26 states.
- ❖ The survey found that 97.2% of youth aged 14-18 were enrolled in some form of formal education institutions.
- ❖ Of that 70.3% youth were enrolled in government institutions.
- ❖ It showed that under a quarter of the teens surveyed could not read a Class II-level text in Tamil Nadu.
- ❖ While the all-district average indicated that 25% of teens could not read a Class-II text, in Perambalur district.
- ❖ 2.8% of the youth was not enrolled anywhere, and this was found to be higher among 17-18-year-olds as compared to the 14-16 age group.
- ❖ Among those aged 17-18, 12.4% males were not enrolled in any formal education institutions as compared to 4% females.
- ❖ Additionally, 16.4% were engaged in some work.
- ❖ Among all teens aged 14-18 years in Perambalur, 52.1% could do at least division and 78.3% could read at least sentences in English.
- ❖ Against the average of 63% who could perform digital tasks, Tamil Nadu stood at 68.3%.

### **Prehistoric Rock Paintings**

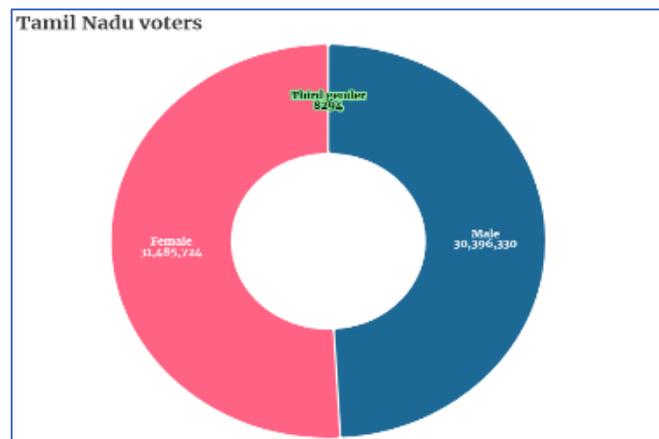
- ❖ The Department of Archaeology has declared the entire hillocks with prehistoric rock paintings at Alampadi, Melvalai, and Sethavarai villages in Villupuram as protected monuments.
- ❖ Melvalai, a nondescript village around 22 km from Villupuram, is a treasure trove of prehistoric rock art.
- ❖ The word, Rattapparai, has become synonymous with the rock art painted in red ochre.
- ❖ The paintings at Melvalai date back to 3000 B.C.
- ❖ The paintings are of human figurines, animals, and symbols.
- ❖ The Melvalai and Sethavarai sites are spread over 4.26 and 110.79 hectares respectively.
- ❖ Alampadi has a combination of prehistoric rock paintings in red and white ochre that are similar to those found at Sethavarai.



### **Sri Lankan passport from Tamil Nadu**

- ❖ A group of 200 Sri Lankan refugees living in Tamil Nadu received Sri Lankan passports at the country's Deputy High Commission in Chennai.
- ❖ This is the first time for the refugee community in India.
- ❖ Earlier, if Sri Lankan refugees living in Tamil Nadu wanted to leave for a third country, they had to first travel to Sri Lanka on a passport issued under the Refugee Repatriation Programme and then apply for a Sri Lankan passport there.
- ❖ Under the new initiative, they need not visit Sri Lanka, but can instead apply directly for a passport through the diplomatic missions in India.
- ❖ Then they can leave for a foreign country from India.

### **TN electorate in 2024**



- ❖ The electorate of Tamil Nadu rose by about seven lakh electors.
- ❖ It now stands at 6.18 crore, including 3.14 crore women, 3.03 crore men and over 8,200 from the third gender.



- ❖ Tamil Nadu stood at 6.11 crore, as of October 27, 2023.
- ❖ During the revision period since then, 13,61,888 were included, while 6,02,737 entries were deleted on account of moving, death and duplicate entries.
- ❖ Correction of entries was done with respect to 3,23,997 electors.
- ❖ Shozhinganallur Assembly constituency in Chengalpattu district has the highest number of electors at 6,60,419.
- ❖ While the Kilvelur Assembly constituency in Nagapattinam district has the lowest number of voters at 1,72,140.
- ❖ The Kavundampalayam Assembly constituency in Coimbatore district has the second-highest electorate with 4,62,612 electors.
- ❖ Harbour Assembly constituency in Chennai district has 1,72,624 electors.

### **Statue for Marudhu Brothers**

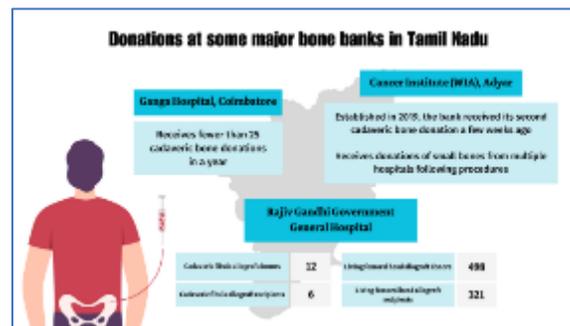
- ❖ Bhumi Puja performed for installing the statues of “Marudhu Pandiyar Brothers” on the tank bund of Gangineni Cheruvu tank of Chittoor corporation, Andhra Pradesh.
- ❖ Marudhu brothers said that during the late 18th century, Periya Marudhu and Chinna Marudhu were in the service of the Siva Gangai region king.
- ❖ Against British Raj, the brothers started the unification of the anti-British forces from the coastal belt from Tamil Nadu to West Bengal and raised an armed force to wage a battle for Independence.
- ❖ After a series of struggles, the brothers were captured in 1801 and were hanged by the British rulers near Siva Gangai.

### **Tamilnadu Policy for women**

- ❖ Tamil Nadu Cabinet, approved the State’s New Policy for Women, the draft of which was released in December 2021.
- ❖ The policy is aimed at the holistic development of the women, by focussing on empowering them through education, economic independence and power sharing.
- ❖ State-level committee headed by Chief Secretaries and district-level committees headed by Collectors will be constituted to monitor the implementation of the policy and to address any issues of discrimination.
- ❖ The Social Welfare and Women Empowerment department will also monitor the implementation.
- ❖ The national-level policy was released in 2001.



## Donations of cadaveric bones in Tamilnadu



- ❖ Cadaveric bone donations are still slow-paced in Tamil Nadu.
- ❖ While people's overall understanding of cadaveric organ donations has largely improved, this is not the case with bone donation.
- ❖ There were 248 bone donations from 2018 to 2023.
- ❖ Major bone banks have only received a small number of donations over this period.
- ❖ The bone bank at Cancer Institute (WIA), Adyar was set up in 2019.
- ❖ Every year, Coimbatore Ganga Hospital's bone bank receives fewer than 25 cadaveric bone donations.

## Grantham Inscriptions – Kangeyam



- ❖ Two stone inscriptions of ‘Grantham’ and Tamil dating 11th and 16th centuries respectively were discovered at Pazhnchervazhi village near Kangeyam.
- ❖ The stone bearing 11th century ‘Grantham’ inscriptions were created by Tamils for writing the North Indian language.
- ❖ The inscribed words denote that the ‘manthra’ stone was worshipped by people in the past for curing diseases.
- ❖ The 16th century Tamil inscription describes a donation of four rupees for lighting the perpetual lamp in the Vishnu temple.
- ❖ The notable aspect here is that the four rupees is the amount levied as tax for each wheel the potter makes.
- ❖ And lighting of lamp was meant to be continued until the moon exists.

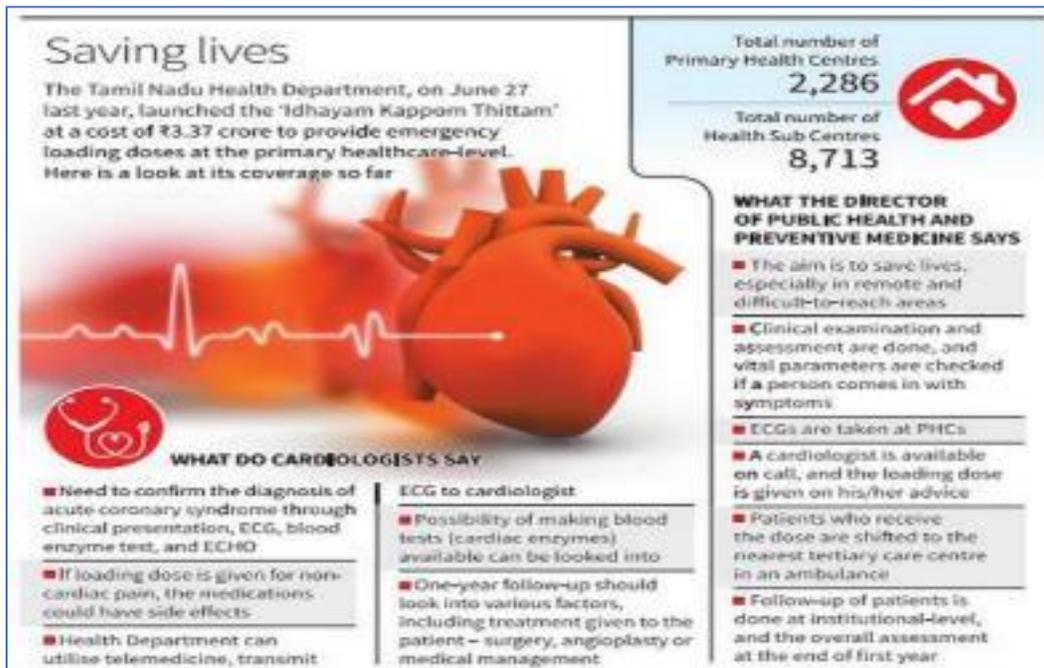
## Kazhugumalai rock cut temples



- ❖ The entire hillock housing the famous Vettuvan Koil and the Jain abode at Kazhugumalai is to be declared as ‘Protected Archaeological Monument’ of the Department of Archaeology.
- ❖ It is known as ‘Ellora of Southern India’.

- ❖ Vettuvan Koil of Thoothukudi that translates into ‘Sculptors’ Paradise,’ is a Pandya-era incomplete Hindu cave temple built between 8th and 9th century.
- ❖ The carvings reflect the southern temple style of Pandya-era.
- ❖ The rock-cut temple has 122 sculptures.
- ❖ The Kazhugumalai Jain beds are rock relief sculptures dating back to 8th or 9th century with rock-cut images of ‘tirtankaras’.

### **Idhayam Kappom initiative**

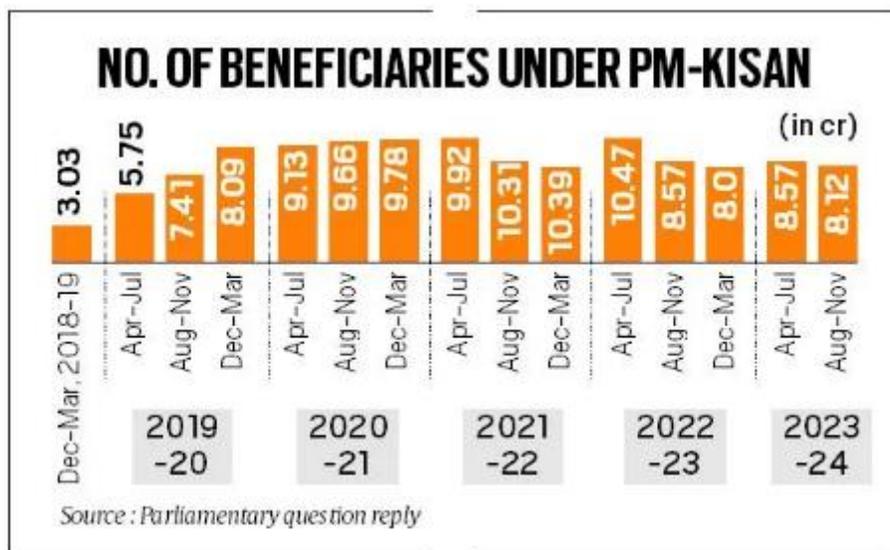


- ❖ Tamil Nadu’s Idhayam Kappom initiative has completed six months and covered over 5,000 beneficiaries.
- ❖ It is a preventive heart health scheme rolled out by the State government.
- ❖ The emergency loading doses are made available at the primary healthcare level to prevent deaths due to heart attacks.
- ❖ 5,145 of 5,827 persons had visited the Primary Health Centres (PHCs) with symptoms/suspected myocardial infarctions.
- ❖ 386 of 544 patients went to Health Sub Centres (HSCs) have received the emergency loading dose.
- ❖ The scheme was launched in June 2023.

## NATIONAL

### PM-KISAN Scheme beneficiaries

- ❖ The number of PM-Kisan beneficiaries are dropped by over 20 per cent to 8.12 crore now from a peak of 10.47 crore in April-July 2022.
- ❖ The government has added back 34 lakh farmers under the “saturation drive”.
- ❖ Of the 34 lakh, Uttar Pradesh accounts for the most — 8.50 lakh.
- ❖ It is followed by Rajasthan 2.39 lakh, Manipur 2.27 lakh, Jharkhand 2.2 lakh, and Maharashtra 1.89 lakh.



### Women in Ayushman Bharat Yojana

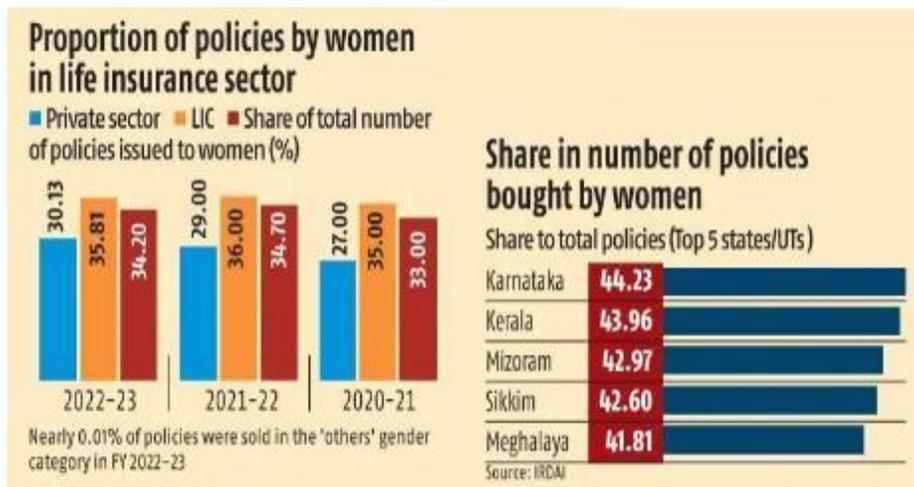
- ❖ Women account for approximately 49% of the total Ayushman cards created and approximately 48% of total authorised hospital admissions.
- ❖ Ayushman cards are made under the Ayushman Bharat Pradhan Mantri — Jan Arogya Yojana (AB PM-JAY).
- ❖ Currently as per the government figures 55 crore individuals corresponding to 12 crore families are covered under the scheme.
- ❖ Approximately 28.45 Crore Ayushman Cards have been created since the inception of the scheme.
- ❖ Of that, approximately 9.38 crore Ayushman Cards have been created during the year 2023.

## Litchi cultivation in India

- ❖ Litchi is now being cultivated across 19 Indian states.
- ❖ The sweet and juicy fruit earlier restricted to Muzaffarpur in Bihar.
- ❖ The fruit mainly grows in the foothills of the Himalayas in Uttarakhand, Bihar, West Bengal and Jharkhand.
- ❖ Litchi cultivation is spread across over 32,000 hectares in Bihar alone.
- ❖ This accounts for nearly 40 per cent of India’s litchi production.
- ❖ Bihar is followed by West Bengal (12 per cent of the total) and Jharkhand (10 per cent).
- ❖ Muzaffarpur of Bihar is known as the “Sweet City of India” due to its abundant production of litchis.
- ❖ Muzaffarpur is one of India’s leading litchi producers.



## IRDAI annual report 2022-23





- ❖ The share of life insurance policies sold to women in India slightly decreased from 34.7 percent in 2021-22 to 34.2 percent in 2022-23.
- ❖ In the fiscal year 2022-23, the number of life insurance policies issued to women reached 97.38 lakh.
- ❖ Totally 2.84 crore policies are sold during the same period.
- ❖ Share of policies sold to women by the Life Insurance Corporation of India (LIC) was higher at 35.81 percent, compared to private life insurers' 30.13 percent.
- ❖ Karnataka (44.23 percent), Kerala (43.96 percent), Mizoram (42.97 percent), Sikkim (42.6 percent), and Meghalaya (41.81 percent) emerged as the top states in terms of the share of life insurance policies issued to women.
- ❖ Ladakh (23.1 percent), Haryana (27.16 percent), Jammu & Kashmir (28.07 percent), Uttar Pradesh (29.53 percent), and Gujarat (29.59 percent) were among the states with lower percentages.

### **NTPS - One nation one pass**

- ❖ The environment ministry launched the National Transit Pass System (NTPS) as a "One Nation-One Pass" regime.
- ❖ It aims to facilitate seamless transit of timber, bamboo and other forest produce across the country.
- ❖ Currently, transit permits are issued by different states based on state-specific transit rules.
- ❖ Since each state has its own regulations, one has to get a separate transit pass issued in every state.
- ❖ The entire process, therefore, makes it quite a time-consuming process, causing hurdles in transporting timber and forest products.

### **Bharat Brand rice**

- ❖ The Government is considering a proposal to sell FCI (Food Corporation of India) rice under the 'Bharat' brand.
- ❖ There is a proposal to retail 'Bharat rice' but the price has not yet been decided.
- ❖ Under the OMSS, the Food Corporation of India (FCI) is offering quality rice at a reserve price of ₹29 per kg.
- ❖ The Government is already selling wheat flour (atta) and pulses under the Bharat brand.
- ❖ Rice inflation is at 13% year-on-year.

### **New epaulettes for Admirals**

- ❖ The Navy unveiled the new design of Admirals' epaulettes, with the octagon in the new design.
- ❖ It was drawn from the naval ensign and inspired from rajmudra of Chhatrapati Shivaji.
- ❖ Further, the Navy was now going to name its ranks "in line" with Indian traditions.



### **Amrit Bharat train**

- ❖ Amrit Bharat is an all-new train being inducted into the Indian Railways keeping in mind the comforts and travel needs of the common man.
- ❖ These trains will be non-air conditioned with second class unreserved coaches and sleeper coaches.



- ❖ Newly launched Amrit Bharat Express trains routes:
  - Darbhanga to Anand Vihar Terminal in Delhi via Ayodhya
  - Malda Town to Bengaluru.

### **66<sup>th</sup> DRDO foundation Day**

- ❖ The organisation was founded on January 1 in the year 1958.
- ❖ It was formed from the amalgamation of the then already functioning Technical Development Establishment (TDEs) of the Indian Army and the Directorate of Technical Development & Production (DTDP) with the Defence Science Organisation (DSO).
- ❖ Starting with 10 laboratories, DRDO has now grown to a network of 52 plus laboratories.

### **India's First Submarine Tourism**

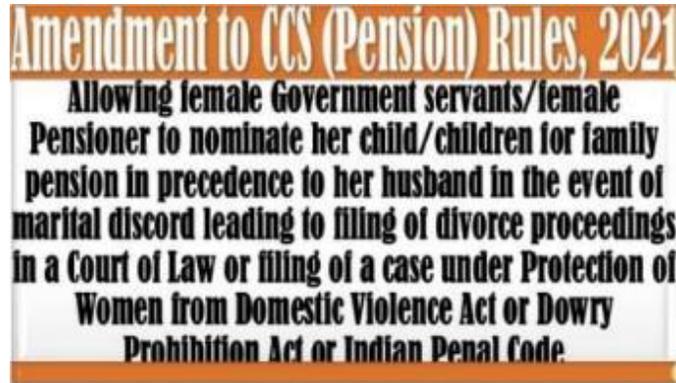


- ❖ The Gujarat government is set to introduce India's first submarine tourism.
- ❖ It will explore the marine life surrounding Bet Dwarka, a small island off the coast of Dwarka city.
- ❖ The project is on the lines of the Titanic submersible expedition.
- ❖ It will enable tourists to dive 100 metres below the sea in a submarine to experience the marine life around the island.
- ❖ The place is believed to have a submerged city, which was created by Lord Krishna, according to mythological texts.

### **Amendment of Central Civil Services (Pension) Rules 2021**

- ❖ The Indian Ministry of Personnel, Public Grievances & Pensions announced that the provisions of Central Civil Services (Pension) Rules, 2021 (CCS) have been amended.
- ❖ It will be allowing the female government employees to nominate their child or children for the family pension in place of their husband if divorce proceedings are pending or a case has been filed against their spouse.

- ❖ Till now, the rules provided for the family pension to first go to the surviving spouse and the children became eligible to receive it only after the death of the spouse.



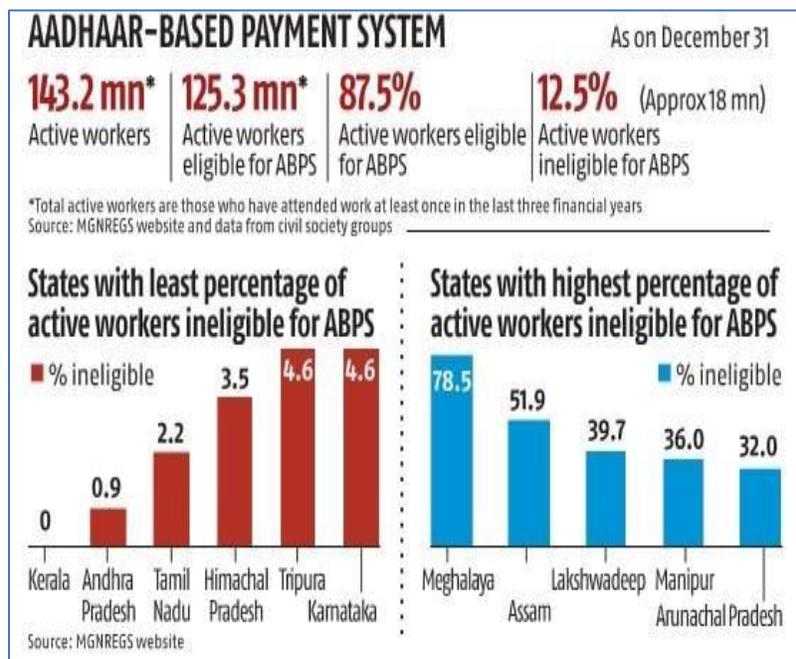
### **Exchange of nuclear installations 2024**

- ❖ India and Pakistan on January 1 exchanged a list of their nuclear installations under a bilateral pact.
- ❖ This pact prohibits the two sides from attacking each other's atomic facilities.
- ❖ The agreement was signed on December 31, 1988 and entered into force on January 27, 1991.
- ❖ It mandates the two countries to inform each other of nuclear installations and facilities to be covered under the agreement on the first of January of every calendar year.
- ❖ This is the 33rd consecutive exchange of such lists between the two countries.
- ❖ The first one is having taken place on January 1, 1992.
- ❖ Also, the lists of prisoners were exchanged.
- ❖ Totally 231 Indian prisoners in Pakistan, including 47 civilian prisoners and 184 fishermen.
- ❖ There are a total of 418 Pakistanis in Indian jails, including 337 civilian prisoners and 81 fishermen.



## Aadhaar-based payment system for MGNREGS

- ❖ It is a method of disbursing payments to MGNREGA workers using their unique 12-digit Aadhaar number as their financial address.
- ❖ The Workers will get exemption on a case-to-case basis from the Aadhaar-based payment system of the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS).
- ❖ 34.8% of the registered workers and 12.7% of active workers remain ineligible for this mandatory payment method.
- ❖ Total number of registered job cards is 14.32 crore, out of which just 9.77 crore (68.22%) is active job cards.
- ❖ There is a total of 25.25 crore workers, out of which just 14.32 crore (56.83%) are active workers.
- ❖ Since April 2022 to till date, about 2.85 crore job cards have been deleted by following the due process by the states.



## BNS for hit-and-run cases

- ❖ The new Bhartiya Nyay Sanhita (BNS) prescribes the harsher punishments for causing death in a hit and run cases.
- ❖ It treats hit-and-run accident cases as an aggravated form of the offence of causing death by rashness or negligence.
- ❖ Section 106 of the BNS will replace Section 304A of the IPC.



- ❖ It punished the causing of death by rash and negligent act that does not amount to culpable homicide.
- ❖ The existing section provides for a two-year jail term.
- ❖ First, the Section 106 prescribes a prison term of up to five years, besides a fine, for causing death due to rash or negligent acts;
- ❖ Second, it provides for reduced criminal liability for registered medical doctors of two years in jail, if death occurred in the course of a medical procedure.
- ❖ If the person involved in rash and negligent driving “escapes without reporting it to a police officer or a Magistrate soon after the incident”, the imprisonment may extend to 10 years and a fine.

#### **HIT AND RUN LAW:**

### **WHAT IS NEW**

The new Hit and Run law was passed under the Bharatiya Nyay Sanhita by the Centre last year. The specific rule on such road accident cases says that if the driver flees from the spot after a road accident without informing the police about the collision, he will have to face **10 years in jail and fine of Rs 7 lakh.**

**The new rules also applies to private vehicle owners.** Protesting truck drivers say that the provisions of the new law are too strict and that they should be softened.

### **UN Statistical Commission membership**

- ❖ India started its four-year term as a member of the United Nations Statistical Commission.
- ❖ The country had won the election to the global statistics body in April after a gap of nearly two decades.
- ❖ It was established in 1947 and is the highest body of the global statistical system.
- ❖ The Commission consists of 24 member countries of the United Nations.
- ❖ They are elected by the United Nations Economic and Social Council.

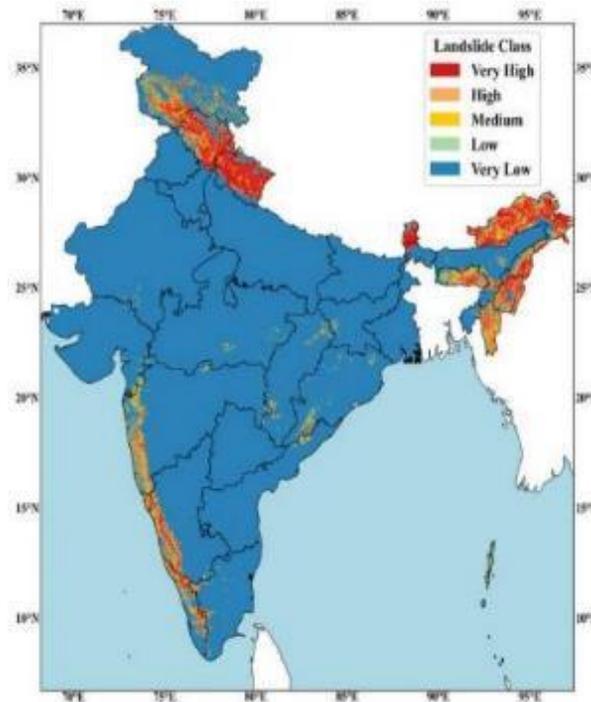


### **SMART 2.0**

- ❖ The Central Council for Research in Ayurvedic Sciences (CCRAS) along with National Commission for Indian System of Medicine (NCISM) has launched 'SMART 2.0' program.
- ❖ SMART stands for Scope for Mainstreaming Ayurveda Research among Teaching professionals.
- ❖ It aims to promote robust clinical studies in priority areas of Ayurveda with Ayurveda academic institutions/hospitals across the country through mutual collaboration.

### **Indian Landslide Susceptibility Map**

- ❖ IIT Delhi team makes first hi-resolution landslide risk map for India.
- ❖ This map is the first of its kind by virtue of being on a national scale, leaving out no locations in the country.
- ❖ It also revealed some previously unknown places with high risk, such as some areas of the Eastern Ghats, just north of Andhra Pradesh and Odisha.
- ❖ It can help identify the most dangerous areas and help allocate resources for mitigation strategies better.
- ❖ Landslides are a unique and deadly problem in India.
- ❖ Unlike floods, they are less widespread and harder to track and study with the satellites.
- ❖ Landslides happen in very localised areas and affect only about 1-2% of the country.



### **Rashtriya Khel Protsahan Puruskar 2023**

- ❖ The Ministry of Youth Affairs & Sports announced 'Rashtriya Khel Protsahan Puruskar' 2023.
- ❖ It is given to corporate entities (both in private and public), Sports Control Boards, NGOs, including sports bodies at the State and National level, who have played a visible role in the area of sports promotion and development.
- ❖ The winners are
  - Identification and nurturing of budding / young talent - Jain Deemed to be University, Bengaluru.
  - Encouragement to sports through Corporate Social Responsibility - Odisha Mining Corporate Limited.



### **C-130J's Night Landing**

- ❖ The Indian Air Force has successfully conducted a night landing of the C130-J transport aircraft at the Kargil airstrip.
- ❖ This marks the first time a night landing has been carried out at the airstrip, situated near the Line of Control (LoC) in the Ladakh region.
- ❖ C130-J is an advanced tactical airlifter utilized by the Indian Air Force for special operations and humanitarian crises.



### **PRERANA program**



**Ministry of Education Launches  
PRERANA: An Experiential Learning Program**

- Themed Classrooms
- Ancient Knowledge System
- Holistic Learning Journey
- Foundation of Extraordinary Lives



**प्रेरणा**  
एक अनुभववात्मक ज्ञान कार्यक्रम

Register for the program:  
[prerana.education.gov.in](http://prerana.education.gov.in)



Vadnagar, Gujarat

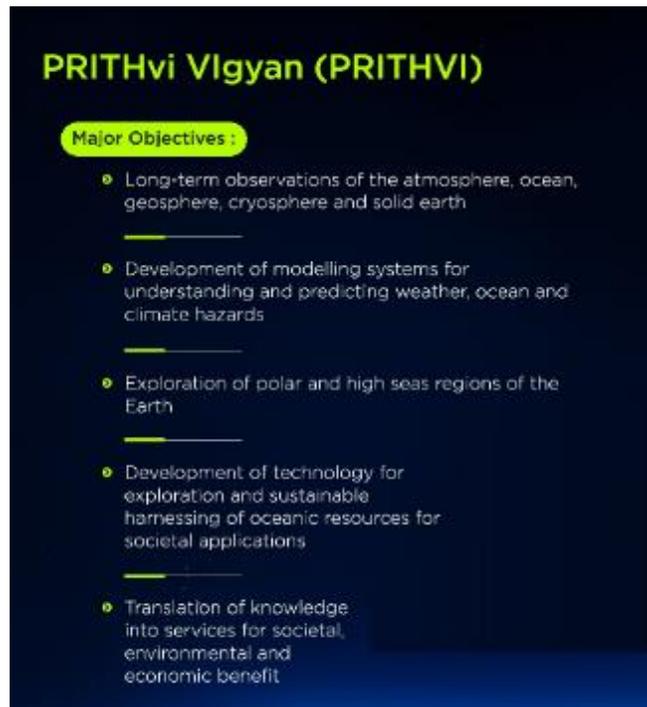
- ❖ The Education Ministry has launched the 'Prerana: An Experiential Learning Programme' for students in Classes 9 to 12.

- ❖ This residential initiative, held weekly, caters to 20 selected students and takes place at a vernacular school in Mehsana, Gujarat.
- ❖ The Prerana school follows a syllabus based on nine value-based topics prepared by the IIT, Gandhinagar.

### **Tur Dal Procurement Portal**

- ❖ A tur dal procurement portal inaugurated to aid farmers to sell their produce to NAFED and NCCF at a minimum support price or market price.
- ❖ A similar facility will be launched in future for urad and masoor farmers as well as maize farmers
- ❖ The registered tur farmers will have an option to sell to either NAFED/NCCF or open market.
- ❖ Pulses production has increased in the last ten years to 26.05 million tonnes in 2022-23 from 19.2 million tonnes in 2013-14 crop year (July-June),

### **PRITHVI VIGYAN Scheme**



- ❖ The Union Cabinet has approved "PRITHvi Vlgyan" scheme for the Ministry of Earth Sciences.
- ❖ The scheme would be implemented between 2021-26 and encompasses five ongoing sub-schemes ACROSS, O-SMART, PACER, SAGE and REACHOUT.



- ❖ It also seeks to promote exploration of polar and high seas regions of Earth towards the discovery of new phenomena and resources.

### **Supreme Court Legal Services Committee**

- ❖ Supreme Court judge Justice BR Gavai has been nominated as the Chairman of the Supreme Court Legal Services Committee.
- ❖ This Committee was constituted under Section 3A of the Legal Services Authorities Act, 1987.
- ❖ It will provide “free and competent legal services to the weaker sections of society”, in cases falling under the top court’s jurisdiction.
- ❖ Section 3A of the Act states that the Central Authority (the National Legal Services Authority or NALSA) shall constitute the committee.
- ❖ It consists of a sitting SC judge, who is the chairman, along with other members possessing the experience and qualifications prescribed by the Centre.
- ❖ Both the chairman and other members will be nominated by the CJI.

### **Symbol Allotment to Unrecognized Parties**

- ❖ The Election Commission of India making it mandatory for registered unrecognized political parties to provide additional financial documents and election expenditure statements for getting a common election symbol.
- ❖ The move aims to improve transparency in the allotment process ahead of the 2024 general election.
- ❖ Registered unrecognized political parties refer to political parties that are registered with the ECI but do not qualify as state or national parties.
- ❖ It includes:
  - Newly registered parties that are yet to establish themselves
  - Parties that have never contested an election post-registration
  - Parties that did not get sufficient votes in recent state or national elections to be recognized.

### **Work4Food: Algorithm**

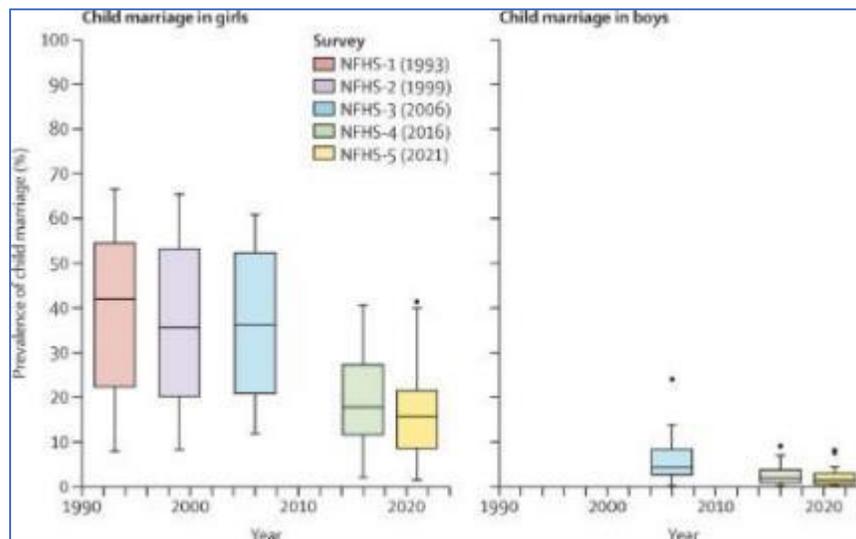
- ❖ IIT Delhi have proposed a solution to ensure fair compensation for food delivery agents and minimise the platform costs.
- ❖ The solution called 'Work4Food' was recently presented at the International Joint Conference on Artificial Intelligence.

- ❖ They have developed an order-assignment algorithm (determines which delivery agent gets which order) to ensure that each delivery person earns more than the minimum wage.

### **Shark Meat Consumption**

- ❖ The meat of sharks and rays for long is consumed by tribal and coastal people in India.
- ❖ India has banned the live-finning of sharks and also the export of fins of all shark and ray species.
- ❖ Ten species are completely protected from any fishing and trade.
- ❖ But fishing of sharks and rays is continuing, driven in part by legal local meat consumption.
- ❖ Goa had the highest percentage of shark and ray meat selling restaurants (35.8 per cent), followed by Tamil Nadu (34.6 per cent) and Maharashtra (4.6 per cent).
- ❖ Goa and Tamil Nadu together accounted for 70 per cent of all restaurants serving shark meat in India.
- ❖ Some 251.6 tonnes of shark meat are sold every year in India's restaurants.

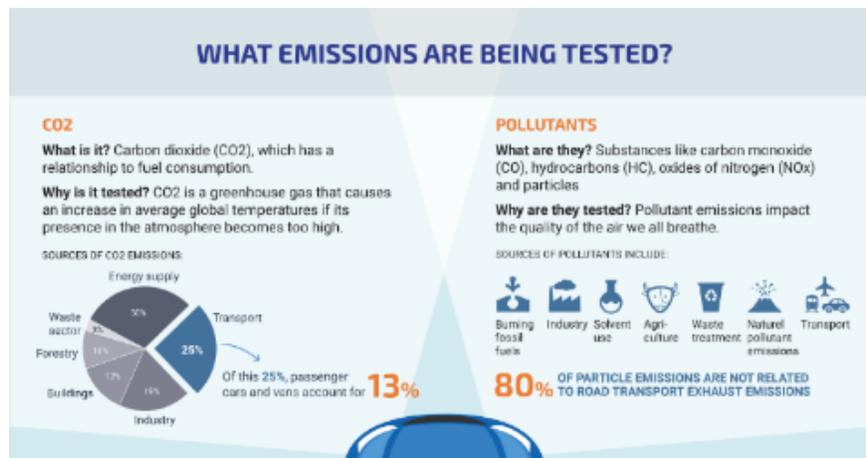
### **Lancet Study on Child Marriage in India**



- ❖ A recent study on child marriage in India published in the Lancet noted the overall decrease in child marriage across the country.
- ❖ But it pointed out that four States, mainly accounted for more than half of the total headcount burden of child marriages in girls.

- ❖ They are: Bihar (16.7%), West Bengal (15.2%), Uttar Pradesh (12.5%), and Maharashtra (8.2%).
- ❖ For boys, Gujarat (29%), Bihar (16.5%), West Bengal (12.9%), and Uttar Pradesh (8.2%) accounted for more than 60 per cent of the burden.
- ❖ One in five girls and nearly one in six boys are still married below the legal age of marriage in India
- ❖ The largest absolute increase in girls headcount was observed in West Bengal, representing an increase of 32.3% in headcount.
- ❖ West Bengal saw the largest absolute increase with over 5,00,000 more girls getting married as children.
- ❖ The National Family Health Survey-5 points out that the women aged 20-24 years who were married before the age of 18 years in West Bengal remains one of the highest in the country at 41.6%.
- ❖ The percentage was the same during the National Family Health Survey- 4.
- ❖ The all-India figure of women aged 20-24 years getting married before they turn 18 is pegged at 23.3%.
- ❖ In 2021, West Bengal registered 105 cases under Prohibition of Child Marriage Act 2006.
- ❖ Tamil Nadu registered 169 cases, Karnataka 273 and Assam 155 cases respectively in the same period.

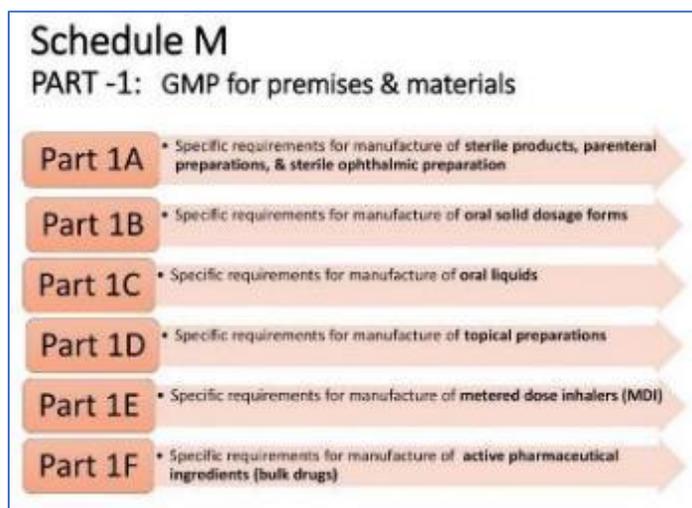
## New Emission Test Rules for Vehicles



- ❖ The Ministry of Road Transport and Highway (MoRTH) has notified new emission test standards for vehicles seeking approval under BS-VI emission norms.
- ❖ All bi-fuel vehicles with flex-fuel options will have to take both gaseous pollutant and particulate matter pollutant tests.

- ❖ However, vehicles that run on Hydrogen, will only have to undergo nitrogen oxide tests.
- ❖ Particulate Matter mass and number limits only apply to cars with direct-injection engines.
- ❖ CO<sub>2</sub> emission and fuel consumption shall be measured as per procedure laid down in AIS 137 and as amended from time to time.

### Updated Manufacturing Practices for Drug Makers



- ❖ The Union Health Ministry notified revised rules under Schedule M of the Drugs and Cosmetics Rules, 1945.
- ❖ It was aimed at ensuring robust quality control for pharma and biopharmaceutical products.
- ❖ Schedule M prescribes the Good Manufacturing Practices (GMP) for pharmaceutical products.
- ❖ The revised Schedule M has been notified as rules to ensure GMP is adhered to, and requirements of premises, plant, and equipment for pharmaceutical products.
- ❖ GMP was first incorporated in Schedule M of the Drugs and Cosmetics Rules, 1945 in the year 1988 and the last amendment was done in June, 2005.

### Critically Important Antimicrobials

- ❖ The findings of a new survey by the National Centre for Disease Control (NCDC) underscored the need for directing more efforts for appropriate stewardship in antibiotic use practices.

- ❖ It stressed on particularly Critically Important Antimicrobials (CIAs) and in mitigation of antimicrobial resistance.
- ❖ Out of overall antibiotic prescriptions, the third generation cephalosporins was the most commonly prescribed class of antibiotics (33.1 per cent).
- ❖ Third generation cephalosporins are categorised as the highest priority critically important antimicrobials (HPCIA) by WHO.
- ❖ The third generation cephalosporins, including ceftriaxone, were found to be used in the Indian dairy sector.
- ❖ Aminoglycosides including amikacin were reported in the Indian poultry sector.
- ❖ These antibiotics were being used to prevent, control or treat diseases; the research found.
- ❖ Widespread use of these important antibiotics both in food animal production and healthcare poses a potential threat.

Antibiotics used in current study	Class of Critically Important Antibiotics	Prioritization of Critically Important Antibiotics*
Azithromycin	Macrolides and ketolides	Highest priority
Levofloxacin	Quinolones	
Ciprofloxacin		
Cefotaxime	Third-, fourth- and fifth-generation cephalosporins	High priority
Ceftriaxone		
Amikacin	Aminoglycosides	
Gentamicin		
Meropenem	Carbapenems	
Linezolid	Oxazolidinones	

### **Drishti 10 ‘Starliner’**

- ❖ The Indian Navy unveiled the first indigenously manufactured Drishti 10 Starliner Unmanned Aerial Vehicle (UAV) in Hyderabad.
- ❖ Drishti 10 Starliner is an advanced intelligence, surveillance, and reconnaissance (ISR) platform.
- ❖ It has 36 hours endurance and 450 kg payload capacity.
- ❖ This is the only all-weather military platform with NATO’s STANAG 4671 certifications for the UAV system’s airworthiness.



### **New Republic Day Pact on Tableau**

- ❖ The Defence Ministry has proposed a rollover plan for the States and Union Territories (UT) to showcase their tableaux.
- ❖ Approximately 15 tableaux from the States and Union Territories are selected for the Republic Day parade every year.
- ❖ So, everyone cannot be accommodated each year.
- ❖ Under the agreement, every State and UT will get an opportunity within three years.
- ❖ So far 28 States, including Karnataka, are a signatory to the MoU.
- ❖ Karnataka has displayed its tableau in the Republic Day parade every year from 2015 to 2023.

### **Report Fish Disease App**



**MOBILE APP FOR TIMELY SCIENTIFIC ADVICE TO AQUA FARMERS**

**"Report Fish Disease"**  
App developed under Pradhan Mantri Matsya Sampada Yojana

Envisaged to reach all fish farming communities

To help farmers save from economic loss which happen due to disease outbreak in fish

- ❖ The National Surveillance Programme for Aquatic Animal Diseases (NSPAAD) project has introduced a mobile app 'Report Fish Disease.'
- ❖ It assists to track and monitor fish diseases across the country.
- ❖ It intends to empower fish farmers with a convenient and efficient platform to report diseases on their farms.

### **India Innovation Week 2024**



- ❖ The Department for Promotion of Industry and Internal Trade (DPIIT) is organizing the Startup India Innovation Week from January 10 - 18.
- ❖ It aims to bring together startups, entrepreneurs, investors, policymakers, and other stakeholders.
- ❖ The week includes the Startup Seminar: 'Startups Unlocking Infinite Potential' at the Tenth Vibrant Gujarat Global Summit.
- ❖ It also features the result declaration and felicitation ceremony for the National Startup Awards 2023 and the 4<sup>th</sup> edition of the States' Startup Ranking Framework.
- ❖ Virtual 'Ask Me Anything (AMA)' live sessions and dedicated mentorship sessions are focused on 'How to Start Up' will be conducted.

### **Wings India 2024**

- ❖ Hyderabad's Begumpet Airport is set to host the aviation extravaganza, Wings India 2024.
- ❖ It is Jointly organized by the Ministry of Civil Aviation (MOCA) and the Federation of Indian Chambers of Commerce & Indian Industry (FICCI).
- ❖ This four-day biennial spectacle promises to be a showcase of cutting-edge aviation technology and machinery.
- ❖ Boeing's new widebody 777-9 jet will touch down in India for the first time for this event.

- ❖ Air India will receive ten 777-9s, as part of the carrier's "substantial order" placed in 2023.

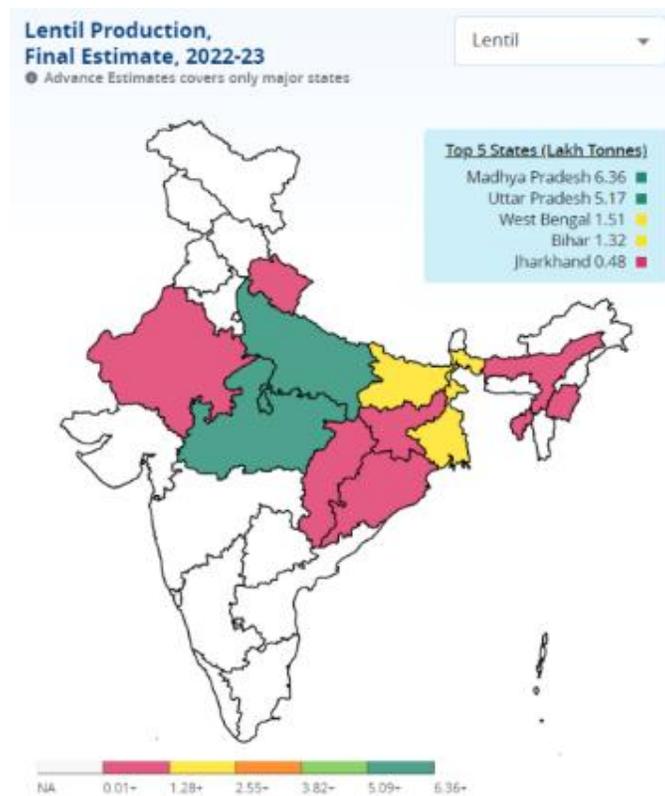
## Swachh Survekshan Awards 2023

ZONAL CLEAN CITY AWARDS				
Zonal (North)	Zonal (East)	Zonal (North East)	Zonal (South)	Zonal (West)
Clean City (North Zone) (Population < 15,000) Winner: <b>Barwar</b>	Clean City (East Zone) (Population < 15,000) Clean City within State (Population < 1,00,000) Winner: <b>Chikiti</b>	Clean City (North East Zone) (Population < 15,000) Winner: <b>Jiribam</b>	Clean City (South Zone) (Population < 15,000) Winner: <b>Kihvelur</b>	Clean City (West Zone) (Population < 15,000) Winner: <b>Panchgani</b>
Clean City (North Zone) (Population between 15,000 - 25,000) Clean City within State (Population < 1,00,000) Winner: <b>Mullanpur Dakha</b>	Clean City (East Zone) (Population between 15,000 - 25,000) Winner: <b>Arang</b>	Clean City (North East Zone) (Population between 15,000 - 25,000) Clean City within State (Population < 1,00,000) Winner: <b>Mohanpur</b>	Clean City (South Zone) (Population between 15,000 - 25,000) Clean City within State (Population < 1,00,000) Winner: <b>Gundlapochampally</b>	Clean City (West Zone) (Population between 15,000 - 25,000) Clean City within State (Population < 1,00,000) Winner: <b>Budni</b>
Clean City (North Zone) (Population between 25,000 - 50,000) Winner: <b>Anupshahr</b>	Clean City (East Zone) (Population between 25,000 - 50,000) Winner: <b>Kumhari</b>	Clean City (North East Zone) (Population between 25,000 - 50,000) Winner: <b>Golaghat</b>	Clean City (South Zone) (Population between 25,000 - 50,000) Winner: <b>Nizampet</b>	Clean City (West Zone) (Population between 25,000 - 50,000) Winner: <b>Gadhinglaj</b>
Clean City (North Zone) (Population between 50,000-1,00,000) Clean City within State (Population < 1,00,000) Winner: <b>Gajraula</b>	Clean City (East Zone) (Population between 50,000-1,00,000) Winner: <b>Mahasamund</b>	Clean City (North East Zone) (Population between 50,000-1,00,000) Clean City within State (Population < 1,00,000) Winner: <b>Lunglei</b>	Clean City (South Zone) (Population between 50,000-1,00,000) Winner: <b>Siddipet</b>	Clean City (West Zone) (Population between 50,000-1,00,000) Winner: <b>Karhad</b>

- ❖ Surat in Gujarat and Indore in Madhya Pradesh were jointly declared cleanest cities of the country.
- ❖ Indore has been adjudged the cleanest city for the seventh time in a row.
- ❖ The list of top 10 cleanest cities with a population of more than one lakh also includes Greater Visakhapatnam, Bhopal, Vijayawada, New Delhi, Tirupati, Greater Hyderabad and Pune.
- ❖ As far as the States were concerned, Maharashtra came first, followed by Madhya Pradesh and then Chhattisgarh.
- ❖ Odisha is ranked fourth, followed by Telangana, Andhra Pradesh, Punjab, Gujarat, Uttar Pradesh, Tamil Nadu, Sikkim, Karnataka, Goa, Haryana and Bihar.
- ❖ In the category of cities with a population of less than one lakh, Sasvad and Lonavala in Maharashtra as well as Patan in Chhattisgarh secured the top three spots.
- ❖ Mhow Cantonment Board in Madhya Pradesh was adjudged the cleanest cantonment board.
- ❖ Varanasi and Prayagraj, Uttar Pradesh, won the top two awards amongst the cleanest Ganga towns.

- ❖ Chandigarh won the Best Safai Mitra Surakshit Sheher (safest city for sanitation workers).
- ❖ Kilvelur town panchayat in Nagapattinam has topped Tamil Nadu in being the cleanest local body in Swachh Survekshan for 2023.
- ❖ Kilvelur has also been ranked the cleanest local body in the list of southern states (south zone).
- ❖ The theme of the cleanliness survey 2023 was “Waste to Wealth”, while for 2024 it is “Reduce, Reuse and Recycle”.

### Lentil Production in India 2023



- ❖ The country's masur (lentil) production is estimated to touch an all-time high of 1.6 million tonnes in the 2023-24 rabi season on higher acreage.
- ❖ Masur production stood at 1.55 million tonnes in the 2022-23 rabi season.
- ❖ In the ongoing rabi season, more area has been brought under the masur crop.
- ❖ The total masur acreage has increased to 1.94 million hectares as of January 12 in the ongoing rabi season.
- ❖ This was .83 million hectares in the year-ago period.

## **ANUBHAV Awards Scheme - 2024**

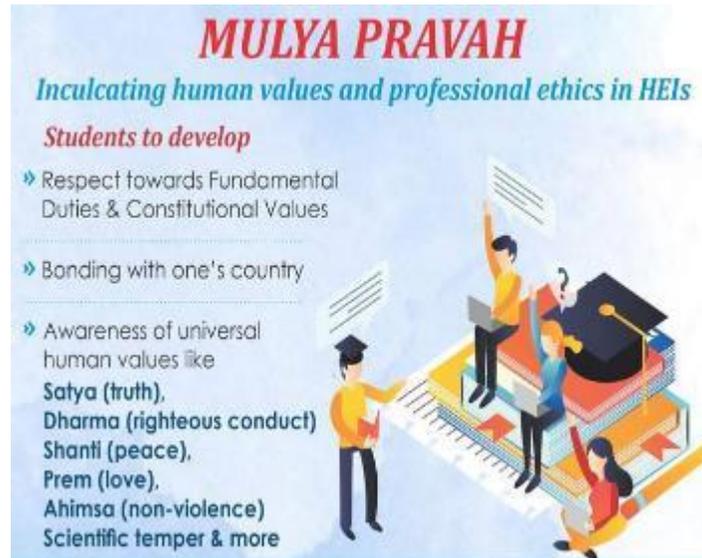
- ❖ Department of Pension and Pensioners Welfare had launched an on-line platform entitled 'Anubhav Portal' in March 2015.
- ❖ It is used for sharing experiences of retiring/retired Central Government employees while working with the Government.
- ❖ It is envisaged that this culture of leaving notes by retirees will become the foundation stone of good governance and administrative reforms in future.
- ❖ The Government recently has notified the ANUBHAV Awards Scheme 2024.
- ❖ To participate in the scheme, retiring Central Government employees/pensioners are required to submit their Anubhav write ups, 8 months prior to retirement and up to 1 year after their retirement.

## **Mulya Pravah 2.0**



- ❖ The University Grants Commission (UGC) has been issuing regulations Mulya Pravah 2.0, a modified version of Mulya Pravah, which was notified in 2019.
- ❖ It seeks to inculcate human values and professional ethics in higher education institutions.
- ❖ It aims to build value-based institutions by orienting individuals and institutions towards developing a deep respect for fundamental duties and constitutional values and bonding with the country.

- ❖ It addresses the pervasive unethical practices within higher education institutions, as revealed by a survey of human resource managers.
- ❖ The vices include favouritism, sexual harassment, gender discrimination, inconsistent discipline, lack of confidentiality, and arrangements with vendors for personal gain.



## Ganga Sagar Mela 2024



- ❖ Ganga sagar fair is celebrated every year on 14<sup>th</sup> or 15<sup>th</sup> January.
- ❖ This fair is celebrated at Sagardweep, located on the Bengal coast.
- ❖ Pilgrims immerse themselves in the holy waters of the Ganga River to cleanse their souls.
- ❖ Sagardweep is the place where the river Ganges meets the Bay of Bengal.
- ❖ Gangasagar Mela is the second largest Hindu fair after Kumbh Mela.

## Food Corporation of India - 60th Anniversary

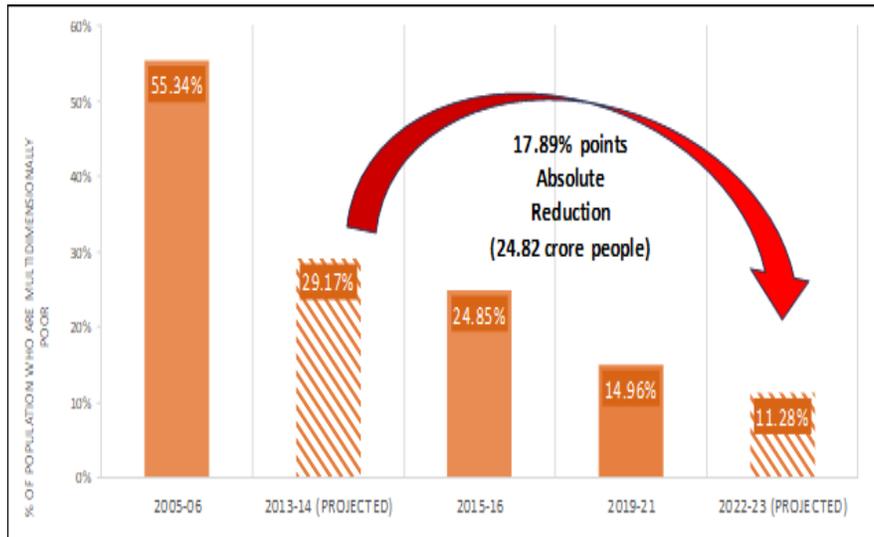
- ❖ Food Corporation of India is celebrating its 60th Foundation Day on January 14.
- ❖ The Food Corporation of India (FCI) is a statutory body created by the Food Corporation Act, 1964.
- ❖ The Food Corporation of India was set up on 14 January 1965, having its first district office at Thanjavur, and headquarters at Chennai.
- ❖ Now, it is one of the largest supply chain management companies in Asia.
- ❖ In 2022-23, the agency bought 76.56 million tonnes of paddy and 26.2 million tonnes of wheat.



## NITI Aayog report on Multidimensional Poverty

- ❖ NITI Aayog released a Discussion Paper titled "Multidimensional Poverty in India since 2005-06".
- ❖ Multidimensional poverty in India declined from 29.17% in 2013-14 to 11.28% in 2022-23.
- ❖ A total of 24.82 crore individuals in India escaped multidimensional poverty over the last nine years.
- ❖ Uttar Pradesh registered the largest decline in the number of poor people with 5.94 crore people escaping multidimensional poverty over the last nine years.
- ❖ It is followed by Bihar at 3.77 crore, Madhya Pradesh at 2.30 crore and Rajasthan at 1.87 crore.

- ❖ The pace of decline in poverty headcount ratio using the exponential method was much faster between 2015-16 to 2019-21 (10.66% annual rate of decline) compared to 2005-06 to 2015-16 (7.69%).
- ❖ Multidimensional poverty is measured by improvement in health, education and standard of living.

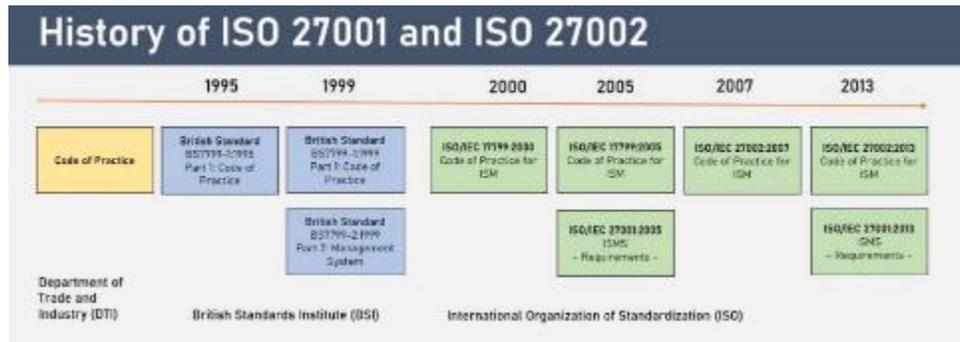


## Farsi Language - Classical Languages



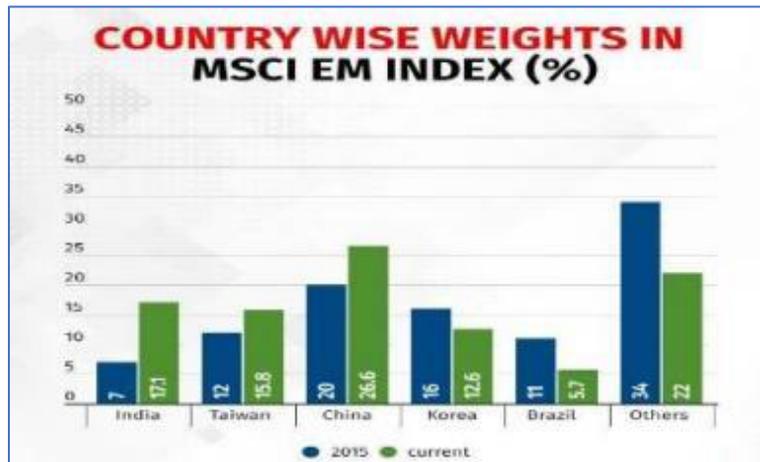
- ❖ The Government of India has decided to include Farsi (Persian) as one of the nine classical languages in India under the New Education Policy.
- ❖ Tamil was the first language in India to be accorded classical language status in 2004.
- ❖ Sanskrit, Kannada, Malayalam, and Odia are the other languages that have been declared classical languages in India by the central government.

## BSI ISO 27001:2022 certificate



- ❖ Haldia Petrochemicals becomes India’s First BSI Certified ISO 27001:2022 Petrochemical Firm.
- ❖ The certification was awarded by the United Kingdom based certification body.
- ❖ ISO/IEC 27001:2022 is the latest iteration of the Information Security Management System (ISMS) program published in October 2022.

## MSCI EM Index

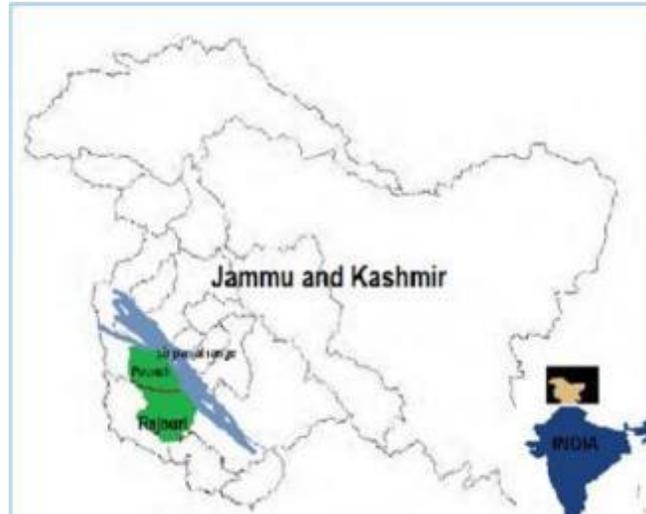


- ❖ India's weightage surpassed Taiwan in MSCI EM index, now ranking second after China.
- ❖ This solidifies India as a promising investment choice among emerging markets.
- ❖ India's MSCI Emerging Markets index spiked in eight years, leaping from 7 percent to 17.1 percent.

## Operation Sarvashakti

- ❖ Indian Army is launching a large-scale counter-terror operation — Operation Sarvashakti.

- ❖ It raided the Poonch-Rajouri region to flush out terrorists that have been hiding and spreading reign of terror in the forested region.
- ❖ The operation is reportedly modelled after Operation Sarp Vinash, conducted in 2003-04 in the same region.



### 2023 ASER Survey – Key Findings



- ❖ This year's survey puts the spotlight on youth aged 14 to 18 years in rural India which was last studied in the 2017 survey.
- ❖ Around 30% are already working, often for their parents.
- ❖ About one in four children in the 14-18 age group still cannot read a Std II-level text fluently in their regional language.

- ❖ Across enrolment categories, girls do better than boys in this respect.
- ❖ More girls aspire to continue studying after class 12 than boys.
- ❖ More than half struggle with division (3-digit by 1-digit) problems, a skill that is usually expected in Std III or IV.
- ❖ About 57% can read sentences in English; more than 73% among them can also tell their meanings.
- ❖ Boys do better than girls in both arithmetic and English reading.
- ❖ About 90% of surveyed households had smartphones.
- ❖ Of the surveyed children, almost 95% boys and 90% girls could use a smartphone.
- ❖ The 'basic' ASER survey was first implemented in 2005 and is conducted annually until 2014.
- ❖ Since, 2014, it switched to an alternate-year cycle in 2016.

### **INS Cheetah, Guldar and Kumbhir**

- ❖ Indian Navy Ships Cheetah, Guldar and Kumbhir were decommissioned on 12 Jan 2024 after rendering four decades of glorious service to the nation.
- ❖ Cheetah, Guldar and Kumbhir were built at Gdynia Shipyard, Poland as Polnocny class Landing Ships.
- ❖ They were commissioned into the Indian Navy in 1984, 1985 and 1986 respectively.



### **150 years of IMD**

- ❖ On the occasion of India Meteorological Department (IMD) 150th year of establishment, it launched various initiatives.

- ❖ IMD launched a national framework of climate services (NFCS) to protect critical sectors through climate monitoring.
- ❖ It also launched Panchayat Mausam Sewa, a nationwide service to forecast weather at panchayat levels.
- ❖ IMD aims to reach every household with weather information through initiatives like mobile App and decision support system (DSS).

### **Excavation At Vadnagar**



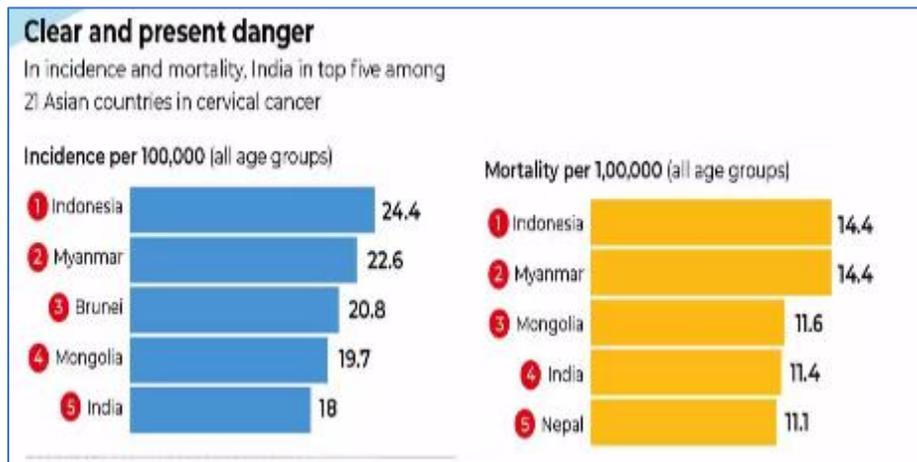
- ❖ A recent excavation in Vadnagar of Gujarat, unearthed evidence of unbroken cultural continuity spanning centuries.
- ❖ The continuity after the Harappan collapse is making it likely that the “Dark Age” was a myth.
- ❖ They found the evidence of a human settlement that is as old as 800 BCE contemporary to late-Vedic/pre-Buddhist Mahajanapadas or oligarchic republics.
- ❖ The period between the collapse of the Indus Valley Civilisation and the emergence of the Iron Age and cities like Gandhar, Koshal, and Avanti is often depicted as a Dark Age.

### **National Startup Awards 2023**

- ❖ The Department for Promotion of Industry and Internal Trade (DPIIT) released the winners list of the National Startup Awards 2023.
- ❖ The government awarded 20 startups across 15 categories.
- ❖ It includes ‘Women led innovation’, ‘NextGen Innovator’, ‘Champions of Cultural Heritage’, ‘Pivot Pro Award’, among others.

Startups	Sector	State
Axial Aero	Defence	Telangana
Country Clay (OPC)	Handicrafts	Delhi
Blackfrog Technologies	Healthtech	Karnataka
Atsuya Technologies	Climate Tech	Tamil Nadu
SNL Innovations	Agritech	Rajasthan
Aumsat Technologies	Agritech	Maharashtra
Nanosafe Solutions	Biotech	Delhi
Aum Paper Products	Sustainability	Karnataka
Atypical Platform	HRTech	Jharkhand
Saif Automations Services	Robotics	Andhra Pradesh
Krishigati Electric Bull	Agritech	Maharashtra
Avinya Infinity Solutions	Healthtech	Kerala
Jiva Business Ventures	Insurtech	Telangana
Canectar Foods	Foodtech	Maharashtra
VVP Healthcare Evolution	Healthtech	Maharashtra
Vividminds Technologies	Deeptech	Telangana
Eeki Automation	Agritech	Rajasthan
Breathe Applied Sciences	Climate Tech	Karnataka
Greenviro Global	Climate Tech	Tamil Nadu
Autocracy Machinery	Agritech	Telangana

## Vaccine drive for cervical cancer



- ❖ In a significant step that can reduce the incidence of cervical cancer, the government is set to roll out a human papillomavirus (HPV) vaccination campaign for girls in the 9-14 years age group.
- ❖ The immunisation drive is planned in three phases over three years.
- ❖ India accounts for about a fifth of the world's cervical cancer cases.

- ❖ With about 1.25 lakh new cases and 75,000 deaths each year.
- ❖ Cervical cancer is the second most common cancer among women in India, after breast cancer.
- ❖ About 83 per cent of invasive cervical cancer cases are attributed to HPV 16 or 18 in India.

### **Astra Missile**

- ❖ Minister of State for Defence flagged off the indigenously developed Astra Missiles for supply to the Indian Air Force.
- ❖ Astra is a beyond visual range (BVR) air-to-air missile indigenously developed by DRDO.
- ❖ Astra Weapon System is best in its class of weapon systems in the world in the category of air-to-air missiles.
- ❖ The missile has a range of 100 plus km.



### **Samavesha project**

A promotional poster for the 'SAMAVESHA' project. The poster features the I-STEM logo at the top left. The main title 'SAMAVESHA' is in large, bold, orange letters, with the tagline 'Uniting Minds & Igniting Innovation' below it. The text 'Inaugural Episode' is followed by the date and time: '16 January 2024, Tuesday, 9:00 AM IST' and the location 'IISc Bengaluru'. There are two QR codes: one labeled 'Scan to Register' and another labeled 'Scan to Contact Us'. The bottom of the poster includes the website 'IISc/www.iisem.gov.in', a phone number '080-22828180', and an email address 'www@iisem.co.in'. The background of the poster is white with colorful illustrations of people working at a table, gears, a lightbulb, and a DNA helix.

- ❖ I-STEM (Indian Science, Technology, and Engineering facilities Map) is launching a major project called 'Samavesha'.
- ❖ It aims to revolutionize research collaboration in India by enhancing accessibility to facilities and labs.
- ❖ The project is working towards optimizing resource utilization nationwide.
- ❖ The Researcher or the industry looking to avail advanced scientific equipment can connect with the institution that has the equipment they are looking for and rent it to conduct their experiments, through I-STEM Portal.

### **National Essential Diagnostics List - first review**



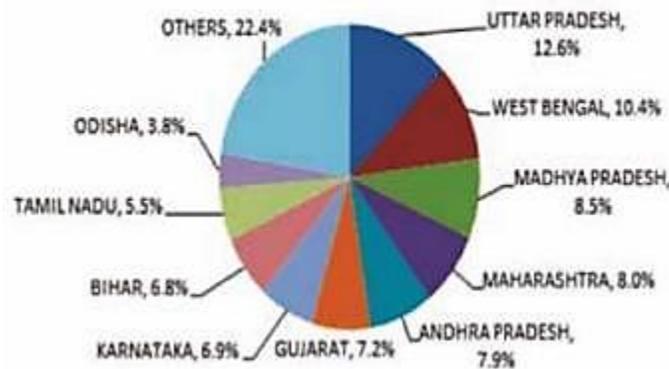
- ❖ The Indian Council of Medical Research (ICMR) has begun the process of revising the current National Essential Diagnostics List (NEDL).
- ❖ This has passed since the first such list was released in 2019.
- ❖ The Council has invited relevant stakeholders to offer suggestions on adding or deleting diagnostic tests to the current list by the end of February.
- ❖ The NEDL lists the essential and most basic tests that should be available at various levels of healthcare facilities in the country.
- ❖ It includes the village level, in sub-health centres, health and wellness centres, and primary health centres.

### **Horticulture production estimation 2022/23**

- ❖ The Agriculture Ministry has raised the production estimate of horticulture crops of the 2022-23 season (July 2022-June 2023) further by two per cent.
- ❖ It has projected the 2022-23 output at over 355 million tonnes (mt) against 347 mt in 2021-22.

- ❖ The latest revision is marginally higher than the second estimate of 351.92 mt.
- ❖ Fruits production is estimated to have gone up to 109.53 mt in 2022-23 from 107.51 mt in the previous year.
- ❖ Vegetable output has increased to 213.88 mt from 209.14 mt.
- ❖ Potato production is estimated to have increased to 60.22 mt as against 56.18 mt in the previous year.
- ❖ Tomato output was dropped to 20.37 mt from 20.69 mt.

**Major Horticulture Producing States**



## New Guidelines for Coaching Centers

### WHAT THE NEW RULES SAY

<p>Guidelines issued by the education ministry on Jan 18</p>	<p>Coaching centres can enrol only students who have completed 16 years or passed Class X Board exams</p>	<p>They are barred from making any misleading promises regarding rank or marks in competitive exams</p>
<p>Makes prior registration mandatory for new coaching centres while those already running need to register afresh within three months from the date of implementation</p>	<p>Each branch of a coaching institute is to be treated as a separate entity</p>	
<p>Centres can't hire tutors who have been convicted of any offence involving moral turpitude</p>		
<p>Centres be penalised up to <b>₹1 lakh</b> or their registration cancelled for charging exorbitant fees that cause undue stress to students</p>		



- ❖ Through the guidelines, the Education ministry aims to regulate the coaching centers by way of an appropriate legal framework.



- ❖ The rules laid down propose to act heavily on the coaching institutes if found in violation.
- ❖ All coaching centers will now have to register the center as per the guidelines.
- ❖ For coaching centers having multiple branches, each of the branches would be considered as a separate coaching center.
- ❖ The centres are also prohibited from making false claims about ranks or marks in competitive exams.
- ❖ Students below 16 years of age are now not allowed to enroll in the coaching institutes.
- ❖ Need to ensure the centers have counselling system as per the requirement of the guidelines.
- ❖ If a student withdraws from a course before its completion, they will be refunded a portion of the fees on a pro rata basis within 10 days.

### **Distress Alert Transmitter**

- ❖ ISRO has developed an improvised Distress Alert Transmitter (DAT).
- ❖ It has advanced capabilities and features for the fishermen at sea to send emergency messages from fishing boats.
- ❖ The first version of DAT has been operational since 2010.
- ❖ By using this message were sent through a communication satellite and received at a central control station (INMCC: Indian Mission Control Centre).
- ❖ Here the alert signals are decoded for the identity and location of the fishing boat.
- ❖ Using this information, the MRCC coordinates to undertake search and rescue operations to save the fishermen in distress.
- ❖ Till now, more than 20,000 DATs are being used.

### **India International Science Festival 2023**

- ❖ The 4 Day 9<sup>th</sup> India International Science Festival (IISF) 2023 was held in Haryana.
- ❖ The aim of this science festival is to celebrate the achievements of India in the frontier areas of science and technology.
- ❖ The festival also aims to acknowledge the achievements of science enthusiasts and inculcate scientific temper among young students and spread the same among the Indian citizens.
- ❖ The central theme of IISF 2023 is “Science and Technology Public Outreach in Amrit Kaal”.

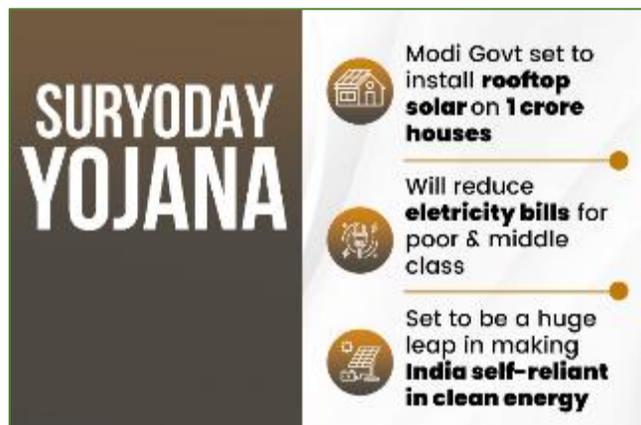
## Status Of Adivasi Livelihoods (SAL) Report, 2022

- ❖ The report titled Status of Adivasi Livelihoods Report 2022 was released by the non-profit PRADAN.
- ❖ The aim of the SAL reports is to understand the status of livelihoods of Scheduled Tribes from India's central belt.
- ❖ In Madhya Pradesh, 51 per cent of Adivasi, 63 per cent non-Adivasi, and 50 per cent of Particularly Vulnerable Tribal Groups (PVTG) villages have PDS outlets.
- ❖ In Chhattisgarh, the figures are 63 per cent, 88 per cent, and 36 per cent.
- ❖ In terms of road connectivity, 78 per cent Adivasi, 79 per cent non-Adivasi, and 80 per cent PVTG villages are linked to block headquarters by all-weather roads in Madhya Pradesh.
- ❖ In Chhattisgarh, the corresponding figures are 80 per cent, 100 per cent, and 82 per cent.
- ❖ About 42 per cent of Adivasi, 63 per cent non-Adivasi, and 80 per cent of PVTG villages in Madhya Pradesh are linked to block headquarters by public transport.
- ❖ For Chhattisgarh, the figures are 30 per cent, 40 per cent, and 9 per cent respectively.
- ❖ In Madhya Pradesh, 32 per cent of Adivasi households, 27 per cent of non-Adivasi households, and 61 per cent of PVTG households reported being severely food insecure.
- ❖ In Chhattisgarh, 27 per cent of Adivasi households, 42 per cent of non-Adivasi households, and 29 per cent of PVTG households reported being severely food insecure.



## Pradhan Mantri Suryodaya Yojana

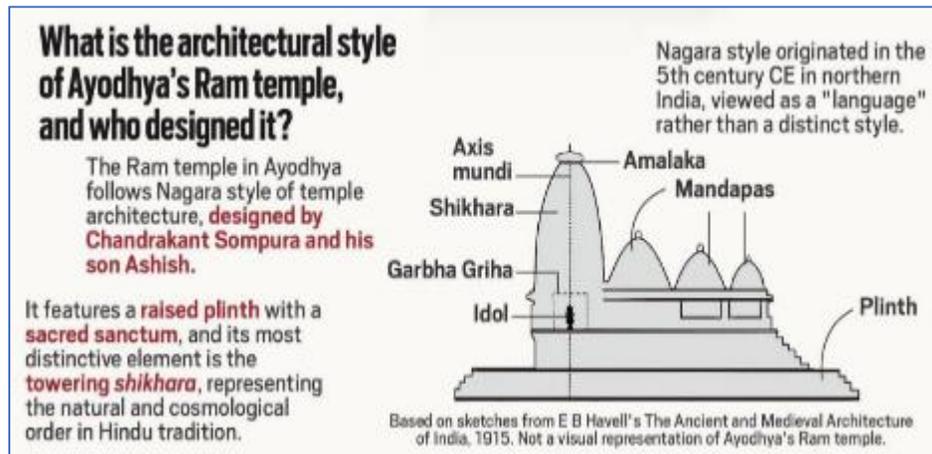
- ❖ Under the 'Pradhan Mantri Suryodaya Yojana', one crore households will get rooftop solar across the nation.
- ❖ It also makes India self-reliant in the energy sector.
- ❖ Rooftop solar panels are the photovoltaic panels installed on the roof of a building which is connected to main power supply unit.
- ❖ Thus, it reduces the consumption of the grid-connected electricity and saves electricity cost for the consumer.
- ❖ Solar power installed capacity in India has reached around 73.31 GW as of December 2023.
- ❖ Meanwhile, rooftop solar installed capacity is around 11.08 GW as of December 2023.
- ❖ In 2014, the union government launched the Rooftop Solar Programme that aimed to achieve a cumulative installed capacity of 40,000 megawatts (MW) or 40 gigawatts (GW) by 2022.



## Nagara style Ram temple

- ❖ The Ram temple in Ayodhya was inaugurated recently.
- ❖ Chandrakant Sompura, and his son Ashish, have designed the complex in the Nagara style of temple architecture.
- ❖ The Nagara style of temple architecture emerged sometime in the fifth century CE, during the late Gupta period, in northern India.
- ❖ Nagara temples are built on a raised plinth, with the garbha griha (sanctum sanctorum).
- ❖ Towering over the garbha griha is the shikhara (literally 'mountain peak'), the most distinguishable aspect of Nagara style temples.

- ❖ The temple is being constructed using sandstone from Mirzapur and those from the hills of Bansi-Paharpur area in Rajasthan's Bharatpur district.
- ❖ The use of steel or iron has been avoided in the construction of the temple structure.
- ❖ Instead, it has been constructed employing the country's indigenous technology and traditional construction materials.



## 75<sup>th</sup> Republic Day Highlights



- ❖ This year's Republic Day parade was 'women-centric', indicating the roles played by women in various sectors.
- ❖ French President Emmanuel Macron participated as its chief guest.
- ❖ For the first time, the parade was heralded by 100 women artists playing Indian musical instruments.
- ❖ The theme of this year's Republic Day is 'Viksit Bharat' and 'Bharat: Loktantra ki Matruka'.
- ❖ The Culture Ministry's Republic Day tableau carried replicas of B R Ambedkar handing over the Constitution to the country's first president Rajendra Prasad, as well as ancient symbols that championed the democratic ethos.

- ❖ Tamil Nadu tableau carried Kudavolai System in Ancient Tamil Nadu - Mother of Democracy.

### **Padma Awards 2024**

- ❖ The President Droupadi Murmu had approved the conferment of 132 Padma Awards including 30 women and eight persons from the category of Foreigners/NRI/PIO/OCI and nine posthumous awardees.
- ❖ The Bharat Ratna was conferred on two-time Bihar chief minister Karpooori Thakur posthumously.
- ❖ 'Padma Vibhushan' is awarded for exceptional and distinguished service.
- ❖ 'Padma Bhushan' for distinguished service of high order and 'Padma Shri' for distinguished service in any field.
- ❖ The awards are announced on the occasion of the Republic Day every year.
- ❖ Padma Vibhushan was awarded to 5 people; Padma Bhushan was given to 17 and Padma Shri was conferred to 110.



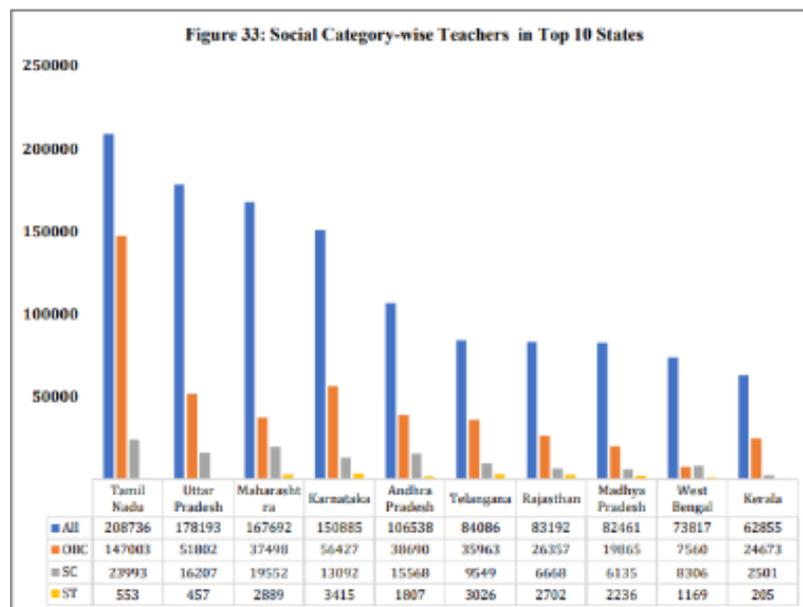
### **Gallantry Award Winners 2024**

- ❖ President Droupadi Murmu announced 80 gallantry awards, including six Kirti Chakra and 16 Shaurya Chakra, for India's armed forces.
- ❖ Kirti Chakra is India's second-highest peacetime gallantry award after Ashok Chakra.
- ❖ The Shaurya Chakra is the third-highest peacetime award.

- ❖ Six Kirti Chakra awards were announced, out of which three were conferred posthumously.
- ❖ Two out of the total 16 Shaurya Chakra awards were conferred posthumously.
- ❖ The awards also included 53 Sena Medal (seven posthumous), one Nao Sena Medal (gallantry) and four Vayu Sena Medals (gallantry).
- ❖ Apart from this, President Murmu approved 311 defence decorations to armed forces and other personnel.



### AISHE Survey 2021-2022



- ❖ The Ministry of Education releases All India Survey on Higher Education (AISHE) 2021-2022.

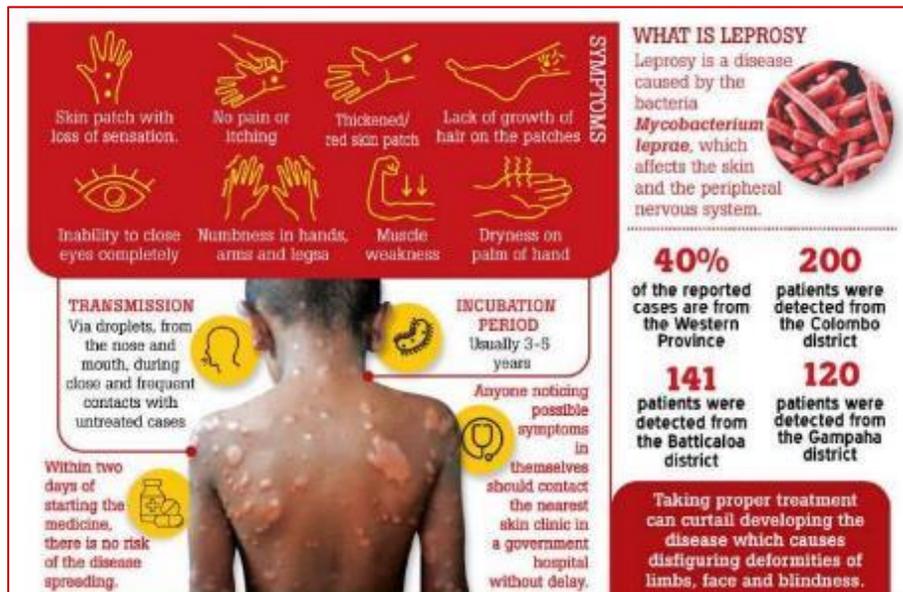


- ❖ The female enrolment in Higher Education increased to 2.07 crore in 2021-22 from 1.57 crore in 2014-15.
- ❖ It is an increase of 50 lakh students, 32 per cent increase.
- ❖ The enrolment of SC students is 66.23 lakh in 2021-22 as compared to 46.07 lakh in 2014-15 (an increase of 44 per cent).
- ❖ The total enrolment in higher education has increased to nearly 4.33 crore in 2021-22 from 4.14 crore in 2020-21.
- ❖ There has been an increase of around 91 lakhs in the enrolment from 3.42 crore (26.5 per cent) in 2014-15.
- ❖ The enrolment of SC Female students has increased to 31.71 lakh in 2021-22 from 29.01 lakh in 2020-21 and 21.02 lakh in 2014-15.
- ❖ There has been an increase of 51 per cent since 2014-15.
- ❖ The enrolment of ST students has increased to 27.1 lakh in 2021-22 from 16.41 lakh in 2014-15 (an increase of 65.2 per cent).
- ❖ The enrolment of OBC students has also increased to 1.63 crore in 2021-22 from 1.13 crore in 2014-15.
- ❖ There is a notable increase in OBC student enrolment since 2014-15 of around 50.8 lakh.
- ❖ About 78.9 per cent of the total students are enrolled in undergraduate level courses and 12.1 per cent are enrolled in postgraduate level courses.
- ❖ The Government Universities constituting 58.6 per cent of total Universities, contribute 73.7 per cent of total enrolment, and Private Universities account for 26.3 per cent of total enrolment.
- ❖ The total number of Universities / University level institutions registered is 1,168, Colleges 45,473 and Standalone Institutions 12,002.

### **New 3-Drug Regimen for Leprosy**

- ❖ The Central government has approved a new treatment regimen for leprosy, aiming to stop its transmission at the sub-national level by 2027.
- ❖ The National Leprosy Eradication Programme is taking all the required steps to stop the transmission of leprosy.
- ❖ Govt has decided to introduce a three-drug regimen for Pauci-Bacillary (PB) cases in place of a two-drug regimen for six months.
- ❖ WHO had agreed to supply the revised drug regimen from April 1, 2025.
- ❖ Thus, all States and Union Territories have now been asked to send their requisitions for anti-leprosy drugs 12 months beforehand.

- ❖ The revised classification of leprosy and the treatment regimen for PB and multi-bacillary (MB) cases in India will be implemented from the same date.
- ❖ The WHO's recommended treatment regimen consists of three drugs — dapsone, rifampicin and clofazimine.
- ❖ The combination is referred to as MDT.
- ❖ Leprosy is a chronic infectious disease caused by the *Mycobacterium leprae* bacteria.
- ❖ Free MDT was initially funded by the Nippon Foundation and since 2000.



### Vijay Raghavan Panel Report

- ❖ This nine-member committee has recently submitted a comprehensive report addressing concerns about the functioning of the DRDO.
- ❖ The DRDO's role is to be limited to research and development without being involved in developing prototypes or technology demonstrators.
- ❖ Also, any production and further development should be done by selected private players or public sector undertakings.
- ❖ It recommended the setting up of close to 10 national-level laboratory facilities instead of the existing 40 or more DRDO labs across the nation.
- ❖ Besides, the setting up of five national test facilities has also been recommended, which will be open to private players for testing their weapons systems.
- ❖ Limited public awareness and transparency regarding DRDO's activities and achievements leads to negative perception and criticism.

- ❖ Efficient transfer of developed technologies must be from DRDO to private industries for mass production.
- ❖ It suggested the creation of the Department of Defence Science, Technology, and Innovation under the Defence Ministry.

### **SOTTTER Report of TISS**

#### **National average number of Schools (\*), Teachers and Enrollment (\*\*)**

	Schools	Teachers	Students
Total	1,489,115	9,507,123	265,235,830
% rural of total	82.92%	70.09%	69.71%
Government	65.70%	49.25%	51.68%
% of govt in rural	91.97%	85.44%	84.53%
Government (other)	3.31%	2.11%	2.33%
Government Aided (***)	5.54%	8.38%	10.19%
Private	22.55%	37.24%	33.28%
% of private in rural	60.70%	52.22%	50.92%
Madarsa (recognized)	1.34%	0.99%	1.01%
Unrecognized	1.91%	2.03%	1.51%

- ❖ Tata Institute of Social Sciences (TISS) released a report titled "Right Teacher for Every Child: State of Teachers, Teaching, and Teacher Education Report 2023".
- ❖ The study is based on existing available data and survey findings from Maharashtra, Bihar, Assam, Chhattisgarh, Karnataka, Punjab, Mizoram and Telangana
- ❖ It showed low levels of competency in regional language among primary school teachers.
- ❖ 90% of teachers hold some kind of professional certification.
- ❖ Only 46% of primary school teachers were found to possess the necessary professional certification.
- ❖ In many states, the private sector employs 40% or more of the teaching workforce.
- ❖ These schools typically have better facilities (like libraries, computer labs and internet access — 76% in private schools vs only 38% in government schools.
- ❖ More than 50% of teachers in private or non-government schools said that they are working without written contracts.

- ❖ The Government schools also reported a high proportion (41%) of unsupportive parents.
- ❖ Provisioning of physical education teachers was overall low with 36 per cent in government schools and 65 per cent private schools.
- ❖ The Right of Children to Free and Compulsory Education Act, (2009) mandates a student-teacher ratio at the school level of 30:1 for Classes 1 to 5, and 35:1 for Classes 6 to 8.

### Technology on Bamboo Composites



- ❖ During the second day of India International Science Festival (IISF 2023), the Know-How Technology on “Bamboo Composites” was transferred to materials manufacturing company.
- ❖ Bamboo composites are materials that blend bamboo fibres with other substances to form composite materials.
- ❖ The bamboo composite product resembles teak wood with better durability & dimensional stability, high strength, density, mechanical strength, fire resistance, moisture resistance, and natural & aesthetic appearance.
- ❖ Within 3-4 years, the bamboo gets matured can be utilised for developing into bamboo composite, unlike teak wood, which requires 30-40 years to grow.
- ❖ Bamboo is also an excellent absorber of CO<sub>2</sub> and releases oxygen in large amount (approximately 35%) which helps to cure global warming.

### Guidelines for Green Claims

- ❖ Advertising Standards Council of India (ASCI) has issued its guidelines to prevent false pro-environment claims.
- ❖ The draft guidelines target greenwashing – the deceptive practice of making misleading environmental claims.
- ❖ This will be effective from February 15, 2024, these mandate that green claims in ads are reliable, verifiable and transparent.

- ❖ Ads making relative claims like “greener” or “eco-friendlier” must provide evidence.
- ❖ Ads cannot market legal compliance itself as an environmental achievement.
- ❖ Brands cannot highlight the absence of one damaging component that competitors also lack as an ecological benefit.



### **All Women contingent's parade**



- ❖ Women contingents from the Armed Forces, Border Security Force (BSF), Delhi Police, and Agniveers paraded on Kartavya Path, Delhi.
- ❖ Capt Sandhya Mahla led an all-women tri-service contingent at the parade along with Sub Lt Aashu Yadav, Flt Lt Shrishti Verma and Capt Sharanya Rao.
- ❖ The contingent was consisted of women Agniveers from all the three services.
- ❖ For the first time, an all-women contingent of the Armed Forces Medical Services marched on Kartavya Path, led by Major Srishti Khullar.
- ❖ A 149-member all-male contingent of the Bombay Sappers, which returned to the parade after two decades, was led by woman officer, Major Divya Tyagi.



- ❖ For the first time in the history, the Delhi police force IPS officer Shweta K Sugathan lead the contingent comprised only women personnel.
- ❖ The Indian Air Force (IAF) contingent was led by Squadron Leader Rashmi Thakur.
- ❖ The Indian Coast Guard (ICG) contingent was led by assistant commandant Chunauti Sharma.
- ❖ For the second time, female camel riders on their decorated camels took part in the parade.

### **Idate Commission Report**

- ❖ The National Human Rights Commission (NHRC) stressed on the need to implement the Bhiku Ramji Idate Commission report.
- ❖ The Idate Commission submitted its report in January 2018.
- ❖ The committee has recommended for setting up a permanent commission for Nomadic, Semi Nomadic, and De-Notified Tribes (NTs, SNTs, and DNTs) in India.
- ❖ The Renke Commission report of 2008 had roughly estimated their population to be between 10-12 crore.
- ❖ However, none of its recommendations were implemented.
- ❖ The commission also maintained that the government must act to repeal the Habitual Offenders Act, 1952 and if not, the appointment of a representative of De-notified Tribe community with the nodal officers as stipulated in the Act.
- ❖ It also suggested the non-inclusion of DNTs/NTs/SNTs under the SC/ST/OBC and formulation of specific policies for the former, among many others.

### **Boeing Sukanya Program**

- ❖ The new state-of-the-art Boeing India Engineering & Technology Center (BIETC) campus was inaugurated in Bengaluru, Karnataka
- ❖ The Boeing Sukanya Program was also launched during the event.
- ❖ It aims to support the entry of more girl children from across India into the country's aviation sector.
- ❖ The programme will provide opportunities for girls and women to learn critical skills in science, technology, engineering and maths (STEM) fields.
- ❖ For young girls, the programme will create STEM Labs at 150 planned locations to help spark interest in STEM careers.
- ❖ It also providing scholarships to women who are training to be pilots.



### **VAIBHAV Fellowship Scheme**

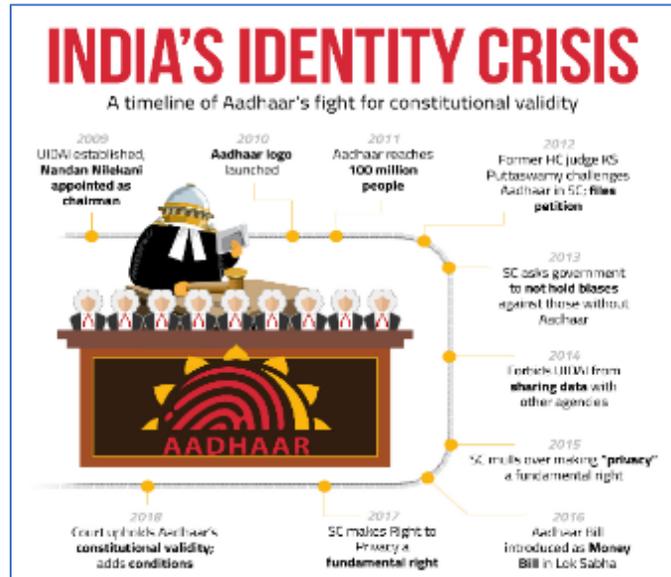
- ❖ The government unveiled a VAIBHAV fellowship to bring Indian-origin researchers to higher educational institutions in the country for a maximum period of two months per year.
- ❖ The fellowship offers NRI researchers an opportunity to work for a minimum of one month to a maximum of two months a year with a research institution or an academic institution in India.
- ❖ The duration of the fellowship is three years with the government offering the researchers an amount of up to Rs 37 lakh for the entire period.
- ❖ It is similar as Visiting Advanced Joint Research Faculty (Vajra) scheme of 2018.



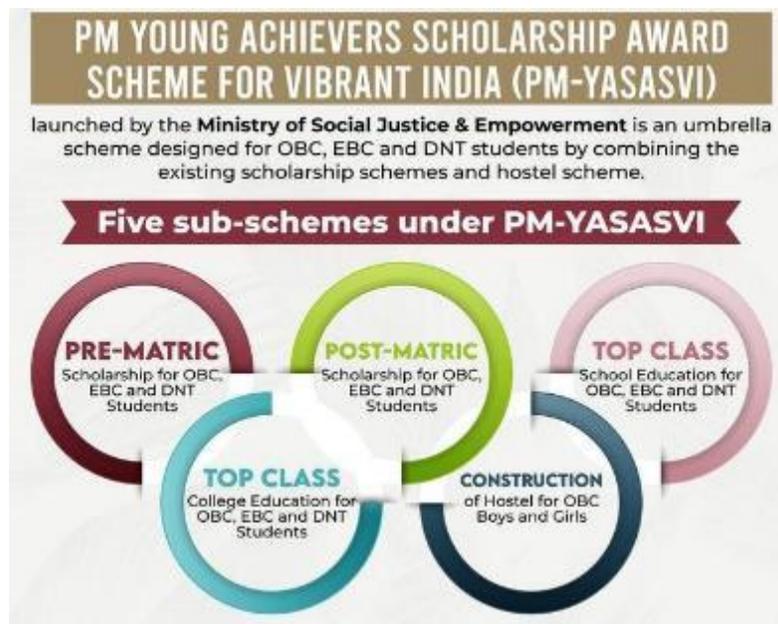
### **Status of Aadhar card**

- ❖ Aadhaar cards and digital copies now prominently state they are “proof of identity”, not of citizenship or date of birth.
- ❖ Thus, Aadhaar will not be used to confirming citizenship or age.
- ❖ Even foreign residents can obtain Aadhaar after 6 months stay in India.

- ❖ Aadhaar just serves as proof of unique identity and residence for Indian inhabitants.



## PM YASASVI scheme



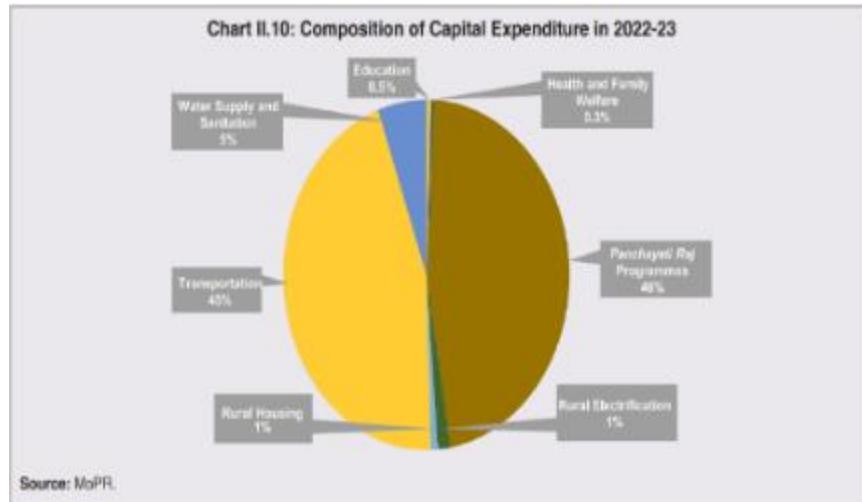
- ❖ A total of ₹32.44 Crore has been released for Pre-matric Scholarships and ₹387.27 Crore for Post-Matric Scholarships to States/UTs under the PM YASASVI scheme in 2023.
- ❖ This is a Scholarship scheme for Other Backward Class (OBCs), Economically Backward Class (EBC) and De-notified Nomadic Tribes (DNT) Students.



- ❖ Under this Scheme students can avail Pre-Matric Scholarship from Class 9 to 10 and Post Matric Scholarship for their higher studies at post-matriculation or post-secondary stage.
- ❖ Students who excel in their studies also get an opportunity of Scholarship to study in Top Class Schools and Colleges.

### **Finances of Panchayat Raj Institutions**

- ❖ The Reserve Bank of India's (RBI) maiden report on 'Finances of Panchayati Raj Institutions' was released.
- ❖ The PRIs need to intensify efforts to augment their own tax and non-tax revenue resources and improve governance.
- ❖ Around 95% of the PRI revenues are in the form of grants from the Centre and states.
- ❖ It is restricting their spending ability that is already hampered by delays in the constitution of State Finance Commissions.
- ❖ The average revenue per Panchayat from all sources – taxes, non-taxes and grants – was Rs 2.12 million in 2020-21, Rs 2.32 million in 2021- 22 and Rs 2.12 million in 2022-23.
- ❖ The decline in 2022-23 was owing to lesser devolution of grants.
- ❖ The own revenues of the Panchayats were only 1.1% of their total revenue.
- ❖ It is generated by imposing local taxes, fees, and charges on various activities, including land revenue, professional and trade taxes, and miscellaneous fees.
- ❖ Non-tax revenue – primarily from Panchayati Raj programmes and interest earnings – is also modest, with a share of only 3.3% of their total revenue receipts.
- ❖ Panchayats in Tamil Nadu, Himachal Pradesh, Maharashtra, and Telangana have reported higher non-tax revenue than other states.
- ❖ The average expenditure per Panchayat was decreased from Rs 17.3 lakh in 2020-21 to Rs 12.5 lakh in 2022-23.
- ❖ This was due to higher than-normal spending in the pandemic year 2020-21.
- ❖ Goa, Karnataka, Odisha, Sikkim, Kerala, and Tamil Nadu recorded the highest average expenditure at the Panchayat level.
- ❖ The ratio of revenue expenditure of Panchayats to nominal GSDP is less than 0.6 percent for all the States.
- ❖ It was ranging from 0.001 percent in Bihar to 0.56 percent in Odisha.



### **Gyanvapi Mosque Survey Report**

- ❖ A report by the Archaeological Survey of India (ASI) has said that a large Hindu temple existed before the construction of the Gyanvapi Masjid in Varanasi.
- ❖ It was claimed that there was “reuse of pillars and pilasters of pre-existing structure in existing structure.
- ❖ The Gyanvapi mosque was built 600 years ago by a zamindar (landlord) of Jaunpur, Uttar Pradesh.
- ❖ It was renovated by Mughal emperor Akbar during his rule.
- ❖ Then the expansion and renovation of the Gyanvapi mosque was done by Mughal emperor Aurangzeb.

## **INTERNATIONAL**

### **Colombo Security Conclave**

- ❖ India’s National Security Adviser (NSA), Ajit Doval, took part in the sixth NSA meeting of the Colombo Security Conclave (CSC).
- ❖ The meeting also included member-states, Mauritius and Sri Lanka, and observer-states, Bangladesh and Seychelles.
- ❖ The organisation came into its own in 2011, with Sri Lanka joining India and the Maldives for a trilateral maritime security grouping.
- ❖ In 2020, India expressed interest in expanding the CSC to Mauritius, the Seychelles, and Bangladesh.

## Venezuela and Guyana Land Dispute

- ❖ Venezuela and Guyana have agreed not to use force or threaten one another in their long-standing dispute over a border region.
- ❖ Both countries planned to meet again in Brazil within the next three months to resolve any outstanding issues.
- ❖ Venezuela insists Essequibo should be under its control because it was within its borders during the Spanish colonial period.
- ❖ But Guyana says a border drawn by international arbitrators in 1899 means it is part of Guyana.
- ❖ Guyana argues the controversy should be resolved by the International Court of Justice in the Netherlands.
- ❖ While Venezuela says the court does not have jurisdiction.



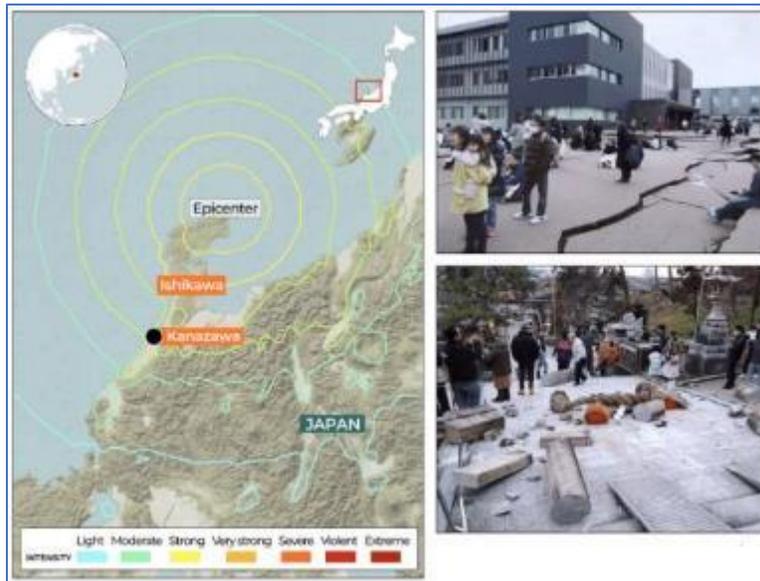
## Argentina in BRICS

- ❖ Argentina has announced that it will not join the BRICS bloc of developing economies.
- ❖ This bloc is made up of Brazil, Russia, India, China and South Africa.
- ❖ It announced it was admitting six new members in a bid to counter the Western-led global order.

- ❖ The membership of Argentina, Ethiopia, Iran, Saudi Arabia, Egypt and the United Arab Emirates was due to take effect from January 1, 2024.
- ❖ Argentina's new president's geopolitical alignment mostly with the United States and Israel.



## Japan Earthquake



- ❖ A major earthquake with a preliminary magnitude of 7.6 hit north-central Japan.
- ❖ Soon after, the Japan Meteorological Agency issued a tsunami warning along the coastal regions of Ishikawa, Niigata and Toyama prefectures.
- ❖ Waves more than 1-metre-high hit the coast of Wajima City in Ishikawa Territory.

- ❖ Last week, an earthquake of magnitude 6.3 on the Richter scale occurred in Japan's Kuril Islands.
- ❖ Japan was devastated by a massive 9.0-magnitude undersea quake off northeastern Japan in March 2011.
- ❖ In March 2022, a 7.4-magnitude quake off the coast of Fukushima shook large areas of eastern Japan.
- ❖ The capital Tokyo was devastated by a huge earthquake a century ago in 1923.

### **China's Mengxiang**

- ❖ China has unveiled its first ocean drilling vessel, the Mengxiang.
- ❖ It is designed to delve into the Earth's crust and explore the mysteries of the mantle.
- ❖ If successful, this will mark humanity's first exploration into the upper mantle.
- ❖ Moreover, its drilling power is the best in its class, with the ability to reach 11,000 metres below the sea's surface.



### **Women's Suffrage at Vatican**

- ❖ In October 2023, Pope Francis allowed women to vote at the Synod of Bishops for the first time.
- ❖ With this historic move, Vatican City became the last country in the world to give its women the right to vote.
- ❖ Earlier in 2021, Francis for the first time named a woman to the number two position in the governorship of Vatican City.
- ❖ This was making Sister Raffaella Petrini the highest-ranking woman in the world's smallest state.



## Russia on International Space Station



- ❖ Russian and U.S. space agencies have agreed to keep working together to deliver crews to the International Space Station (ISS) until at least 2025.
- ❖ The ISS was launched in 1998 at a time of increased US-Russia cooperation following the Cold War "Space Race."
- ❖ ISS partners – the United States, Russia, Europe, Canada and Japan – are for the moment only committed to operate the orbiting laboratory until 2024.
- ❖ Russia said that it planned to use the International Space Station until 2028.

## **BRICS expansion 2024**

- ❖ Saudi Arabia, Egypt, the United Arab Emirates, Iran and Ethiopia joined the ranks of the BRICS group on January 1.
- ❖ The five countries were to join the group in August 2023 at the 15th BRICS summit in Johannesburg, South Africa.
- ❖ Argentina was also invited but backed out at the end of December.
- ❖ The BRICS group of emerging countries was formed in 2006 by Brazil, Russia, India and China, with South Africa joining in 2010.



## **Genocide case against Israel**

- ❖ South Africa moved the International Court of Justice (ICJ), for an urgent order declaring that Israel was in breach of its obligations under the 1948 Genocide Convention.
- ❖ The ICJ is a United Nations platform for resolving disputes between states.
- ❖ The term 'genocide' has been defined using set criteria in the UN's Convention on the Prevention and Punishment of the Crime of Genocide-1948.
- ❖ In the present Convention, genocide means any of the following acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group, as such:
  - Killing members of the group;
  - Causing serious bodily or mental harm to members of the group;
  - Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part;
  - Imposing measures intended to prevent births within the group;
  - Forcibly transferring children of the group to another group.

- ❖ In 2019, the Gambia, on behalf of the OIC (Organisation of Islamic Cooperation), petitioned the court against Myanmar over its atrocities against the Rohingya people.

### **India at Square Kilometre Array Observatory**

- ❖ India has joined a mega project – Square Kilometre Array Observatory (SKAO).
- ❖ The SKAO is not a single telescope but an array of thousands of antennas, to be installed in remote radio-quiet locations in South Africa and Australia.
- ❖ It will operate as one large unit meant to observe and study celestial phenomena.
- ❖ Some of the countries taking part in building the SKA include the UK, Australia, South Africa, Canada, China, France, India, Italy and Germany.



### **Denmark's Queen Margrethe II**

- ❖ Denmark's Queen Margrethe II has announced her relinquish of her role after a reign lasting 52 Years.
- ❖ She will hand over the throne to her son, Crown Prince Frederik.
- ❖ Queen Margrethe II took over the throne on 14 January 1972 following the death of King Frederik IX.
- ❖ After the death of Britain's Queen Elizabeth II last year Margrethe became the longest-serving monarch in Europe.
- ❖ Denmark's royals have a limited role under the country's constitution, with power resting with parliament.
- ❖ Monarchs play an important ambassadorial role as well as signing off on new legislation.



### **Schengen Visas for Paris Olympics**



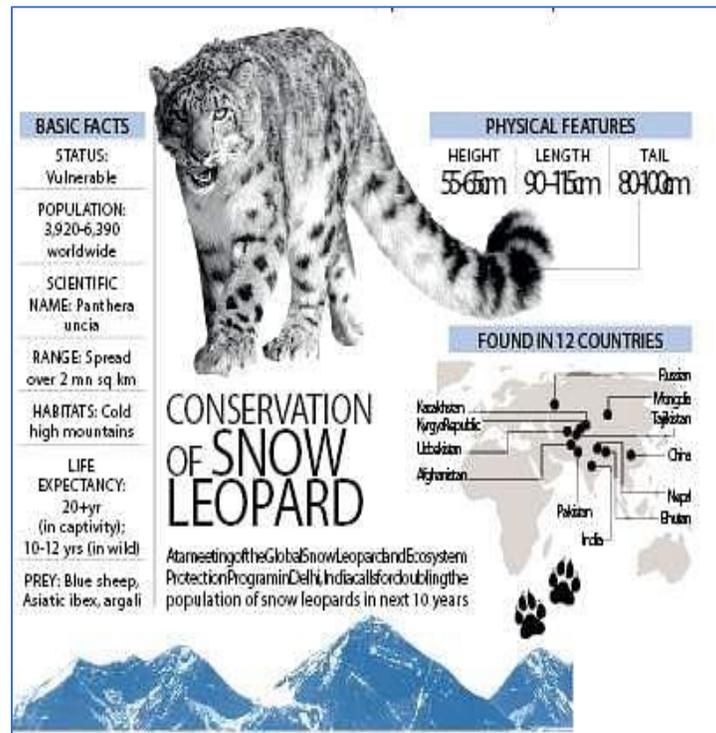
- ❖ France will become the first European country to issue digital Schengen visas to visitors for the upcoming Paris Olympics.
- ❖ France has announced plans to shift entirely to online procedures for 70,000 French Schengen Visas.
- ❖ Last year, the European Union announced plans to turn the Schengen visa digital.
- ❖ The Schengen area includes 23 of the 27 EU member countries, along with associated neighbours Switzerland, Norway, Iceland, and Liechtenstein.

### **Bangladesh election 2024**

- ❖ Incumbent Prime Minister Sheikh Hasina has secured her fifth term in office after her Awami League Party secured absolute majority in the polls.
- ❖ The Awami League take an early lead, winning 216 seats out of 224 seats.
- ❖ Being elected for her fifth term as the prime minister, Sheikh Hasina has become the world's longest-serving female head of state.

## Snow leopard - National symbol

- ❖ Kyrgyzstan has officially declared the snow leopard as its national symbol.
- ❖ In ancient Kyrgyz culture, Panthera uncia/ snow leopard, held significance as a totem animal linked to the legendary hero of the Kyrgyz people, Manas.
- ❖ Kyrgyzstan hosted the inaugural Global Snow Leopard Forum in 2013 in the capital, Bishkek.
- ❖ During this event, the Bishkek Declaration on Snow Leopard Protection was unanimously adopted.
- ❖ The Global Snow Leopard and Ecosystem Protection Programme (GSLEP) was initiated with the collaboration of representatives from 12 snow leopard range countries including India.



## Palace of Aigai

- ❖ The Palace of Aigai in northern Greece was fully reopened following a 16-year renovation.
- ❖ It was built more than 2,300 years ago during the reign of Alexander's father, Phillip II.
- ❖ The palace was the largest building in classical Greece - covering an area of 15,000sq m.

- ❖ The Palace of Aigai was destroyed by the Romans in 148 BC.



## Countries of Particular Concern

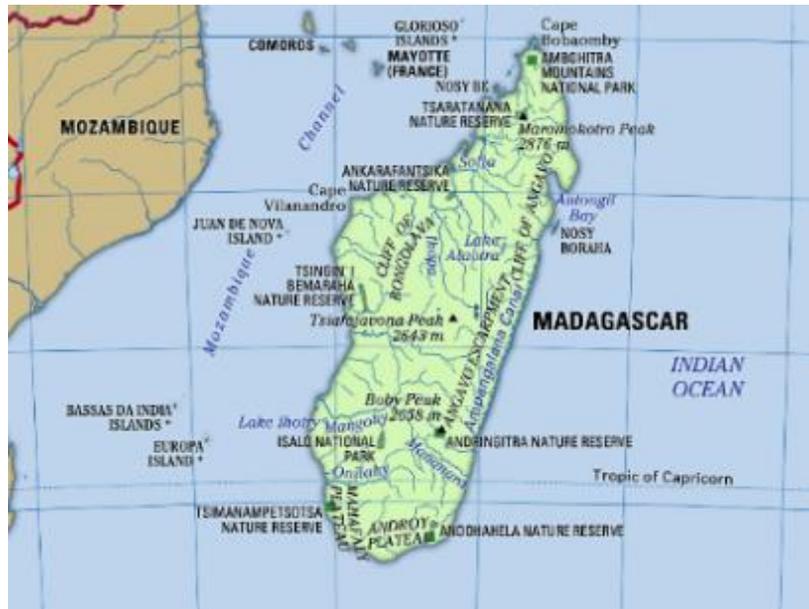
Countries of Particular Concern (CPC) and Special Watch List (SWL)  
USCIRF 2023 Annual Report



- ❖ The U.S. has designated some countries as "Countries of Particular Concern" for engaging in and tolerating "particularly severe violations of religious freedom."
- ❖ They are Burma, China, Cuba, North Korea, Eritrea, Iran, Nicaragua, Pakistan, Russia, Saudi Arabia, Tajikistan, and Turkmenistan.
- ❖ In addition, they designated Algeria, Azerbaijan, the Central African Republic, Comoros, and Vietnam as Special Watch List countries for engaging in or tolerating severe violations of religious freedom.

## Alvaro cyclone

- ❖ Alvaro, the first cyclone of 2024, made landfall near Morombe in Madagascar.
- ❖ It is the first cyclone to hit Madagascar during the 2023-2024 season.
- ❖ The existing early warning systems in the Southern Africa region, including Madagascar, are inadequate to prevent loss of life and economic hardship.



### Global Economic Resilience

- ❖ After a low-base fuelled rebound to 6.2 percent in 2021, the World Bank estimates global growth cooled to 3.0 percent in 2022 and then to 2.6 percent in 2023.
- ❖ It now projects the world economic growth to slow down further to 2.4 percent in 2024, before edging up to 2.7 percent in 2025.
- ❖ This is well below the 3.1 percent average growth seen in the 2010s.
- ❖ Most economies will likely grow at a slower rate in 2024 and 2025 than they did in the 10 years before the COVID-19 pandemic.
- ❖ India's growth edging up steadily from 6.3 percent in 2023-24 to 6.4 percent in 2024-25 and 6.5 percent in 2025-26.

	2023	2024	2025
World	2.6%	2.4%	2.7%
US	2.5%	1.6%	1.7%
Euro area	0.4%	0.7%	1.6%
Japan	1.8%	0.9%	0.8%
China	5.2%	4.5%	4.3%
Russia	2.6%	1.3%	0.9%
Brazil	3.1%	1.5%	2.2%
South Africa	0.7%	1.3%	1.5%

## Global Firepower rankings 2024

TOP 10 MILITARY POWERS IN 2024		
For the 2024 GFP review, a total of 145 world powers are considered		
Country		PwrIndx
 UNITED STATES		0.0699 -
 RUSSIA		0.0702 -
 CHINA		0.0706 -
 INDIA		0.1023 -
 SOUTH KOREA		0.1416 ↑
 UNITED KINGDOM		0.1443 ↓
 JAPAN		0.1601 ↑
 TÜRKİYE		0.1697 ↑
 PAKISTAN		0.1711 ↓
 ITALY		0.1863 -

- ❖ The United States continues to have the most powerful military in the world, according to the Global Firepower rankings 2024.
- ❖ It is followed by Russia and China.
- ❖ India has the fourth strongest military of evaluated 145 countries.
- ❖ South Korea overtook UK and became the fifth most powerful country in the world in terms of military strength.
- ❖ Pakistan is at number 9 while Bhutan has the least powerful military in the world.
- ❖ US spends the most money on its military with a defence budget of \$831 billion.
- ❖ It is followed by China (\$227 billion), Russia (\$107 billion) and India (\$74 million).
- ❖ Among the top five defence spenders, US accounts for 63.3% of the total expenditure share.

## Cabo Verde - Malaria Free City

- ❖ The World Health Organization (WHO) has certified Cabo Verde (Cape Verde) as a malaria-free country.
- ❖ Thus, it was becoming the third country to acquire the status in the global health organisation's African region.

- ❖ The country has now joined Mauritius and Algeria, who were certified in 1973 and 2019, respectively.
- ❖ Africa has the highest malaria burden and accounted for roughly 95 per cent of global malaria cases and 96 per cent of related deaths in 2021.
- ❖ Till now, WHO has awarded the 'malaria-free' certification to 43 countries and 1 territory.

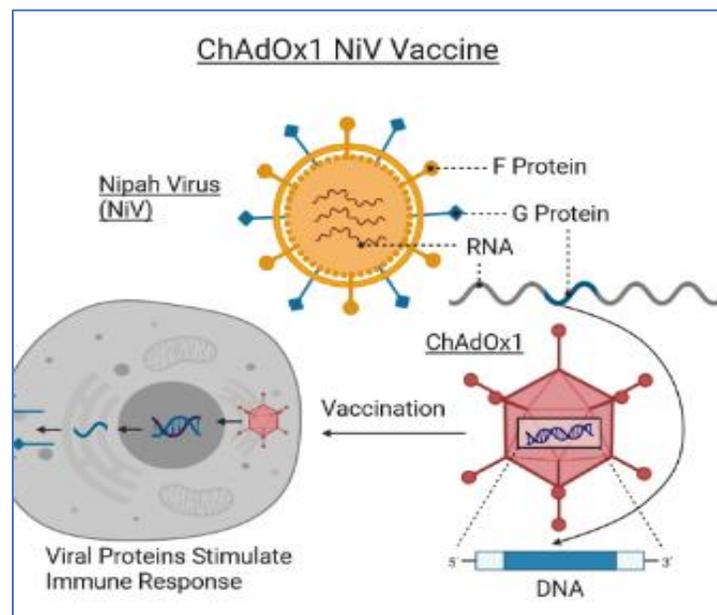


### **Green Fuels Alliance India (GFAI)**

- ❖ At the TN Global Investors Meet (GIM) 2024, Denmark announced a Green Fuels Alliance India (GFAI) initiative.
- ❖ It aims to boost collaboration between the two countries in the sustainable energy solutions sector and advance its joint global goal towards carbon neutrality.
- ❖ The GFAI's primary objective is to promote sustainable energy growth in India by establishing an ecosystem that encourages collaboration among businesses, government entities, research institutions, and financial stakeholders.
- ❖ Nine pioneering Danish organisations have committed themselves to the GFAI initiative as founding members.
- ❖ Meanwhile, the GFAI's advisory board members include India Hydrogen Alliance, Energy Consortium at the Indian Institute of Technology-Madras, the Danish Energy Agency and State of Green.
- ❖ India is working towards achieving net zero emissions by 2070.
- ❖ The GFAI is demonstrative of activities under the Green Strategic Partnership (GSP) signed between India and Denmark in 2020.

### **First human vaccine trials for Nipah**

- ❖ The University of Oxford, U.K. have launched first-in-human vaccine trials for the deadly Nipah virus.
- ❖ The trials of the ChAdOx1 NipahB vaccine was consisting of 51 people aged 18 to 55.
- ❖ Nipah virus is a devastating disease that can be fatal in around 75% of cases.
- ❖ Outbreaks have occurred in countries in Asia, including Singapore, Malaysia, Bangladesh and India.
- ❖ Nipah virus is carried by fruit bats and may also be transmitted by contact with infected animals (such as pigs) or from person-to-person via close contact.
- ❖ Nipah virus was first identified in 1998.

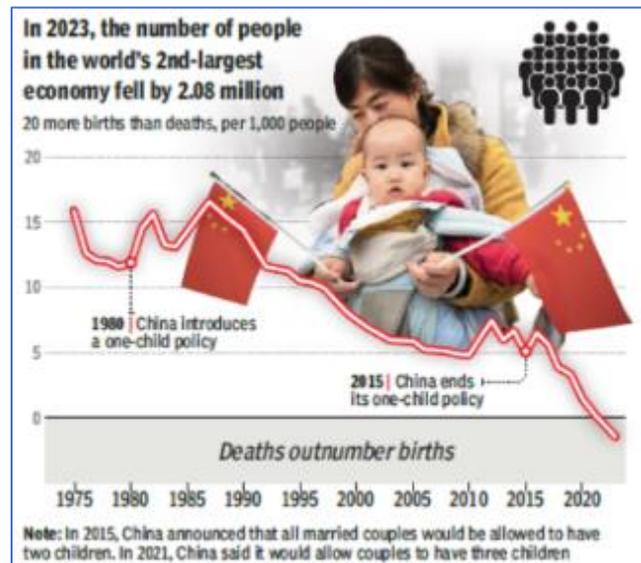


### **WEF annual meeting 2024**

- ❖ The World Economic Forum Annual Meeting 2024 is held in Davos.
- ❖ The 54th annual meeting adopts a theme centered on returning to fundamental principles.
- ❖ Key Focus Areas at Davos 2024:
  - Achieving Security and Cooperation amid Rising Geopolitical Tensions:
  - Creating Growth and Jobs for a New Era
  - Artificial Intelligence as a Driving Force for the Economy and Society
  - A Long-Term Strategy for Climate, Nature, and Energy

## China's Population Falls Again in 2023

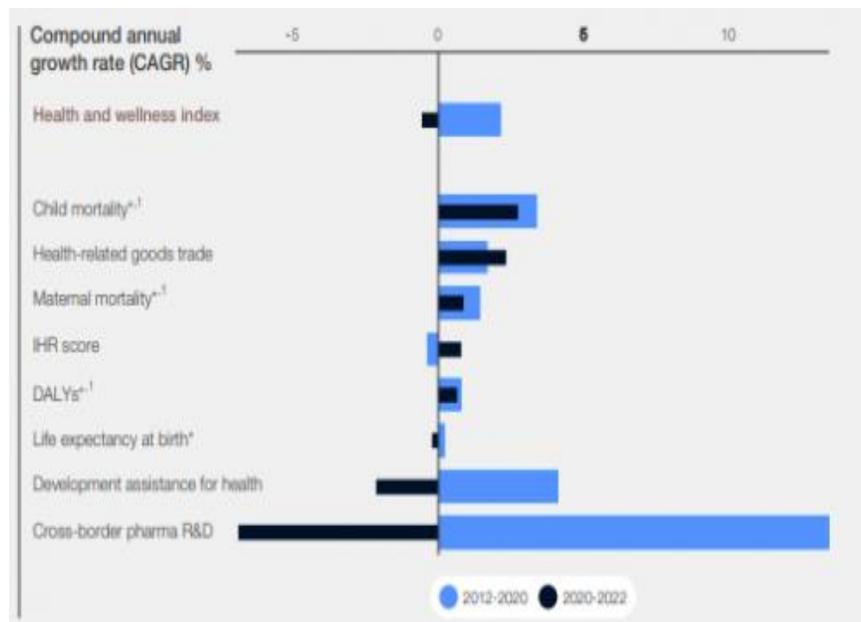
- ❖ China's population fell for a second consecutive year in 2023, as a plunging birth rate and a wave of COVID-19 deaths.
- ❖ The total number of people in China was dropped by 2.75 million to 1.409 billion in 2023, a faster decline than in 2022.
- ❖ It was the first since 1961 during the Great Famine of the Mao Zedong era.
- ❖ The country's birth rate has been plummeting for decades as a result of the one-child policy implemented from 1980 to 2015.
- ❖ By long-term, China's population is shrinking by 109 million by 2050.
- ❖ It will more than triple the decline of their previous forecast in 2019.
- ❖ China's birth rate last year was 6.39 births per 1,000 people, down from a rate of 6.77 births in 2022 and marking the lowest birth rate on record.
- ❖ Japan's rate was 6.3 births per 1,000 people in 2022, while South Korea's was 4.9.
- ❖ China's 2023 rate of 7.87 deaths per 1,000 people, was up from a rate of 7.37 deaths in 2022.
- ❖ This is the highest since 1974 during the Cultural Revolution.



## The Global Cooperation Barometer 2024

- ❖ The barometer was developed in collaboration with management consultants McKinsey & Company.
- ❖ The five pillars are trade and capital; innovation and technology; climate and natural capital; health and wellness; and peace and security.

- ❖ Life expectancy at birth for the World declined to 71 in 2021 from 72.8 in 2019.
- ❖ An estimated 241 million malaria cases and 627,000 deaths from malaria were reported worldwide in 2020.
- ❖ This means that 14 million more people contracted malaria and 69,000 more people died from it than in 2019.
- ❖ Maternal mortality rates increased for the first time in three decades.
- ❖ In 2020, the global maternal mortality ratio was 152 deaths per 100,000 live births, up from 151 deaths per 100,000 live births in 2019.
- ❖ Of the estimated 287,000 maternal deaths recorded in 2020, 70 per cent (202,000) took place in sub-Saharan Africa.



### **“Green Rooms” in Ukraine**

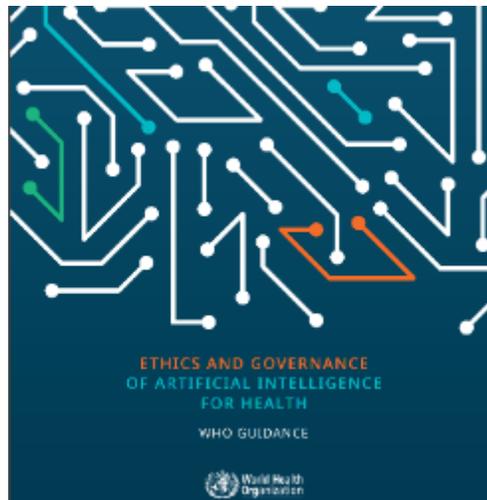
- ❖ The United Nations Development Programme (UNDP) in Ukraine, in partnership with the Government of Denmark, has launched two “green rooms” in Ukraine.
- ❖ The “green room” enables a set of activities within a specially equipped space to facilitate effective interaction between police officers and child survivors and witnesses of crime.
- ❖ The rooms operate on principles that safeguard the rights and freedoms of the child during investigative and procedural actions.
- ❖ The “green room” comprises two spaces separated by special glass.
- ❖ One room facilitates communication with the child, while the other allows observation of the conversation.

## **New King of Denmark**

- ❖ Denmark's King Frederik X has ascended the throne by succeeding his mother, Queen Margrethe II.
- ❖ He will reign as king over Denmark, Greenland and the Faroe Islands.
- ❖ However, the formal power will remain with the elected parliament and Denmark's government.
- ❖ Margrethe announced she planned to become the first Danish monarch in nearly 900 years to voluntarily relinquish the throne.
- ❖ Denmark, one of the oldest monarchies in the world, does not have a coronation.



## **Guidance on Healthcare AI Ethics**



- ❖ The WHO issues guidelines on ethics and governance of AI for health, specifically multimodal AI like ChatGPT.
- ❖ These guidelines address the ethical quandaries surrounding the rapid advancement of generative AI technology, particularly in its applications within the healthcare domain.
- ❖ The new WHO guidance outlines five broad applications of large multimodal models (LMMs) for health:

- Diagnosis and clinical care, such as responding to patients' written queries
- Patient-guided use, such as for investigating symptoms and treatment
- Clerical and administrative tasks, such as documenting and summarising patient visits within electronic health records
- Medical and nursing education, including providing trainees with simulated patient encounters
- Scientific research and drug development, including to identify new compounds.

### **Chancay port of Peru**

- ❖ The \$3.5 billion deep water port in the Peruvian fishing town of Chancay will be the first controlled by China in South America.
- ❖ It is a part of China's Belt and Road Initiative
- ❖ It will provide the Asian nation a direct gateway to the resource-rich region.
- ❖ The Chancay mega port aims to turn Peru into a strategic commercial and port hub between South America and Asia.
- ❖ Some 150 countries have signed on to the Belt and Road with China, including 22 in Latin America.
- ❖ Peru is the world's no. 2 copper producer, traded slightly more with the U.S. than China.



### **Malathion to Afghanistan**

- ❖ India has sent 40,000 litres of Malathion, a pesticide, to Afghanistan through Iran's Chabahar port.
- ❖ The pesticide is used to fight the locust menace.

- ❖ Malathion is an environment-friendly pesticide and best suited for arid regions.
- ❖ The Indian assistance will ensure food security in Afghanistan and Central Asia.
- ❖ The Indian government has partnered with the United Nations World Food Programme for the internal distribution of wheat within Afghanistan.
- ❖ Under this partnership, India has supplied 47,500 metric tonnes of wheat as assistance to UNWFP centres in Afghanistan.



## Discussion on Disease X



- ❖ The discussion titled, Preparing for Disease X, was hosted by the World Economic Forum.
- ❖ 'Disease X' represents an unknown disease that could cause a potential epidemic or pandemic.
- ❖ It will make unprecedented impact on health infrastructure and mortality.



- ❖ It is most likely to be a zoonotic disease with a ribonucleic acid (RNA) virus, having a far worse effect on mortality rates than the COVID-19 pandemic.
- ❖ RNA viruses have a high mutation rate and highly infectious.

### **19<sup>th</sup> NAM Summit**

- ❖ The 19<sup>th</sup> Summit of the NAM was held in Kampala, Uganda.
- ❖ The theme of the event was "Deepening Cooperation for Shared Global Affluence".
- ❖ The summit usually takes place every three years.
- ❖ Uganda has taken over as chair from Azerbaijan, to run until 2027.
- ❖ The summit adopted the Kampala Declaration.
- ❖ During this event, Ugandan President Yoweri Museveni expressed his regret over the expulsion of Indians in 1970s.
- ❖ In August 1972, Idi Amin, the dictator of Uganda, ordered the expulsion of Indians and other Asians who were living and working in Uganda.
- ❖ Around 80,000 Indians were forced to leave the country within 90 days.
- ❖ Currently, Indian Nationals/PIOs who constitute less than 0.1% of Uganda's population, contribute about 70% of Uganda's direct taxes.
- ❖ At present, NAM has 120 Member States, 17 Observer Countries and 10 Observer organizations.
- ❖ NAM does not have a permanent secretariat or a formal founding charter, act, or treaty.

### **Steadfast Defender 2024 exercise**

- ❖ The Exercise Steadfast Defender 24, NATO's largest exercise in decades, began at USA.
- ❖ It will take place in several locations, with associated exercises running until May 31, 2024.
- ❖ It will be the first large scale NATO exercise where new defence plans will be put into action.
- ❖ Approximately 90,000 troops from the United States and other Nato member nations are slated to participate.

### **ICJ Ruling on Gaza**

- ❖ The International Court of Justice (ICJ) has delivered its ruling on the emergency measures requested by South Africa.
- ❖ South Africa filed a genocide case against Israel over its war on the Gaza Strip.

- ❖ ICJ has ordered Israel to take steps to prevent acts of genocide in Gaza but stopped short of ordering a ceasefire.



## Nitrogen hypoxia execution



- ❖ Alabama, a US state with 165 people on death row, carried out the first-ever execution by an untested method known as nitrogen hypoxia.
- ❖ The convicted man had been on death row since 1996.
- ❖ Nitrogen hypoxia is a method of execution where a respirator mask is placed over the inmate's face, and their breathing air is replaced with pure nitrogen gas.
- ❖ This deprives the individual of oxygen, leading to unconsciousness in a few seconds, and ultimately causing death in several minutes.
- ❖ Lethal injection is the most common form of execution in the US and was also introduced as an experimental and "gentler" method in 1982.
- ❖ The last execution in US using gas was in 1999, by using hydrogen cyanide gas.

## ECONOMY

### Iron Ore Exports to China

- ❖ China has emerged the highest buyer of iron ore from India with nearly 24.75 million tonnes (mt) being exported for April-November period (eight months).
- ❖ This is the highest export to China in absolute terms in over the last three years, and second highest since FY20.
- ❖ So far, this fiscal, nearly 95 per cent of India's iron ore shipments have gone to China.
- ❖ From 18.15 mt for 8 months of FY20 or 76 per cent of total shipments, it shot up to 92 per cent of at 35.19 mt in FY21 - the highest in absolute numbers.



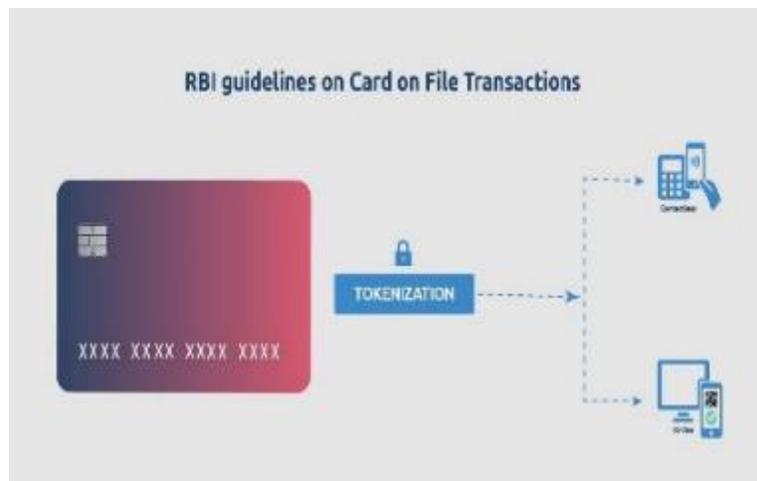
### Trend and Progress of Banking in India

#### STRESS TEST FINDINGS

- Net non-performing assets hit record low of **0.8%**
- Under baseline scenario, gross NPA ratio may improve to **3.1%** by Sept
- Capital position will be at **12.2%** under severe stress scenario, well above the minimum capital requirement
- The recent increase in risk weights of select retail loan categories may have implications for NBFC credit growth
- Contagion risks warrant monitoring due to increased inter-bank exposure

- ❖ Indian banks' gross non-performing assets (GNPA) ratio fell to 3.2 per cent at the end of September.
- ❖ The GNPA ratio for Scheduled Commercial Banks (SCBs) dropped to 3.9% at the end of March 2023.
- ❖ The report also highlighted that commercial banks' consolidated balance sheet grew by 12.2% in 2022-23, the highest in nine years.
- ❖ At the end of September 2023, the capital to risk weighted assets ratio (CRAR) of SCBs stood at 16.8 percent.

### **Card-on-file tokenisation**



- ❖ The Reserve Bank of India (RBI) has now enabled card-on-file tokenisation (CoFT) through card issuing banks and institutions.
- ❖ It aims to enhance convenience for cardholders to get tokens created and linked to their existing accounts with various e-commerce applications.
- ❖ The card details when stored with a merchant is known as card-on-file (CoF).
- ❖ This free availability of information was used to compromise the safety of financial data of users.
- ❖ RBI introduced the rule of tokenisation in Sep 2021 where instead of card details, a specially created token is saved with the merchant.

### **NSE investors data**

- ❖ The number of investors in India went past the 8-crore mark in 2023.
- ❖ This registering a 22.4% jump from December 31, 2022.
- ❖ Uttar Pradesh added the greatest number of new stock market investors for NSE in 2023.



- ❖ It is followed by Maharashtra and Gujarat.
- ❖ In percentage terms, Mizoram, at 55% showed the biggest jump but on a low base of 9,564 investors.
- ❖ Maharashtra has almost 1.5 crore investors, UP pipped Gujarat (77) with 90 lakh investors.
- ❖ Retail participation also saw spike in West Bengal, Karnataka, Tamil Nadu, and Rajasthan.
- ❖ The National Stock Exchange of India Ltd is the world's largest derivatives bourse by the number of contracts traded.

### Investors

- **NSE's investor base reached 8.5 crore by December 2023.**
- **Investor base increased from 7 crore to 8 crore in eight months to September 2023.**
- **Uttar Pradesh at second position in terms of total registered investors with 90 lakh investors as on December 29<sup>th</sup>, 2023.**
- **99.85% pin codes covered in terms of investor registrations.**
- **23 new Investors Services Centres (ISC) in 2023, taking the total to 42 across the country.**

### Domestic systemically important banks 2023

- ❖ The Reserve Bank of India has released the latest list of domestic Systemically important banks (D-SIBs).
- ❖ RBI has retained State Bank of India, HDFC Bank and ICICI Bank as Domestic Systemically Important Banks.
- ❖ The Reserve Bank had announced SBI and ICICI Bank as D-SIBs in 2015 and 2016.
- ❖ The D-SIB framework requires the Reserve Bank to disclose the names of banks designated as D-SIBs starting from 2015.
- ❖ RBI places these banks in appropriate buckets depending upon their Systemic Importance Scores (SISs).

The list of D-SIBs is as follows:

Bucket	Banks	Additional Common Equity Tier 1 requirement as a percentage of Risk Weighted Assets (RWAs)
5	-	1%
4	State Bank of India*	0.80%
3	-	0.60%
2	HDFC Bank*	0.40%
1	ICICI Bank	0.20%

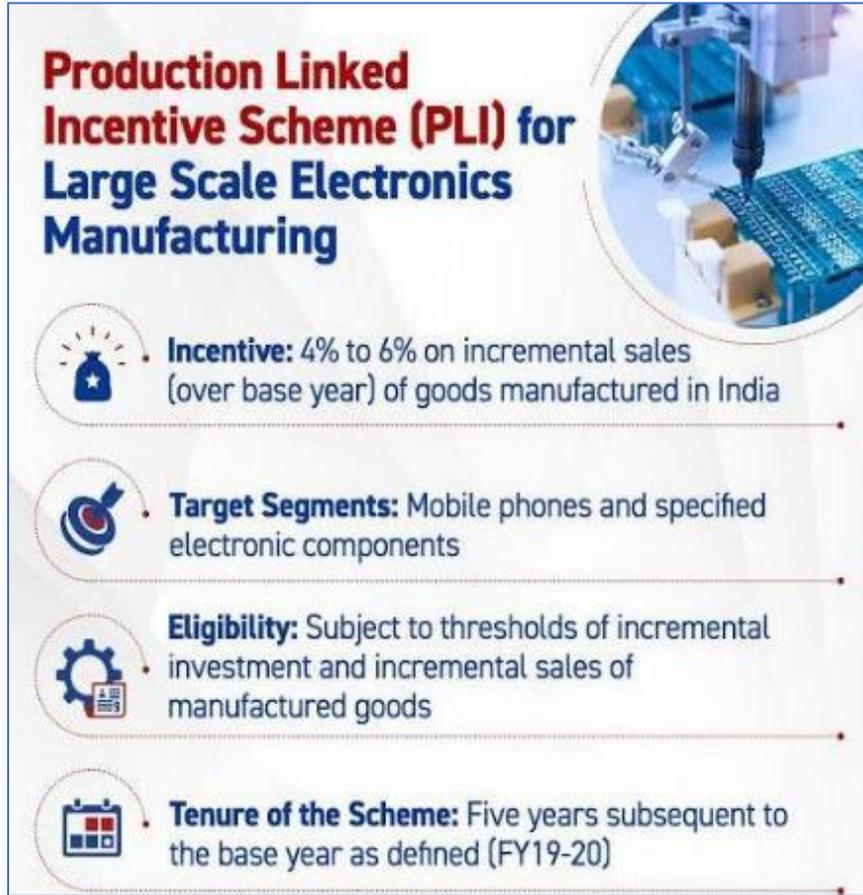
\* The higher D-SIB surcharge for SBI and HDFC Bank will be applicable from April 1, 2025. Hence, up to March 31, 2025, the D-SIB surcharge applicable to SBI and HDFC Bank will be 0.60% and 0.20% respectively.

### UPI transactions 2023



- ❖ UPI ended 2023 at a high, creating a new record in terms of both the transaction count and value.
- ❖ There were over 1,200 crore transactions in December and they were worth more than Rs 18 lakh crore.
- ❖ It is a marginal increase as compared to the already peaked Rs 17.4 lakh crore in November 2023.
- ❖ Over 11,765 UPI transactions worth Rs 182.2 lakh crore were processed in 2023.
- ❖ It is up 59% in terms of volume and 45% in terms of value compared with 2022.

## Production Linked Incentive extension



**Production Linked Incentive Scheme (PLI) for Large Scale Electronics Manufacturing**

- Incentive:** 4% to 6% on incremental sales (over base year) of goods manufactured in India
- Target Segments:** Mobile phones and specified electronic components
- Eligibility:** Subject to thresholds of incremental investment and incremental sales of manufactured goods
- Tenure of the Scheme:** Five years subsequent to the base year as defined (FY19-20)

- ❖ The Ministry of Heavy Industries extend the Production Linked Incentive (PLI) Scheme for Automobile and Auto Components by one year with "partial amendments".
- ❖ It aims to provide clarity and flexibility to the scheme.
- ❖ The incentive will be applicable for a total of five consecutive financial years, starting from the financial year 2023-24.

### PLI to Ola

- ❖ Ola Electric has become the first Indian e-scooter (e2W) company to get eligible for the government's production-linked incentive (PLI) scheme.
- ❖ Ola Electric will get benefits ranging from INR 15,000 to 18,000 per unit.
- ❖ To qualify for this scheme, e-scooter startups need to invest at least Rs 1,000 crore.



### Steel Sector production

- ❖ India become the world's second-largest producer of crude steel in FY23.
- ❖ It produced 125.32 million tonnes (MT) of crude steel and 121.29 MT of completed steel.
- ❖ This production was increased by 75% since 2008.
- ❖ Steel consumption per capita in India was 86.7 kilograms in FY23.

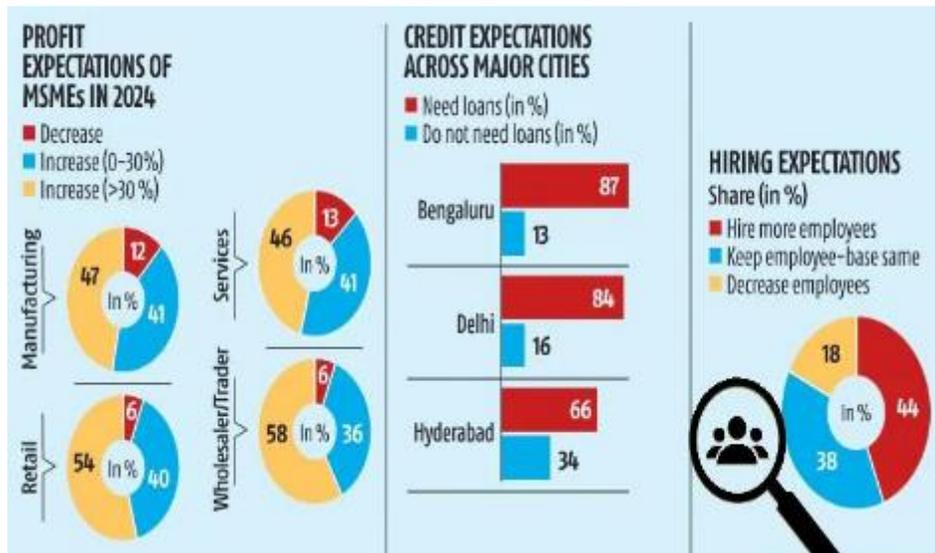
Global crude steel output and offtake*			
	2023	2024	2025
Consumption	1,927	1,962	1,990
Production	1,916	1,947	1,974

\*in million tonnes Source: Office of the Chief Economist, Australia

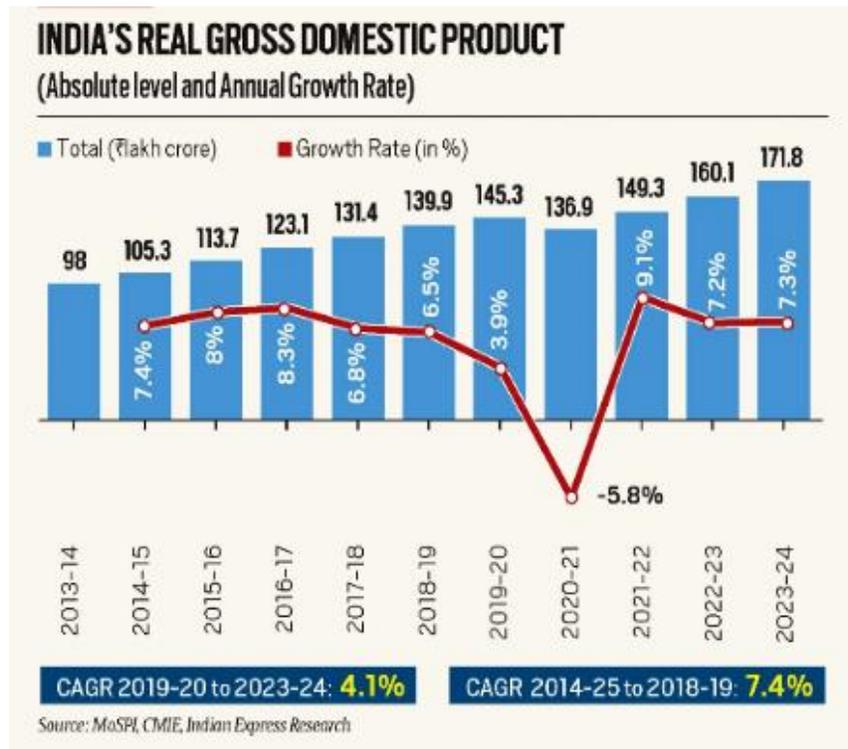
### MSMEs in India: report

- ❖ As of December 2023, there are over 3 crore MSMEs registered in the country, according to government data.
- ❖ Maharashtra, Tamil Nadu, and Uttar Pradesh collectively contribute nearly 40 per cent of all registered micro, small, and medium enterprises (MSMEs) in India.
- ❖ Uttar Pradesh holds a 9 per cent share in the national MSME landscape.

- ❖ The strategic opportunity for Indian MSMEs in the construction sector is contributing approximately 8 per cent to the GDP.



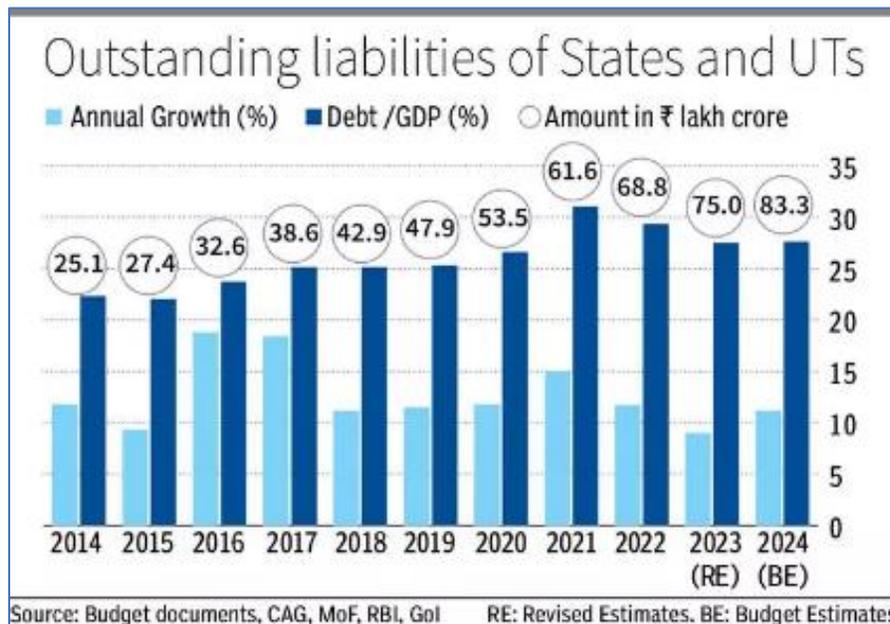
### First Advance Estimates of India's GDP for 2023-24



- ❖ The First Advance Estimates (FAEs) was released by the government recently.
- ❖ India's GDP will grow by 7.3% in the current financial year (2023-24) is slightly faster than the 7.2% growth in 2022-23.

- ❖ The growth in Gross Value Added (GVA) in the economy eases slightly from 7% in 2022-23 to 6.9% this year.
- ❖ Nominal GDP growth at 8.9% is compared to the 10.5% Budget estimate.
- ❖ This could translate into the fiscal deficit breaching the year's 5.9% of GDP target to hit around 6%, economists cautioned.
- ❖ GVA growth for the farm sector is estimated to more than halve from 4% a year ago to 1.8% this year.
- ❖ The FAE are presented at the end of the first week of January every year.
- ❖ They are only the first estimates of growth for that financial year.

### RBI's State of the Economy Report



- ❖ The Indian economy is expected to retain its growth momentum in 2024.
- ❖ Inflation must align with the 4% target by Q2 2024 to enable sustained 7%+ GDP growth in 2024-25.
- ❖ The report forecasts emerging economies like India to outperform the world, with Asia leading overall 2024 growth.
- ❖ Urban consumption has recovered amid a strong uptick in discretionary spending, but rural spending growth remains muted.

## SCIENCE AND TECHNOLOGY

### SLIM Mission - Japan

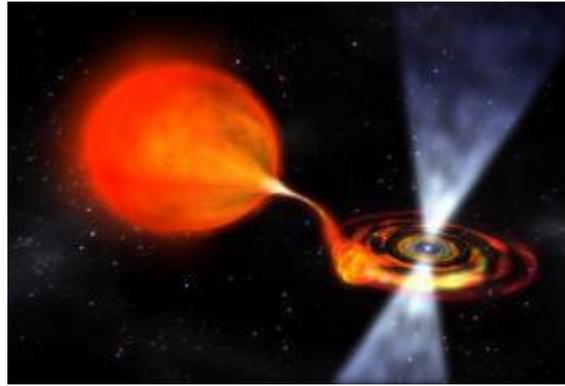
- ❖ Japan's Smart Lander for Investigating Moon (SLIM) spacecraft entered into orbit around the moon recently.
- ❖ If the landing attempt succeeds, Japan will become only the fifth country to soft-land a robotic craft on the natural satellite.
- ❖ By sacrificing some time, SLIM could be more fuel-efficient.
- ❖ SLIM is the second Japanese attempt this year to soft-land on the moon.
- ❖ The HAKUTO-R M1 lander, built by Japanese company ispace, crashed in late April.



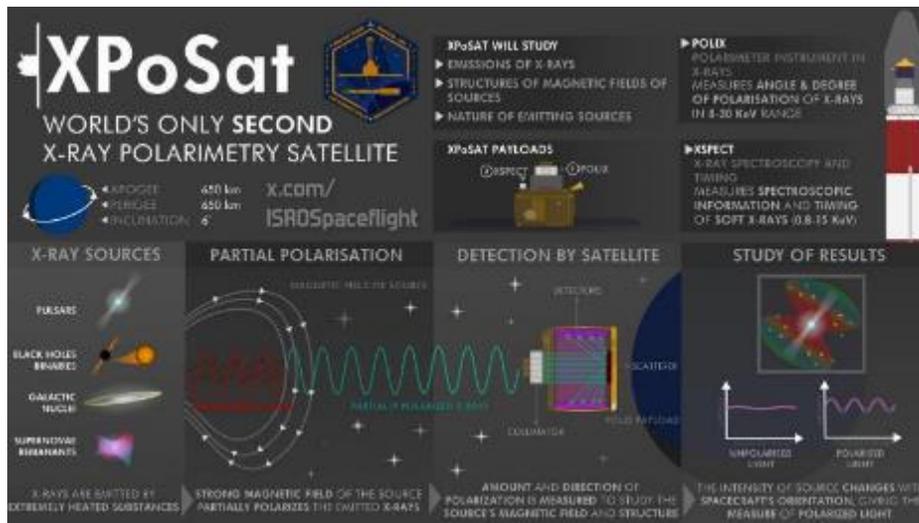
### Bright sub-second X-ray bursts

- ❖ AstroSat, has detected bright sub-second X-ray bursts from a new and unique neutron star with an ultrahigh magnetic field (magnetar).
- ❖ This is expected to help understand the intriguing extreme astrophysical conditions of magnetars.
- ❖ One of the key findings was the detection of 67 short sub-second X-ray bursts, with an average duration of 33 milliseconds.

- ❖ Of these bursts, the brightest one lasted for about 90 milliseconds.
- ❖ AstroSat is the India's first multi-wavelength space-based observatory.
- ❖ Magnetars are neutron stars having an ultrahigh magnetic field that are much stronger than the terrestrial magnetic field.

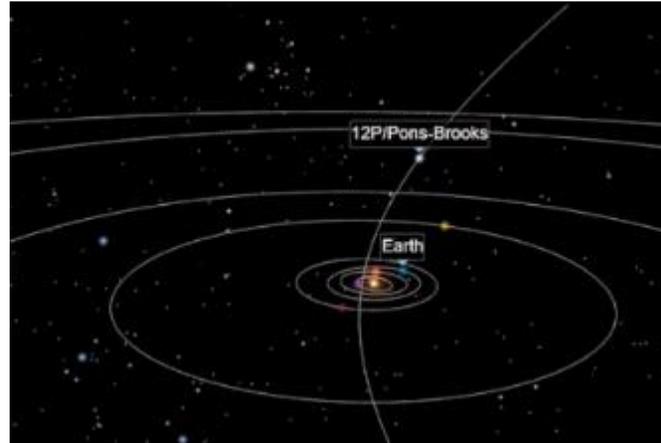


## ISRO's PSLV-C58



- ❖ ISRO's PSLV-C58 has launched X-ray Polarimeter Satellite (XPoSat) into an Eastward low inclination orbit recently.
- ❖ XPoSat is the first dedicated scientific satellite from ISRO.
- ❖ It aims to carry out research in space-based polarisation measurements of X-ray emission from celestial sources.
- ❖ It carries two payloads, namely POLIX (Polarimeter Instrument in X-rays) and XSPECT (X-ray Spectroscopy and Timing).
- ❖ The PSLV also launched 10 payloads developed by start-ups, education institutions and ISRO centres.

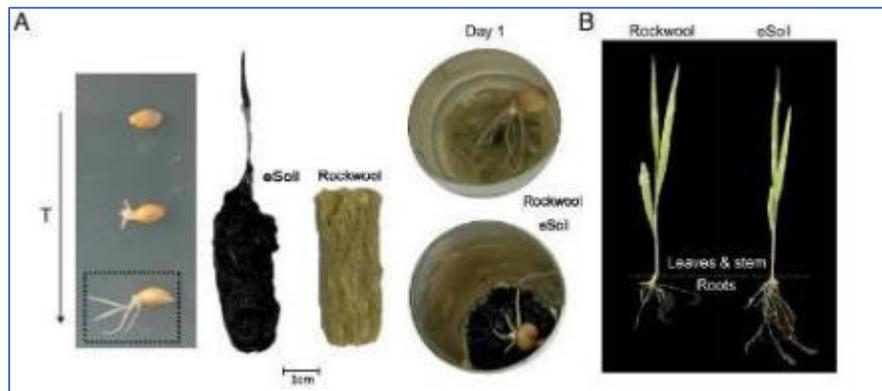
## Devil Comet



- ❖ The "Devil Comet," officially known as 12P, is currently making its way towards Earth and is anticipated to undergo a significant eruption soon.
- ❖ This comet is nearly three times the size of Mount Everest.
- ❖ It is classified as a cryovolcano, which means it erupts due to the build-up and ignition of gas and ice, much like a frozen soda can exploding.
- ❖ The comet is notably large, with a diameter of 18.6 miles, comparable to the size of a small city.
- ❖ It is a short-period comet, completing an orbit around the Sun approximately every 71.2 years, a pattern similar to the well-known Halley's Comet.
- ❖ Comets like this, with an orbital period of less than 200 years, are categorized as short-period comets.

## eSoil: New Development

- ❖ New method of soilless gardening, or hydroponics, using an electrically conductive growing medium is called "electronic soil" or eSoil.
- ❖ eSoil is a low-power bioelectronic growth substrate that can electrically stimulate the root system and growth environment of plants.
- ❖ This novel substrate is environmentally friendly, being derived from cellulose and a conductive polymer called PEDOT.
- ❖ It also offers a low energy, safe alternative to previous methods that required high voltage and non-biodegradable materials.
- ❖ eSoil uses low energy and minimises resource consumption.  
Its active material is an organic mixed-ionic electronic conductor.
- ❖ When the roots of barley seedlings were electrically stimulated for 15 days, they showed a 50% increase in growth using eSoil.



### **Hameleon Trojan**

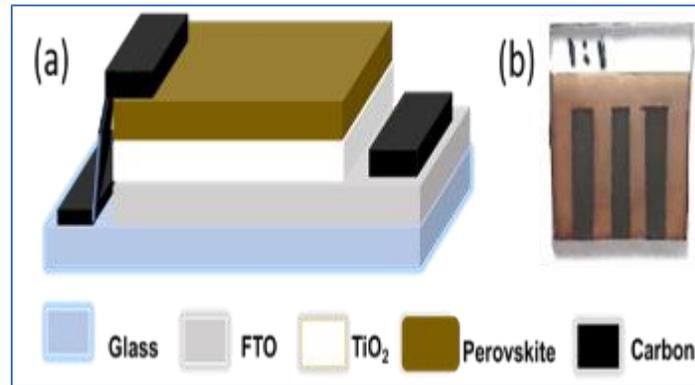
- ❖ The Security researchers have found a new version of the ‘Chameleon Trojan’ malware.
- ❖ It can disable biometric authentication methods like fingerprint and face unlock to steal your phone’s PIN.
- ❖ It steals on-screen content, gives itself more permission and can even navigate using gestures to capture any PINs and passwords users enter to unlock the device.



### **Eco-Friendly Solar Cell Material**

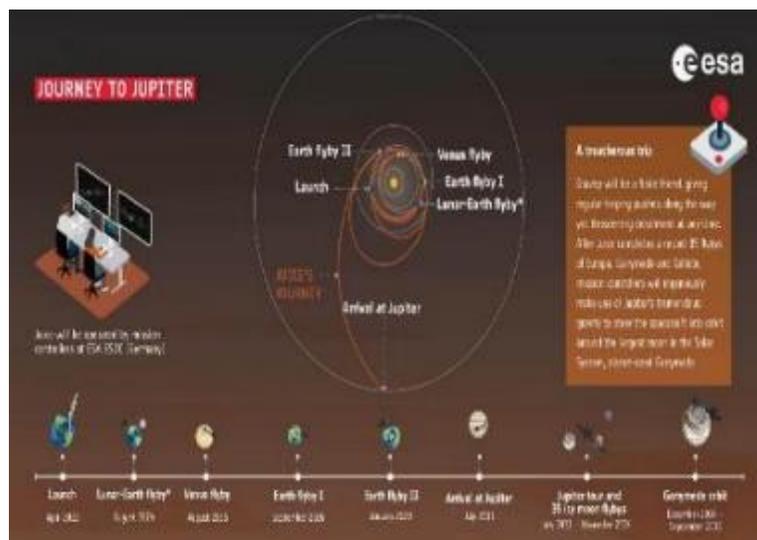
- ❖ The Indian scientists have indigenously developed organic-inorganic halide perovskite self-powered broadband photodetector.

- ❖ It has partial substitution of lead by magnesium which can be useful for solar energy generation.
- ❖ The research represents a significant step towards the replacement of toxic Pb<sup>2+</sup> in perovskite optoelectronic devices.
- ❖ The toxic lead (Pb<sup>2+</sup>) is known for harmful effects on health and the environment.



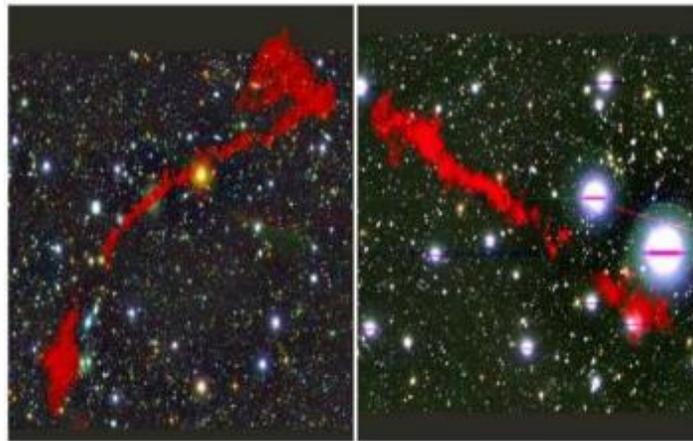
### Double gravity assist

- ❖ European Space Agency's (ESA) Jupiter Icy Moons Explorer (JUICE) probe used double gravity assist.
- ❖ For the first time ever, from Earth and Moon used to propel itself towards Jupiter.
- ❖ This was a notable achievement considering JUICE's substantial weight of around 6000 kg.
- ❖ This mission aims to study Jupiter along with its three intriguing moons – Ganymede, Callisto, and Europa.

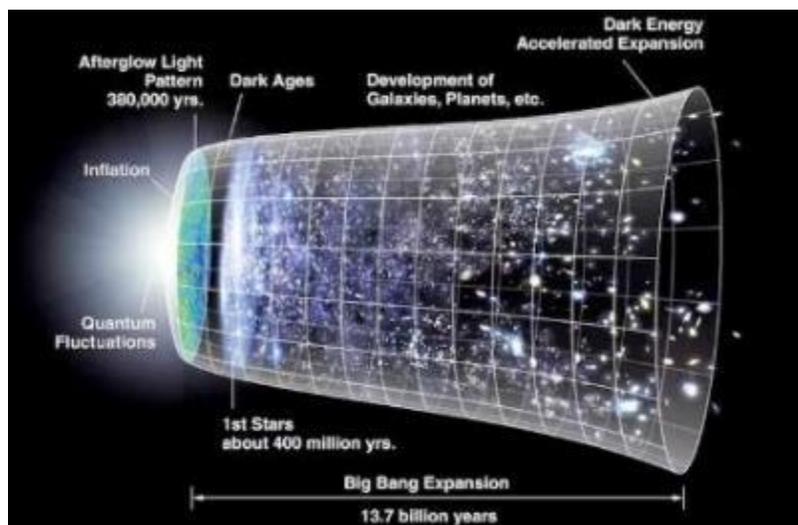


## “Teenage” Galaxies in Cosmic Adolescence

- ❖ The James Webb Space Telescope shows that the teenage galaxies are unusually hot.
- ❖ They reaching about 24,000 degrees Fahrenheit (13,350 degrees Celsius) compared to modern galaxies.
- ❖ Teenage galaxies, though already forming a substantial number of stars, exhibit a rapid growth phase.
- ❖ These adolescent galaxies are formed about 2 to 3 billion years after the Big Bang.
- ❖ Also, they contain some unexpected chemical elements like oxygen, hydrogen and Nickel.



## Cosmic Expansion 2023



- ❖ Euclid telescope observed that the galaxies belonging to the Perseus Cluster and others move further away.



- ❖ This was showing the expansion of universe.
- ❖ The universe's expansion makes galaxies move away from each other.
- ❖ The relationship between a galaxy's speed and distance is governed by "Hubble's constant", which is about 43 miles (70 km) per second per Megaparsec.
- ❖ Perseus is one of the most massive structures known in the Universe.
- ❖ It is located 'just' 240 million light-years away from Earth and containing thousands of galaxies.

### **Zosurabalpin antibiotic**

#### **EXPERIMENTAL ANTIBIOTIC ZOSURABALPIN SHOWS PROMISE IN KILLING DRUG-RESISTANT BACTERIA**

A NEW EXPERIMENTAL ANTIBIOTIC CALLED ZOSURABALPIN HAS SHOWN PROMISE IN KILLING DRUG-RESISTANT BACTERIA IN LAB EXPERIMENTS AND MICE. IT WORKS BY BLOCKING THE TRANSPORT SYSTEM OF THE BACTERIA, LEADING TO LETHAL TOXICITY. THE DRUG TARGETS GRAM-NEGATIVE BACTERIA, WHICH ARE NOTORIOUSLY DIFFICULT TO TREAT. ZOSURABALPIN HAS ALREADY ENTERED CLINICAL TRIALS AND COULD POTENTIALLY BECOME A MUCH-NEEDED NEW ANTIBIOTIC IN THE FIGHT AGAINST DRUG-RESISTANT INFECTIONS.

- ❖ Researchers have identified a new class of antibiotics with the potential to tackle a drug-resistant bacterium, *Acinetobacter baumannii*.
- ❖ Zosurabalpin was found to be effective against CRAB (carbapenem-resistant *Acinetobacter baumannii*)-induced pneumonia and sepsis in mouse models.
- ❖ CRAB was at the top of the World Health Organization's list of antibiotic-resistant "priority pathogens" in 2017.
- ❖ It's more common in Asia and the Middle East and causes up to 20% of infections in intensive care units worldwide.

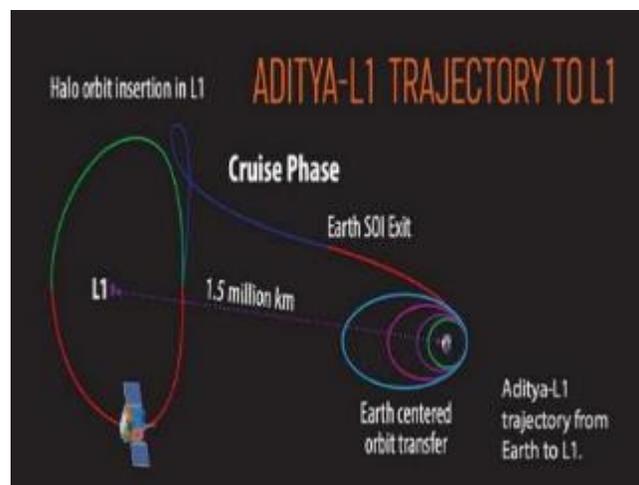
### **Plant cells to produce cancer drug**

- ❖ Researchers at the Indian Institutes of Technology Madras and Mandi have metabolically engineered plant cells to increase production of anti-cancer drug camptothecin (CPT).
- ❖ The allopathic medicine is produced using *Nathapodytes nimmoniana*, a native, endangered plant.
- ❖ It requires nearly 1,000 tonnes of plant material to extract 1 tonne of CPT.
- ❖ The International Union for Conservation of Nature has red-listed the plant.
- ❖ In the past decade alone there has been a 20% decline in the plant's population.



### **Aditya-L1 Mission**

- ❖ ISRO has placed the Aditya-L1 spacecraft in a halo orbit around the Lagrangian point (L1).
- ❖ India's maiden solar mission Aditya-L1 reached the L1 point on January 6, 127 days after it was launched on September 2, 2023.
- ❖ After a 1.5-million km journey the spacecraft was placed in a halo orbit around L1.
- ❖ The orbit of Aditya-L1 spacecraft is a periodic halo orbit.
- ❖ It is located roughly 1.5 million km from earth on the continuously moving Sun–Earth line with an orbital period of about 177.86 earth days.
- ❖ This halo orbit is a periodic, three-dimensional orbit at L1 involving Sun, Earth and a spacecraft.
- ❖ The distance of L1 from the earth is approximately 1% of the earth-sun distance.
- ❖ There are currently four operational spacecraft at L1 which are WIND, Solar and Helio spheric Observatory (SOHO), Advanced Composition Explorer (ACE) and Deep Space Climate Observatory (DISCOVER).



### **PSLV-C58's POEM3 Platform**

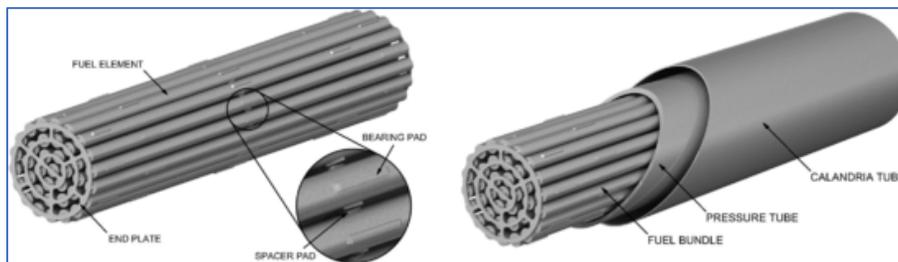


- ❖ ISRO has successfully tested a 100 W class Polymer Electrolyte Membrane Fuel Cell based Power System (FCPS) in its orbital platform, POEM3.
- ❖ It was launched onboard PSLV-C58 recently.
- ❖ The ability to produce electricity directly from fuels without any intermediate step renders them very efficient.
- ❖ With water as the only byproduct, they are totally emission free.

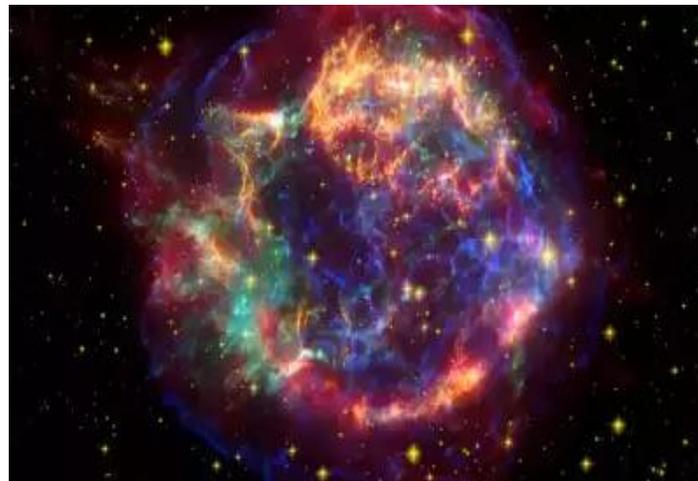
### **ANEEL Fuel**

- ❖ This invention was made by an American company in the nuclear tech, set up by a person of Indian origin.
- ❖ This company has developed a fuel, which is a mix of Thorium and Uranium of a certain level of enrichment, called HALEU (High Assay Low Enriched Uranium).
- ❖ Clean Core calls this concoction ANEEL (Advanced Nuclear Energy for Enriched Life).
- ❖ ANEEL can be used in the existing Pressurized Heavy-Water Reactors (PHWRs).
- ❖ PHWR is an indigenous reactor system that is the workhorse of India's nuclear fleet.
- ❖ India has 18 PHWR reactors of a total capacity of 4,460 MW and is building ten more of 700 MW each.
- ❖ Most of the current reactors run on uranium fuel enriched up to 5 per cent Uranium-235.

- ❖ HALEU is Uranium enriched to more than 5 per cent but less than 20 per cent.
- ❖ At present only Russia and China have the infrastructure to produce HALEU at scale.
- ❖ India has the world's largest reserves of Thorium, estimated at 1.07 million tonnes, enough to last over a century.
- ❖ If India uses this Thorium, it can then produce enough green energy and easily turn net-zero by its target date of 2070.
- ❖ However, Thorium is a fertile material and not a fissile material.
- ❖ This means, it must be paired with Uranium-235 or Plutonium-239 to be used as fuel in a reactor.



### **XPoSat's discovery**



- ❖ The ISRO announced that a payload on its recently-launched XPoSat mission has successfully recorded the initial light from a supernova (the explosion of a star).
- ❖ The XSPECT scientific instrument on XPoSat, India's first X-ray polarimetric mission, was launched recently.
- ❖ It has captured its first light from the Cassiopeia A (Cas A) supernova remnant.
- ❖ A supernova is the explosion of a star that occurs when a star reaches the end of its life cycle, undergoing a catastrophic collapse and then rebounding.

## Einstein Probe – China



- ❖ China launched the Einstein Probe (EP), a new astronomical satellite, to observe mysterious transient phenomena in the universe.
- ❖ The satellite is shaped like a lotus in full bloom with 12 petals to observe mysterious transient phenomena in the universe that flicker like fireworks.
- ❖ It is using the new X-ray detection technology inspired by the functioning of a lobster eye.

## X-59 Quiet Supersonic Aircraft

- ❖ NASA and Lockheed Martin recently unveiled the X-59 aircraft.
- ❖ It aims to conquer one of the key issues with supersonic aircraft- a sonic boom.
- ❖ The X-59 is the latest in a series of experimental planes which include the X-1.
- ❖ X-1 became the first manned aircraft to exceed the speed of sound in 1947.
- ❖ The X-15, which still holds the record for the fastest ever manned flight, set in 1967 at Mach 6.7.

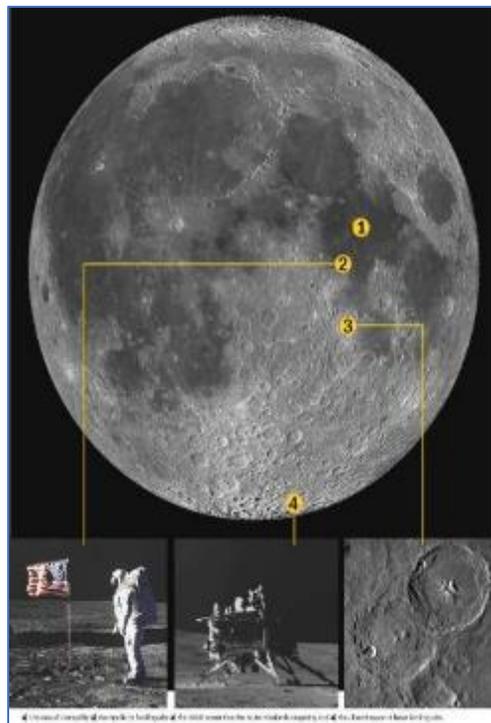


## New nuclear batteries



- ❖ Betavolt, a Chinese startup, has developed a battery capable of powering smartphones for an impressive 50 years without requiring recharging.
- ❖ It is termed as the world's first miniaturized atomic energy system.
- ❖ This nuclear battery utilizes 63 nuclear isotopes compactly arranged within a module smaller than a coin.
- ❖ After the decay period, the 63 isotopes transform into a stable, non-radioactive isotope of copper, posing no environmental threat or pollution.

## SLIM Mission



- ❖ Japanese space agency, Jaxa, confirmed that its ambitious Smart Lander for Investigating Moon (SLIM) landed on the Moon.

- ❖ The spacecraft is yet to receive solar power as the solar cells on the mission are not working.
- ❖ The landing makes Japan the fifth country to touch the lunar surface after India, which landed Chandrayaan-3 on the Moon in 2023.
- ❖ The others were Soviet Union, USA, China and India.
- ❖ Currently, the lander is operating on limited battery power, only expected to last several hours.

### **Havisure Vaccine**

- ❖ Indian Immunologicals Ltd (IIL), launched India's 'first' indigenously developed Hepatitis A vaccine, Havisure.
- ❖ Hepatitis A is a highly contagious liver viral infection.
- ❖ It poses a significant public health challenge primarily spreads through the fecal-oral route.
- ❖ It is transmitted through the ingestion of contaminated food or water.
- ❖ The vaccine is effective in preventing the disease and is recommended for children in routine immunisation.
- ❖ IIL is a wholly-owned subsidiary of National Dairy Development Board (NDDB).



### **Soil-Powered Fuel Cell**

- ❖ Scientists of Northwestern University in USA have developed a new fuel cell they claim can harvest energy from microbes living in the soil.
- ❖ The fuel is around the size of a book and can potentially be used to fuel underground sensors used in green infrastructure and precision agriculture.
- ❖ It could become a sustainable, renewable alternative to batteries that use toxic and flammable chemicals.
- ❖ Soil-based microbial fuel cells (MFCs) were first created in 1911 and they operate not all that differently from a battery.

- ❖ They have an anode, a cathode and electrolyte.
- ❖ But instead of using chemicals to generate electricity, they harvest electricity from bacteria that naturally give out electrons to nearby conductors.
- ❖ These electrons from anode to cathode to create an electric circuit.



### **Japan in moon**

- ❖ Despite last-minute engine problems, Japan's "Moon Sniper" craft made a precise lunar landing.
- ❖ Thus, Japan became the fifth country to land softly on the moon, following the United States, the Soviet Union, China, and India.
- ❖ Its unmanned Smart Lander for Investigating Moon (SLIM), is also known as the "Moon Sniper".
- ❖ Due to its precision technology, it was designed to land within 100 metres of a specific landing spot on a crater.
- ❖ That is much more precise than the usual landing zone range that experts put at several kilometres.
- ❖ SLIM succeeded in a pin-point soft landing.
- ❖ The landing point is confirmed to be 55 metres away from the target point.



## ENVIRONMENT

### Deep-sea bird survey

- ❖ Throughout 14 surveys saw the active participation of over 180 ornithologists and birdwatchers from various parts of India.
- ❖ The new addition to the Karnataka state bird list is sooty shearwater, streaked shearwater, brown skua, and brown booby.
- ❖ The sooty shearwater spotted in April was the first sighting for India off the Mangaluru coast.
- ❖ The Brown Skua, also seen for the first time in Karnataka.



### Tiger at Neora Valley National Park



- ❖ The Royal Bengal Tiger was found at the Neora Valley National Park in the hills of West Bengal.
- ❖ This has confirmed the presence of the big cats at an altitude of 10,509 feet above sea level.
- ❖ Neora Valley National Park is located in the Kalimpong district of West Bengal.
- ❖ It is one of the richest biological zones in the entire Northeast.
- ❖ It links the Pangolakha Wildlife Sanctuary in Sikkim and the Toorsa Strict Reserve of Bhutan.
- ❖ According to the latest count, there are 101 tigers in West Bengal.
- ❖ All tigers have been tracked in the Sunderbans Tiger Belt and its surrounding areas.

### **New Marine Amphipod Species**

- ❖ Researchers have discovered a new species of marine amphipod — a shrimp-like crustacea of genus *Demaorchestia* in Chilika lake of Odisha.
- ❖ It belongs to the subfamily *Platorchestiinae* found along the Indian coast.
- ❖ The present contribution has added one more species to the genus *Demaorchestia*, raising the global species number in the group to six.
- ❖ The family *Talitridae* was considered one of the oldest groups of amphipods, and it was believed to have been on the planet since the Jurassic age.



### **Chila in Peru**

- ❖ Some mountain ranges in Peru where glaciers have almost disappeared.
- ❖ Chila has lost 99% of its glacial surface since 1962.
- ❖ Peru has lost more than half of its glacier surface in the last six decades.
- ❖ Around 175 glaciers became extinct due to climate change between 2016 and 2020.

- ❖ In 58 years, 56.22% of the glacial coverage recorded in 1962 has been lost.
- ❖ This country has 1,050 square kilometers (405 square miles) of glacial coverage left.
- ❖ This area representing about 44% of what was recorded in 1962, when the first glacier inventory was carried out.



### **New 'silverline' butterflies**

- ❖ A new species of Silverline butterfly *Cigaritis meghamalaiensis* has been discovered at the Meghamalai hills.
- ❖ The species is named after Meghamalai region.
- ❖ It has become the first butterfly species to be described from the Western Ghats in 33 years.
- ❖ A hitherto-unreported taxon was last described from the Western Ghats in 1990 – *Eurema (Terias) nilgiriensis* (Yata, 1990), or the Sahyadri Grass Yellow (Nilgiri grass yellow).



### **New Frog genera**

- ❖ Researchers have identified three new-to-science frog genera in the biodiverse hotspot of the Namdapha-Kamlang landscape in Arunachal Pradesh.

- ❖ The first discovery, *Gracixalus patkaiensis*, is a green frog that's almost transparent.
- ❖ The second frog, named *Alcalus fontinalis*, more than a decade after the last species in the genus discovered.
- ❖ The newest and the third frog to be discovered is found in marshy areas and is named after the Noa-Dihing river.
- ❖ This "music frog" is named *Nidirana noadihing*.
- ❖ The scientific records of amphibian species in India, which began in 1799 with five species being described, now have around 470 amphibian species.



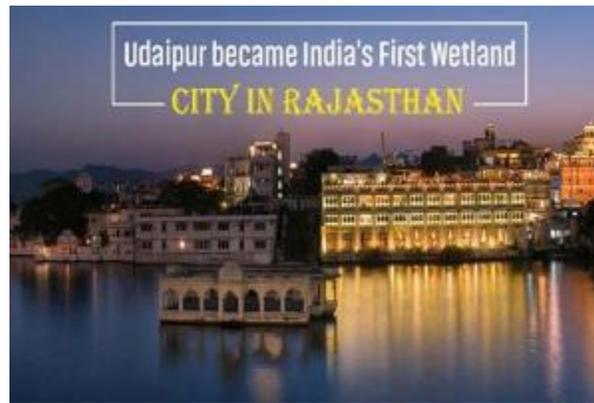
### **Rare vagrant Pied Avocet**

- ❖ The checklist of Birds at the Nanjarayan tank Bird Sanctuary in Tiruppur touched 187.
- ❖ The Forest Department watcher recently spotted a Pied Avocet (*Recurvirostra avosetta*), a shore bird.
- ❖ It is a vagrant that is rarely spotted in inland water bodies.
- ❖ There are no records of the species in inland water bodies in Tamil Nadu other than Nallathangal Dam and Nanjarayan Tank Bird Sanctuary.



### **Wetland City Tag**

- ❖ Sirpur Wetland (Indore), Yashwant Sagar (Indore), Bhoj Wetland (in Bhopal), have been nominated for the prestigious voluntary Wetland City Accreditation along with Rajasthan's Udaipur.
- ❖ The scheme aims to promote conservation and wise use of urban and peri-urban wetlands as well as sustainable socio-economic benefits for local populations.
- ❖ The wetland city accreditation also provides international recognition for conservation efforts by the municipal authorities.



### **Status of Northeast African Cheetah**

- ❖ The experts have appealed to the International Union for Conservation of Nature (IUCN) to reclassify the status of the Northeast African Cheetah to 'endangered' from 'vulnerable'.
- ❖ They are primarily found in the Horn of Africa.
- ❖ Its last wild count was 260–590 mature individuals.



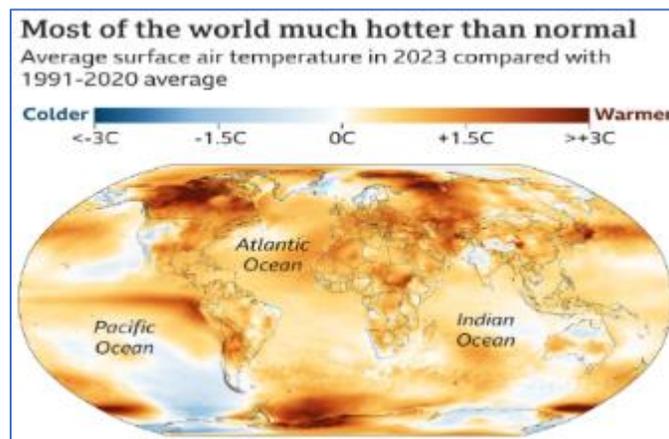
### **Micro and Nano plastics in Bottled Water**

- ❖ Each litre of bottled water contains 110,000 to 370,000 plastic particles.
- ❖ This is approximately three to ten times higher than prior maximum estimates.

- ❖ About 90 per cent of them are nanosized (less than 1 micro meter in size)
- ❖ These nano plastics are even smaller than microplastics and pose a greater risk to human health.
- ❖ Unlike microplastics (5mm to 1 micro meter), nano plastics can move from the intestines and lungs directly into the bloodstream before reaching the heart and brain.



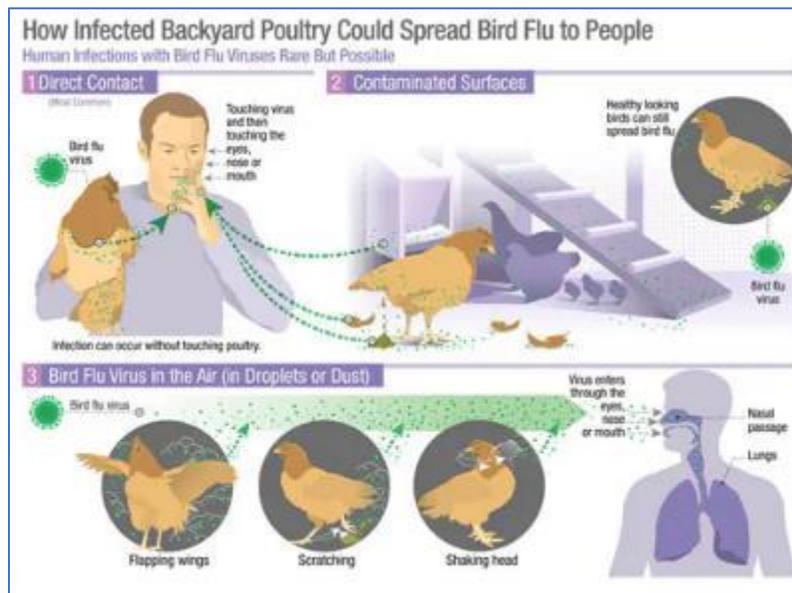
## 2023 As Hottest Year



- ❖ The European Union's Copernicus Climate Change Service (C3S) announced that the year 2023 was the planet's hottest on record by a significant margin and likely the world's warmest in the past 100,000 years.
- ❖ Last year was about 1.48C warmer than the long-term average before humans started burning large amounts of fossil fuels.

- ❖ Last year was 0.17C (0.31F) hotter than 2016, the previous hottest year – smashing the record by a “remarkable” margin.
- ❖ Since June, every month has been the world’s hottest on record compared with the corresponding month in previous years.
- ❖ Last year, the concentration of CO<sub>2</sub> in the atmosphere rose to the highest level recorded at 419 parts per million.

### **Polar Bear Death from Bird Flu**



- ❖ Alaska has recorded the first case of a polar bear dying due to bird flu.
- ❖ The polar bear died from highly pathogenic avian influenza (HPAI).
- ❖ It was contracted by scavenging on bird carcasses infected with the deadly strain H5N1.
- ❖ Black and brown bears have previously contracted the deadly virus.
- ❖ H5N1 was First identified in 1996 in China.
- ❖ In 2020, a new variant of the deadly virus emerged, killing unprecedented birds.
- ❖ The virus has impacted numerous mammals, resulting in thousands of deaths.

### **Natural pathogenic fungi**

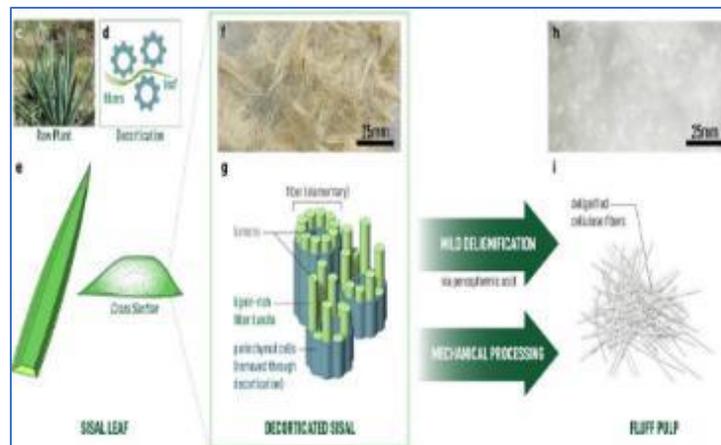
- ❖ Scientists have found a natural remedy to protect eucalyptus forest plantations from a pest, eucalyptus snout beetle.
- ❖ Eucalyptus snout beetle (*Gonipterus platensis*) is a leaf-feeding beetle that is a major defoliator of eucalypts.

- ❖ The pest is indigenous to Australia but occurs in many countries throughout the world where eucalypts are grown.
- ❖ The pest is mainly controlled with the help of microwasps *Anaphes* spp — an expensive solution.
- ❖ *Beauveria bassiana* was highly effective both by contact and ingestion, with a mortality rate of 100 per cent.
- ❖ While *Metarhizium anisopliae* and the *Bacillus* mixture caused low mortalities, ranging from 2.5 to 5 per cent.
- ❖ Eucalyptus wood is a crucial material for paper pulp production.



### Sisal leaves

- ❖ Scientists have reported a method to produce from sisal leaves a “highly absorbent and retentive material”.
- ❖ The material can potentially replace cotton, wood pulp, and chemical absorbents in sanitary napkins.
- ❖ The absorption capacity of the material is higher than those found in commercial menstrual pads.
- ❖ The ancient Aztec and Mayan civilisations were perhaps the first to begin making paper out of sisal leaves.

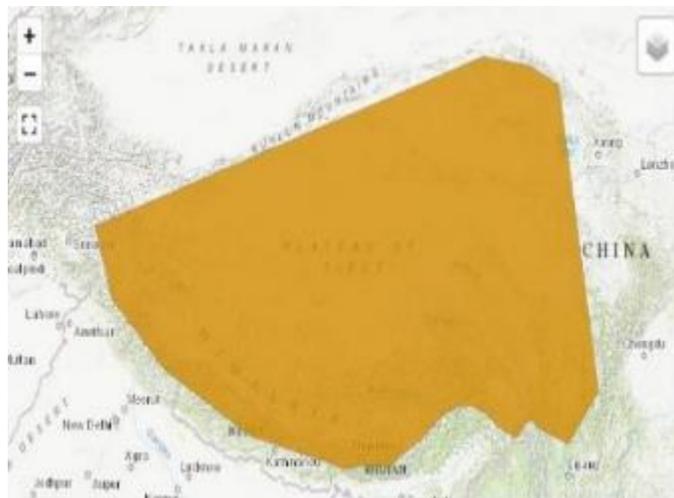


### **Snow leopards Conservation Breeding Program**

- ❖ Darjeeling zoo now has the world's largest number of snow leopards in captivity — 14 in total with 7 males and 7 females.
- ❖ Among them, there are six cubs from three mothers.
- ❖ This is the highest since the launch of the breeding programme at Padmaja Naidu Himalayan Zoological Park (PNHZP), also commonly known as Darjeeling Zoo.
- ❖ Snow leopards are in the “vulnerable” category of the International Union for Conservation of Nature or IUCN “Red List of Threatened Species”.
- ❖ Its estimated global population is 4,000 to 7,500.
- ❖ The conservation breeding programme for snow leopards, the first and the only in the country, was launched at Darjeeling Zoo in 1985.
- ❖ Four years later in 1989, the Conservation Breeding Centre (CBC), which is currently spread across five hectares at Topkeydara, recorded the first birth of a snow leopard.
- ❖ Since then, 77 snow leopards have been born in the zoo.

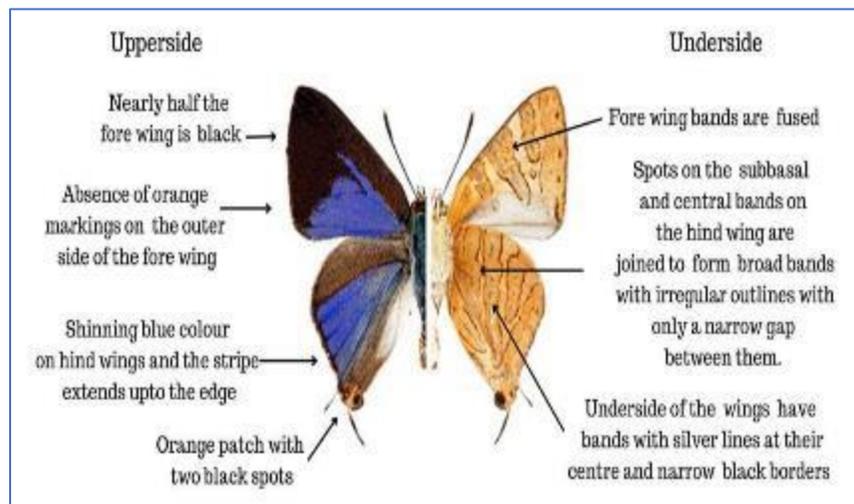


### **IUCN Assessment of the Himalayan Wolf**



- ❖ The Himalayan Wolf (*Canis lupus chanco*), has been assessed for the first time in the International Union for Conservation of Nature (IUCN)'s Red List.
- ❖ The animal has been categorised as 'Vulnerable' on the IUCN Red List.
- ❖ Its population size estimation shows 2,275-3,792 mature individuals.
- ❖ India has 227-378 mature individuals in its section of the Himalayas.

### Conjoined Silverline



- ❖ A new species of silverline butterfly has been identified in the biodiversity hotspots in India's Western Ghats.
- ❖ This unique species, named *Cigaritis conjuncta* or the "conjoined silverline", was first spotted in 2008.
- ❖ This is the first such find in India's Western Ghats biodiversity hotspot since the 1970.
- ❖ The scientists identified 30 individuals of the conjoined silverline butterfly, which belongs to the Lycaenidae family.
- ❖ In India, there are 16 species of silverline butterflies, with 11 of them found in both peninsular India and Sri Lanka.

### Saltwater crocodiles in Bhitarkanika

- ❖ The population of saltwater or estuarine crocodiles (*Crocodylus porosus*) in and around Odisha's Bhitarkanika National Park has marginally increased in 2024.
- ❖ There are 1,811 crocodiles in the park located in Kendrapara district.
- ❖ Last year, the crocodiles are numbered at 1,793.

- ❖ Bhitarkanika is the second-largest mangrove forest in India after the Sundarbans in West Bengal.
- ❖ Both areas are among the three strongholds of saltwater crocodiles — the largest reptiles in the world in India.
- ❖ The third is being the Andaman and Nicobar Islands.



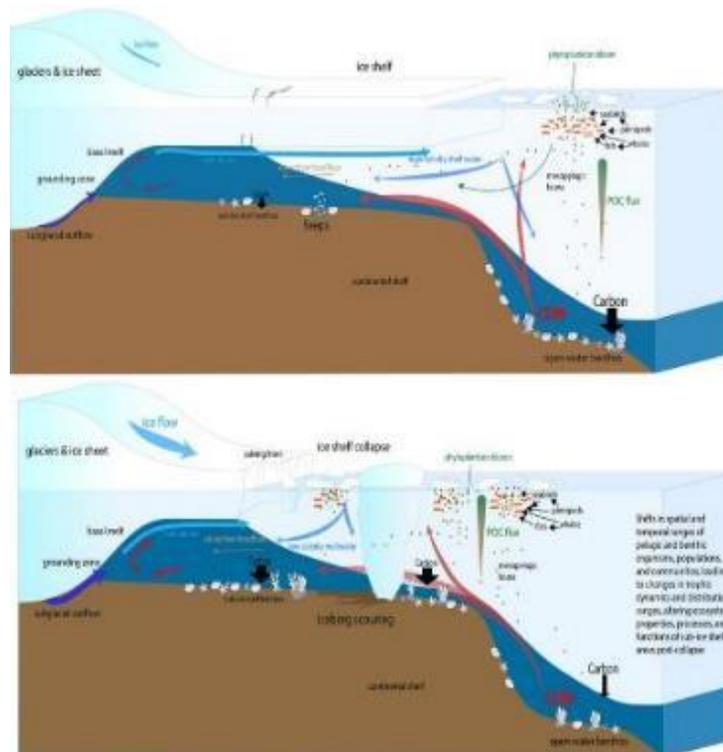
### **Double Cicada Explosion**

- ❖ A double cicada emergence is on the cards this year, a rarity that is happening after 221 years.
- ❖ Two broods of cicadas will explode from the ground at the same time: Brood XIII and Brood XIX.
- ❖ Typically, the insects emerge from underground every 13 or 17 years, depending on the brood.
- ❖ But this year, both these broods will emerge together.
- ❖ This rare joint explosion of cicadas last happened in the year 1803, the year the Louisiana Purchase was made.
- ❖ Its next occurrence will happen only 421 years later.
- ❖ Cicadas are insects that spend the early stages of their lives underground.
- ❖ Once fully grown, they emerge in millions for food and to mate.
- ❖ While Brood XIX of cicadas emerges once every 13 years, Brood XIII explodes from the ground every 17 years.



### Antarctic Shelf Ecosystems

- ❖ There was rising acidity levels of the continental shelves in Antarctic Marine Protected Areas (MPA) under high levels of greenhouse gas emissions.
- ❖ Carbon emissions from human activities may be vertically mixed with ocean waters in coastal regions, resulting in severe acidification at all water levels.
- ❖ The study named Severe 21st-century ocean acidification in Antarctic Marine Protected Areas.
- ❖ The ocean helps to mitigate the effects of global warming by absorbing some of the carbon dioxide gas (CO<sub>2</sub>) that is released into the atmosphere.
- ❖ The pH scale could decline by up to 0.36 (on the total scale) for the top 200 metres of the ocean by 2100.



### **Tibetan Brown Bear**

- ❖ India has recorded its first-ever confirmed record of a rare Tibetan Brown Bear.
- ❖ The bear was spotted in high altitudes of Northern Sikkim.
- ❖ The discovery adds a new subspecies to the mammal diversity of the country.
- ❖ An omnivore, it usually inhabits high-altitude alpine forests and meadows 4,000 metres and above from sea level.
- ❖ The Tibetan brown bear — sometimes also called the Tibetan blue bear — is an endangered species in the Himalayan.
- ❖ So far, the animal had been sighted in some parts of Nepal, Bhutan and the Tibetan plateau.



### **Rare migrant birds in Nanjarayan sanctuary**



- ❖ Rare water birds visited the region have gathered at the Nanjarayan Tank bird sanctuary on the outskirts of Tirupur.
- ❖ They are European Wigeon (*Mareca Penelope*) and Ruddy Shelduck (*Tadorna ferruginea*).
- ❖ Eurasian Wigeon was sighted at the tank after a long gap.
- ❖ Ruddy Shelduck was earlier sighted at the tank when a flock of 14 arrived in November 2020.

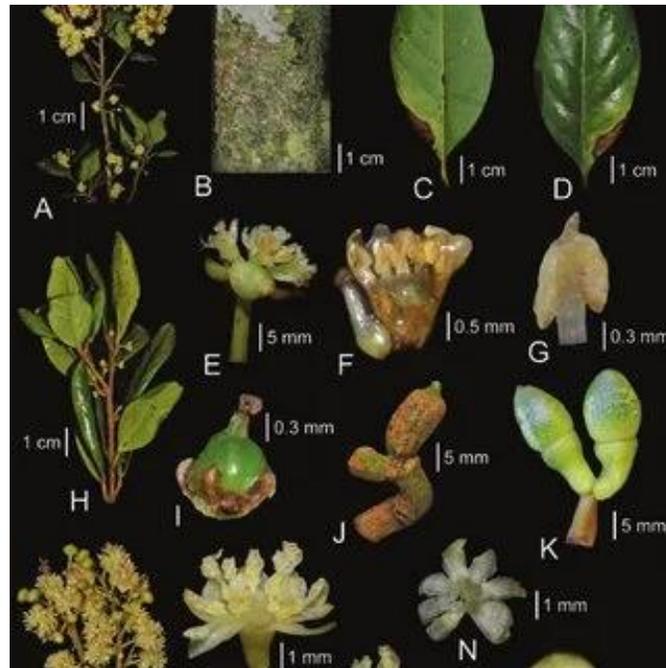


### **India's southernmost vulture population**

- ❖ More than 300 vultures were recorded in the recently completed synchronous vulture survey in the Nilgiri Biosphere Reserve (NBR).
- ❖ It is encompassing parts of Kerala, Tamil Nadu and Karnataka.
- ❖ Population surveyed;
  - A total of 217 critically endangered white-rumped vultures (*Gyps bengalensis*),
  - 47 long-billed vultures (*Gyps indicus*),
  - 50 Asian king vultures (*Sarcogyps calvus*),
  - Four endangered Egyptian vultures (*Neophron percnopterus*) and
  - Two “near threatened” Himalayan griffon vultures (*Gyps himalayensis*)
- ❖ The Mudumalai-Sathyamangalam-Bandipur-Wayanad complex of the NBR accounted for over 82% of the vultures recorded during the survey.
- ❖ The highest number was recorded in the Mudumalai and Sathyamangalam Tiger Reserves in Tamil Nadu.
- ❖ The last synchronous vulture census, conducted in February 2023, when 246 vultures were recorded.
- ❖ In the most recent survey, conducted in December 2023, the number of vultures recorded had increased to 320 individuals.
- ❖ The four Egyptian vultures and two Himalayan griffon vultures were sighted in the Nelli Forest Division and the Wayanad Wildlife Sanctuary.

### **Andrographis theniensis**

- ❖ A new plant species has been discovered in Theni district of Tamil Nadu in the Western Ghats.
- ❖ The plant was named ‘*Andrographis theniensis*’ after the location (Theni).
- ❖ *Andrographis* is a tropical Asian genus native to Bangladesh, India, Myanmar, Nepal, Sri Lanka and the West Himalaya.
- ❖ However, a majority of *Andrographis* taxa are distributed in southern India and Sri Lanka, particularly in Western and Eastern Ghats.
- ❖ There are nearly 25 *Andrographis* species in India.
- ❖ This genus is traditionally used to treat various ailments such as cold, cough, fever, jaundice, diarrhoea, cardiovascular and hepatic diseases in both codified and non-codified medicinal systems.



## Golden Tiger

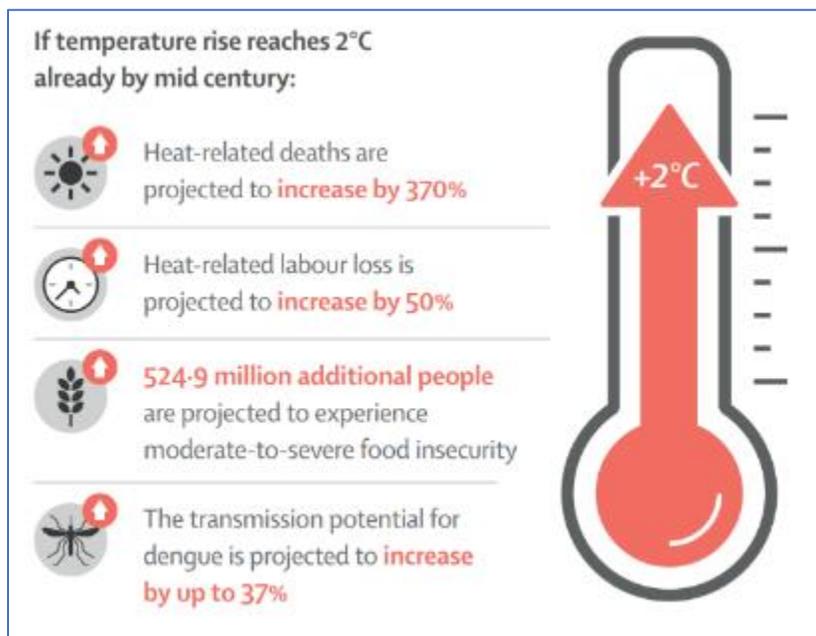


- ❖ The 'rarest' golden tiger was captured on camera in Assam's Kaziranga National Park and Tiger Reserve (KNPTR) after three years.
- ❖ A Coimbatore-based tourism professional Gaurav Ramnarayanan captured photo of this tiger.
- ❖ Previously in July 2020, a "golden tiger" was sighted in Kaziranga.
- ❖ The "golden tiger," was an example of unusual colour aberration, and it could be due to excessive inbreeding.

## REPORTS AND INDICES

### Lancet Countdown on Health and Climate Change

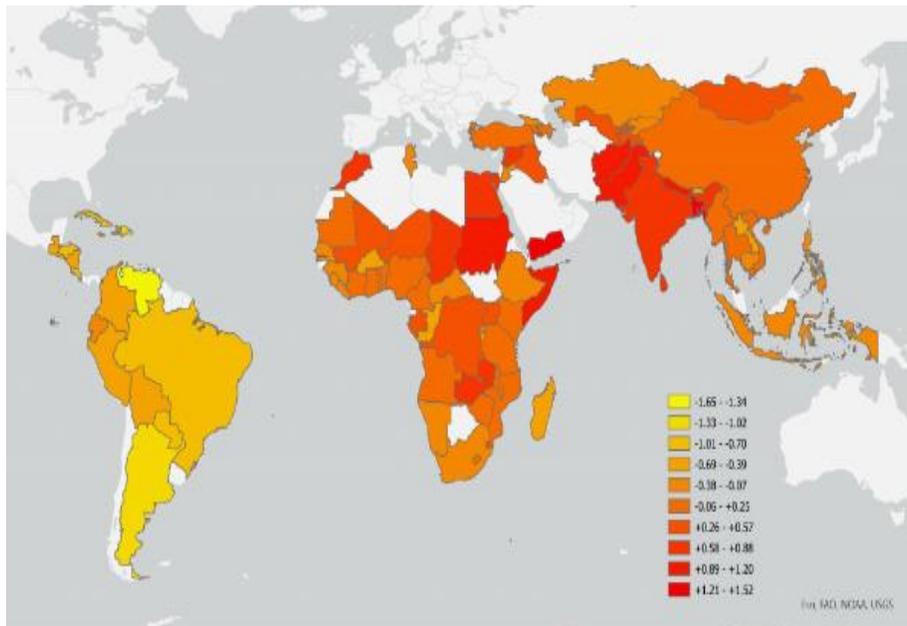
- ❖ It warns that from 2018 to 2022, average summer temperatures increased by 0.5°C compared to the 1986–2005 baseline average, with severe implications for public health.
- ❖ 1,337 tonnes of carbon dioxide still emitted every second.
- ❖ 43% increase in the total number of heatwave days experienced by children under the age of one from 2013-2022 compared to the 1986-2005 period.
- ❖ Adults over 65 saw a staggering 216% increase in heatwave days during the same timeframe.
- ❖ 191 billion potential labor hours lost in 2022 alone, a 54% increase from 1991-2000.
- ❖ This loss was amounted to a potential income loss of US\$219 billion in 2022, equivalent to 6.3% of the country's GDP.
- ❖ Agricultural workers bore the brunt, experiencing 64% of potential hours lost and 55% of potential income losses.



### Climate crisis: Inequality hotspot study

- ❖ It ranked 87 countries based on the level of climate change threat faced by women working in agricultural sectors.

- ❖ India stood 12th on the risk index developed by researchers from six institutes.
- ❖ The other Asian countries included Bangladesh, Pakistan, Afghanistan and Nepal, ranking second, fourth, seventh and eighth respectively.
- ❖ Agri-food systems encompass production, post-harvest handling and distribution.
- ❖ Within African and Asian regions, central, east and southern Africa and west and south Asia were particularly at risk.
- ❖ They face the highest climate risks such as droughts, floods or shortened crop-growing season.



### **Counting the Cost 2023: A Year of Climate Breakdown Report**

- ❖ Floods and storms accounted for 85 per cent of the world's top 20 most expensive disasters (17) linked to climate change in 2023.
- ❖ The 20 disasters analysed by the report occurred in 14 countries spread across six continents (excluding Antarctica).
- ❖ The researchers calculated the economic costs of disasters per capita.
- ❖ The disasters ranged from wildfires, drought (climatological disasters) to floods and storms (hydrological and meteorological disasters).
- ❖ 74 per cent of economic losses in the United States (worth \$76.4 billion) were insured.
- ❖ Compare this with the Asia-Pacific region, where just 13 per cent of economic losses (\$22.2 billion) were insured.

Country	Event	Cost per person \$
Hawaii/ USA	Wildfire	4,161
Guam	Storm	1,455
Vanuatu	Storm	947
New Zealand	Storm	468
New Zealand	Flood	371
Italy	Flood	164
Libya	Flood	105
Peru	Flood	66
Spain	Drought	50
Myanmar	Storm	41
Chile	Flood	39
Haiti	Flood	36
Mexico	Storm	35
Chile	Wildfire	30
USA	Storm	25
China	Flood	23
Peru	Storm	20
Malawi	Storm	17
USA	Storm	16
Peru	Flood	9

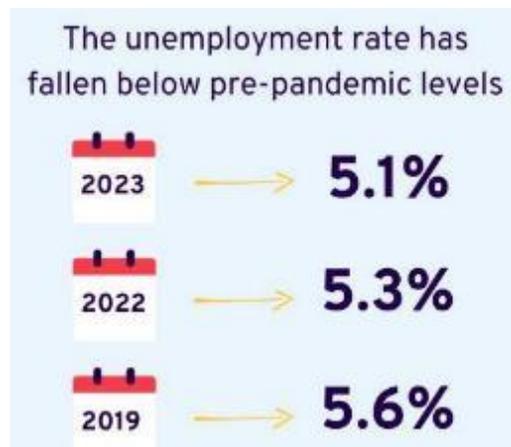
## Henley Passport Index 2024



- ❖ The European nations of France, Germany, Italy and Spain, and Asia's Japan and Singapore sharing the number one spot.
- ❖ India, meanwhile, has improved its ranking and moved up to the 80th position from the previous year's ranking of 84.
- ❖ Those holding an Indian passport have visa-free access to 62 destinations.
- ❖ Ranking low on the index are Pakistan (101), Iraq (102), Syria (103) and Afghanistan (104).

- ❖ Other neighbours of India ranks: Maldives (#58), China (#62), Bhutan (#87), Myanmar (#92), Sri Lanka (#96), Bangladesh (#97), and Nepal (#98).
- ❖ Those holding the passports of the countries in the #1 spot had access to 194 visa-free destinations.
- ❖ Those holding the Afghanistan passport ranked last at #104, had visa-free access to only 28 of them.
- ❖ The index covers 227 destinations and 199 passports.

### World Employment and Social Outlook: Trends 2024

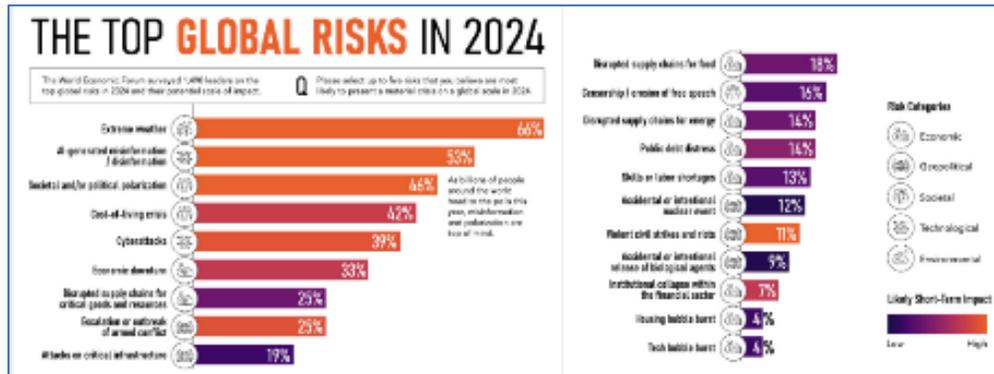


- ❖ The International Labour Organisation has projected the global unemployment rate a tad higher at 5.2% in 2024 compared to 5.1% in 2023.
- ❖ The jobs gap rate in 2023 was 8.2% in high-income countries while it stood at 20.5% in the low-income group.
- ❖ Similarly, while the 2023 unemployment rate persisted at 4.5% in high-income countries, it was 5.7% in low-income countries.
- ❖ In 2023, the numbers of workers living in extreme poverty (earning less than US\$2.15 per day per person in purchasing power parity (PPP) terms) grew by about one million globally.

### Global Risks Report 2024

- ❖ The Global Risks Report 2024 was released by the World Economic Forum.
- ❖ The most serious threats that the world may see in the coming years, considering the impact of technological advancements, economic instability, climate change, and armed conflict.
- ❖ The report underscores the risks posed by AI-driven misinformation and disinformation.

- ❖ Immediate concerns center around the risk of interstate armed conflict.
- ❖ A persistent cost-of-living crisis may lead to uncertainties in the global economic stability.
- ❖ Inflation and economic downturn have emerged as noteworthy additions to the top risks.



## Global Hydrogen Price Index

- ❖ The International Financial Services Centre (IFSC) at GIFT City has entered into a strategic alliance with the Indian Gas Exchange (IGX) and Gujarat State Petroleum Corporation (GSPC).
- ❖ This collaboration aims to establish a pioneering Global Hydrogen Trading Mechanism.
- ❖ This initiative is the second of its kind globally.
- ❖ It will make GIFT City as a frontrunner in the global green hydrogen market.
- ❖ This alliance is set to introduce the Global Hydrogen Price Index.
- ❖ It is a benchmark designed for price discovery and market information in the rapidly growing green hydrogen sector in India.

## Oxfam's Inequality Inc Report 2024

- ❖ As per this report, the Billionaire is now either running or is the main shareholder of seven out of the world's 10 biggest companies.
- ❖ Billionaires have become \$3.3 trillion richer since 2020.
- ❖ The fortunes of the five richest men have spiked by 114 per cent in real terms since 2020.
- ❖ It is estimated that 148 top corporations made \$1.8 trillion in profits, 52 per cent up on a three-year average.

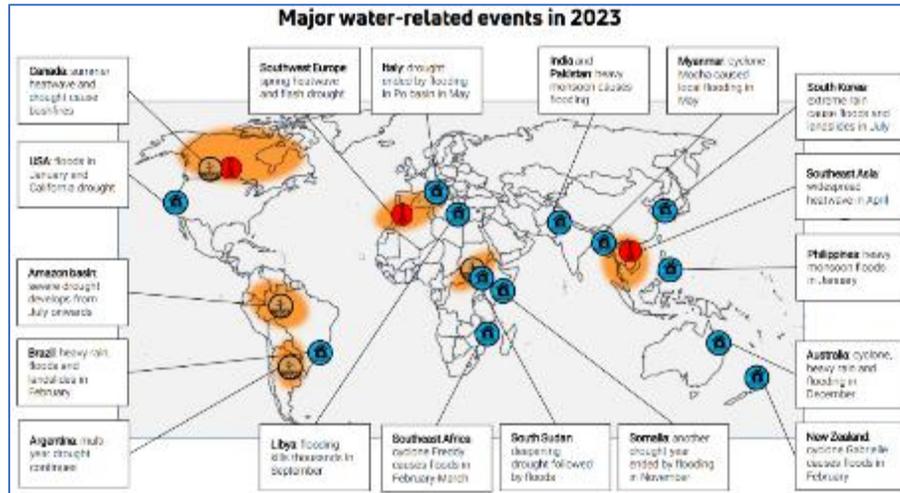
- ❖ The world may witness its first trillionaire within a decade, but it would take 229 years to eradicate poverty altogether.
- ❖ Men globally possess \$105 trillion more in wealth than women.
- ❖ 791 million workers worldwide have seen their wages fail to keep pace with inflation.
- ❖ It was resulting in a collective loss of \$1.5 trillion over the past two years.
- ❖ Of the world's 1,600 largest corporations, just 0.4% of them have publicly committed to paying workers a living wage.



### **Global Water Monitor Report 2023**

- ❖ More than 77 countries experienced the highest average annual temperature in 45 years, according to the 2023 Global Water Monitor report.
- ❖ Record-high average temperatures were observed across all seasons.
- ❖ The year 2023 ranked second in relative air humidity, continuing a trend towards drier average and extreme conditions.
- ❖ Despite the warmer and drier conditions, high annual soil water conditions were observed in many regions.
- ❖ The water content in the soil over the land area was 3.5 per cent above the 1998-2005 average.

- ❖ Surface water occurrence (including lakes, rivers and other forms of temporary inundation) was the second lowest in two decades.
- ❖ Globally, the water surface occurrence was 7 per cent below the 2003-2006 average, the lowest since 2011.

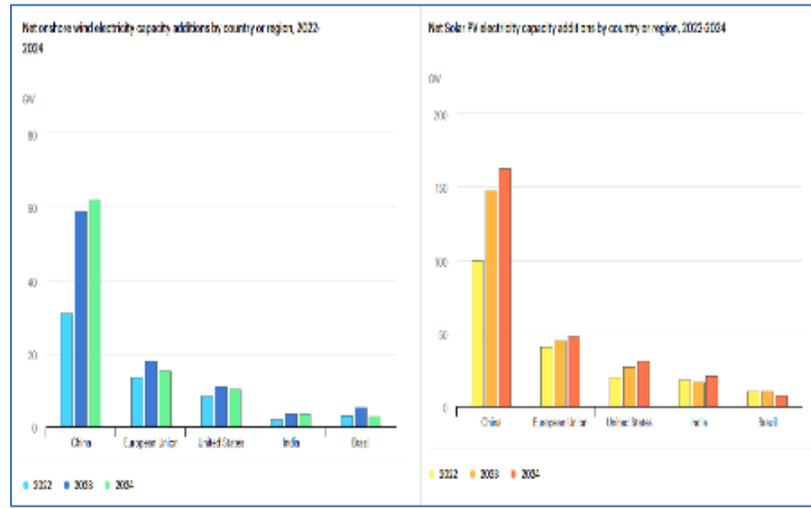


### Edelman Trust Barometer 2024

- ❖ India tops the charts in terms of trust in businesses and NGOs.
- ❖ But it is fourth in terms of trust in media and fifth for the government.
- ❖ Saudi Arabia on the top for trust shown by their people in the government and China for trust in media.
- ❖ In terms of trust shown in one's employer, Indonesia emerged at the top followed by India at the second place.
- ❖ The UK replaced South Korea as the least trusted nation.
- ❖ 61% globally worry about government leaders deliberately spreading false information.



## IEA renewables 2023 report

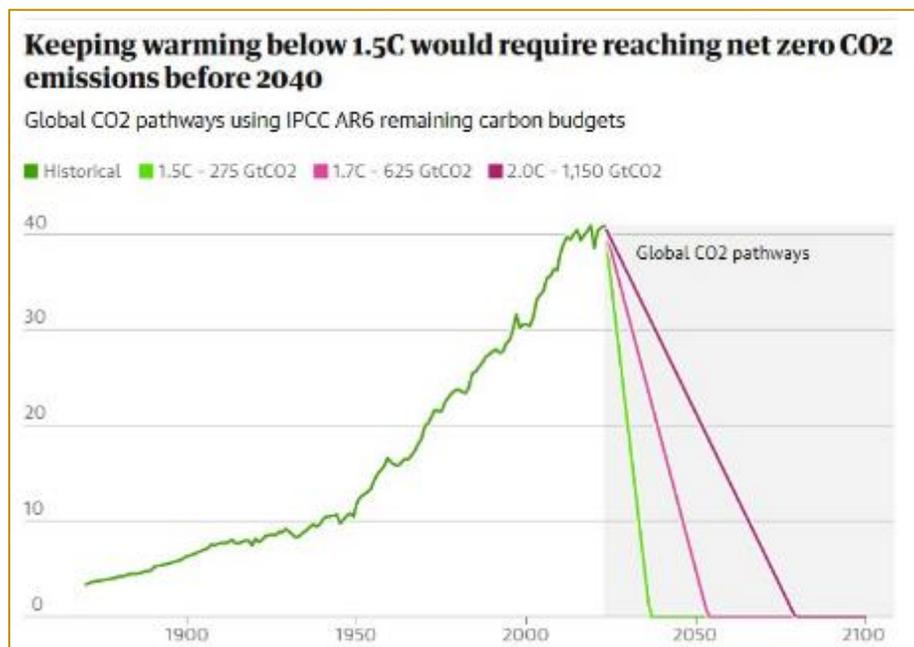


- ❖ Renewable electricity capacity additions soared globally in 2023, reaching an estimated 507 GW.
- ❖ This marked a nearly 50% increase from the previous year.
- ❖ Global renewable capacity is forecast to reach 7300 GW by 2028.
- ❖ In 2024, variable renewable generation is expected to exceed hydropower.
- ❖ By 2025, renewables are projected to outpace coal-fired electricity generation.
- ❖ Additionally, in 2025, wind energy is likely to surpass nuclear electricity generation.
- ❖ In 2026, solar is expected to surpass nuclear electricity generation.
- ❖ Finally, by 2028, solar is projected to exceed wind electricity generation.
- ❖ In 2028, renewable energy sources could account for 42% of global electricity generation, with the wind and solar share making up 25%.
- ❖ India is anticipated to account for half of the region's growth, with the Association of Southeast Asian Nations contributing 14% and Japan 11%.
- ❖ India, in particular, is expected to add 205 GW of renewable capacity over 2023-2028.

## Global Carbon Project Report

- ❖ The global carbon emissions from fossil fuels have reached an all-time high in 2023.
- ❖ Global emissions from oil are projected to rise most steeply in 2023 compared to 2022.

- ❖ The annual report projects fossil carbon dioxide (CO<sub>2</sub>) emissions of 36.8 billion tonnes in 2023, up 1.1 per cent from 2022.
- ❖ The report stated that “global emissions from coal (1.1 per cent), oil (1.5 per cent) and gas (0.5 per cent) are all projected to increase”.
- ❖ The expected emissions rise in India during 2023 compared to 2022 is over eight per cent.
- ❖ In 2023, compared to 2022, the emission is projected to increase in India by 8.2 per cent, China by 4.0 per cent.
- ❖ In the same time, it got decline in the EU by 7.4 per cent, US by 3.0 per cent; and the rest of the world by 0.4 per cent.



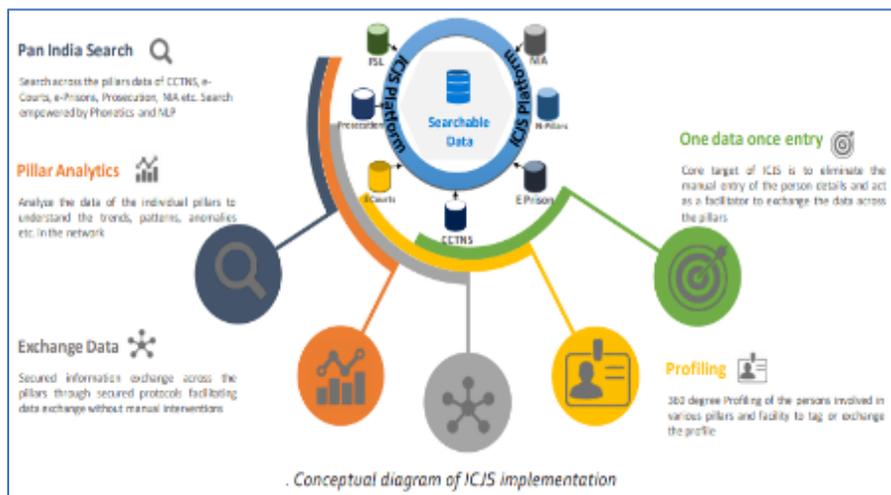
## STATES

### **New Vande Bharat Express**

- ❖ New Vande Bharat train was launched between Bengaluru and Coimbatore recently.
- ❖ Karnataka got two new Vande Bharat Express trains newly.
- ❖ Vande Bharat trains between Bengaluru – Coimbatore and Mangaluru - Madgaon will be operated and with these new additions.
- ❖ Karnataka now has five Vande Bharat trains travelling to multiple destinations.



## Usage of Criminal Justice Data Platform



- ❖ Uttar Pradesh has ranked first for the third consecutive year in recording the highest entry rate on the Inter-Operable Criminal Justice System (ICJS) platform.
- ❖ UP has recorded 1.56 crore entries on the ICJS platform so far.
- ❖ Madhya Pradesh is in the second place with 35 lakh entries and Bihar third with 16 lakh entries.
- ❖ ICJS is conceptualized by the Supreme Court's e-committee and implemented by the ministry of home affairs.
- ❖ This platform facilitates seamless transfer of data and information among various pillars of the criminal justice system nationwide.
- ❖ In these, data related to crime and criminals is exchanged between courts, police, jails and forensic science laboratories through a single window system.



### **ULFA Peace Accord**

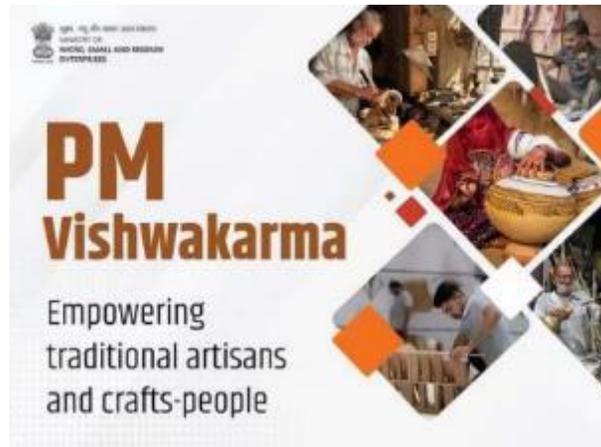
- ❖ The United Liberation Front of Asom (ULFA) signed a historic tripartite peace deal with the Government of India and the state government of Assam.
- ❖ United Liberation Front of Assam was launched during the anti-foreigner's movement of 1979.
- ❖ The Assam Accord, seeking to “find a satisfactory solution to the problem of foreigners in Assam”, was signed in 1985.
- ❖ In 1990, the Centre launched Operation Bajrang, leading to the arrest of 1,221 ULFA insurgents.
- ❖ Assam was declared a ‘disturbed area’, President’s rule was imposed and Armed Forces Special Powers Act (AFSPA) was invoked.
- ❖ In 1992, one faction, later christened as Surrendered ULFA (SULFA), offered to surrender and engage in dialogue with the government.
- ❖ Some ULFA commanders like Arabinda Rajkhowa proposed peace talks with the government called as Rajkhowa-led pro-talk ULFA faction.
- ❖ The faction led by Paresh Baruah, known as ULFA-I, has not joined the peace process.

### **Jammu and Kashmir panchayati raj Act**

- ❖ J&K administrative council amended the Panchayati Raj Act 1989 to incorporate reservation for OBCs.
- ❖ It aims to make the Act more effective by ensuring transparency in the functioning of panchayat bodies.
- ❖ It includes the incorporation of a definition of OBCs for providing reservation, the method of disqualification from membership, suspension and removal of sarpanch, naib sarpanch, and Panch by the government.

### **Vishwakarma Yojana in J&K**

- ❖ Jammu and Kashmir has become the first Union Territory (UT) to implement the PM Vishwakarma Yojana.
- ❖ This initiative aims to empower and enhance the skills of the craftsman community.
- ❖ It recognises artisans and craftspeople through PM Vishwakarma certificates and ID cards.
- ❖ The scheme includes basic training of five to seven days, advanced training of 15 days or more, a stipend of ₹500 per day.
- ❖ It also provides a free modern toolkit worth ₹15,000 for trained Vishwakarmas.



## End of Free Movement Regime



- ❖ The Union government is all set to scrap the Free Movement Regime (FMR) along the Myanmar border.
- ❖ Then, People living in border areas, who could cross over to India, will require visas.
- ❖ India and Myanmar share an unfenced border, and people on either side have familial and ethnic ties, which prompted the arrangement in the 1970s.
- ❖ It was last revised in 2016.
- ❖ Under the FMR, every member of the hill tribes, who is either a citizen of India or a citizen of Myanmar, and who resides within 16 km on either side of the border, can cross the border on production of a border pass.
- ❖ This pass usually valid for a year, and they can stay for up to two weeks per visit.
- ❖ India shares a 1,643 km-long border with Myanmar, which passes through the States of Arunachal Pradesh (520 km), Nagaland (215 km), Manipur (398 km), and Mizoram (510 km).

### ST status to the Hattee community

- ❖ Himachal Pradesh has issued notification to give Scheduled Tribe (ST) status to the Hattee community of Trans-Giri area of Sirmour district.
- ❖ This had led to significant outrage from Sirmour district's Gujjar community, the only other ST community in the area.
- ❖ But the Himachal Pradesh high court has issued an interim order staying the notification.
- ❖ The Centre had already rejected this demand thrice, in 1995, 2006 and 2017.
- ❖ The residents of the Trans-Giri area were demanding ST status on the lines of the Jaunsar-Bawar area of Uttarakhand granted in 1967 itself.
- ❖ Both Trans-Giri and Jaunsar Bawar area had remained part of erstwhile Sirmour princely state and have similarity in all aspects.



### GI tags for over 17 products

State	Products
Arunachal Pradesh	Wancho Wooden Craft Adi Kekir (Ginger) Handmade Carpets
West Bengal	Tangail Saree Garad Saree Korial Saree Kalonunia Rice Sundarban Honey
Odisha	Dhenkanal Magji Khajuri Guda Similipal Kai Chutney Nayagarh Kanteimundi Brinjal Dongaria Kondh Embroidery Shawl Koraput Kalajeera Rice Lanjia Saura Paintings
Gujarat	Kachchhi Kharek
Jammu & Kashmir	Ramban Anardana

- ❖ Over 17 products from Odisha, Arunachal Pradesh, West Bengal, and J&K bagged the Geographical Indication tag.
- ❖ A total 504 items from different parts of the country have had the tag so far since 2004.
- ❖ The first product in India to be accorded with GI tag was Darjeeling Tea in the year 2004-05.

### **REJUPAVE Technology**

- ❖ The Border Roads Organisation will build bituminous roads using an indigenous technology, “Rejupave” along Indo-China border in Arunachal Pradesh.
- ❖ This is developed by premier road research organisation, CSIR-Central Road Research Institute (CSIR-CRRI).
- ❖ Rejupave asphalt modifier is a biooil-based product which lowers the heating requirement of bituminous mixes besides preserving the bituminous mix temperature during transit.
- ❖ Already this technology used for construction of roads at the Sela tunnel and LGG-Damteng-Yangste road sites at 14,000 ft and 18,000 ft altitude respectively.



### **Map All Accident-Prone Sites**

- ❖ Punjab has become the first state in India to map all 784 accident black spots on the Mappls App, a navigation system developed by MapMyIndia.
- ❖ Punjab Police team-up with MapmyIndia for real-time traffic updates and alerts on Mappls App about Black and Blind spots.
- ❖ Citizens can receive voice alerts in Punjabi near critical areas marking Punjab as the first state to Map accident-prone sites Road Safety."
- ❖ An accident blackspot is a place where road traffic accidents have historically been concentrated.

### West Bengal - state song and state day

- ❖ The West Bengal government has issued a notification declaring Poila Boisakh, the first day of the Bengali New Year, as the State Day.
- ❖ It also declares a song Banglar Mati Banglar Jal written by Rabindranath Tagore as the State Song.
- ❖ The State Song that the approximate playing time is 1 minute and 59 seconds.

<b>'RICH GLORY, CULTURE &amp; HERITAGE'</b>	
<ul style="list-style-type: none"> <li>&gt; Poila Baisakh will be state day, Bangla Divas</li> <li>&gt; 'Banglar Mati, Banglar Jal' will be state song</li> <li>&gt; State govt programmes to start with state song and end with national anthem</li> <li>&gt; During state song,</li> </ul>	<ul style="list-style-type: none"> <li>participants must stand like during national anthem</li> <li>&gt; 13 states, including Gujarat, Maharashtra, Karnataka, Bihar, Odisha and Assam, have state songs</li> <li>&gt; Most states have foundation or formation day</li> </ul>

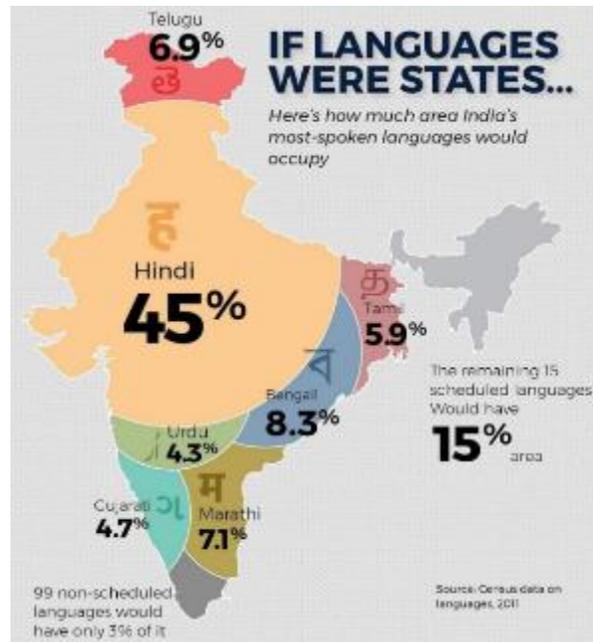
### Atpadi Conservation Reserve



- ❖ The Government of Maharashtra has declared a new Conservation Reserve in the forest land of Sangli district namely Atpadi Conservation Reserve.
- ❖ 36 tree species, 116 herb species, 15 shrub species, 14 vine species and 1 parasitic plant are found in this area.
- ❖ The Atpadi Conservation Reserve will help preserve the habitat of wolves, jackal, deer, foxes, civets, rabbits and other mammals in the area.

## Classical status for Bangla language

- ❖ West Bengal requested the central government to officially list Bengali as a “classical language”.
- ❖ As per their claim, Bengali as a language existed, even in writing, as early as, 3rd-4th BCE.
- ❖ Bengali is the 2<sup>nd</sup> most spoken language in India, it is also the 7th most spoken language in the world.
- ❖ So far, the Government of India has officially recognised six languages as having classical status.
- ❖ They are Tamil (2004), Sanskrit (2005), Telugu, Kannada (2008), Malayalam (2013), and Odia (2014).





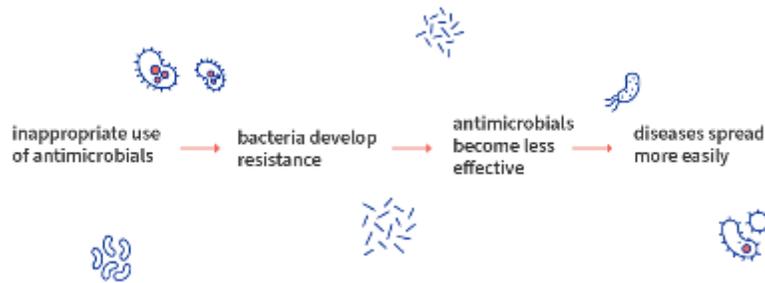
- ❖ As per the Centre’s guidelines, a language must meet following requirements to be declared “classical”.
  - The high antiquity of its early texts;
  - Recorded history of over 1500-2000 years;
  - A body of ancient literature/texts, which is considered a valuable heritage by generations of speakers;
  - A literary tradition that’s original and not borrowed from another speech community; and
  - Being distinct from modern, without discontinuity between the classical language and its later forms or its offshoots.

### **Startup Ranking 2022**

- ❖ Tamil Nadu was among the five States placed under the ‘Best Performer’ category in the States’ Startup Ranking 2022.
- ❖ Gujarat, Karnataka, Kerala and Himachal Pradesh are the other States recognised under this top category.
- ❖ In the first two editions, Tamil Nadu was placed in the bottom-most category of ‘Emerging Ecosystem.’
- ❖ It was recognised as a ‘Leader’ in the 2021 ranking, which was during the third edition.
- ❖ The GreenViro Global have received the National Startup Awards 2023 under the ‘Sustainability Champion’ category at the same event.
- ❖ Atsuya Technologies Private Limited, another start-up from Tamil Nadu, won the Genesis Innovators of the Year award at the National Startups Awards 2023.

### **Operation AMRITH - Kerala**

- ❖ The Kerala Drug Control Department launched tests in the first week of January 2024 called Operation Amrith.
- ❖ AMRITH stands for Antimicrobial Resistance Intervention for Total Health.
- ❖ It aims to prevent the overuse of antibiotics in the state.
- ❖ The Department takes regulatory action for optimising the use of antibiotics by preventing over-the-counter (OTC) sale of antibiotics.
- ❖ Operation Amrith is aimed at conducting surprise raids in retail medical shops for detecting OTC sale of antibiotics.
- ❖ Also, a Toll-Free Number is provided (Toll Free No 18004253182) for lodging complaints against medical shops.



### India's First Dark Sky Park

- ❖ The Pench Tiger Reserve (PTR) in Maharashtra has been marked as India's first Dark Sky Park.
- ❖ It is the fifth such park in Asia for protecting the night sky and preventing light pollution, making the facility ideal for astronomy enthusiasts.
- ❖ A dark-sky preserve is an area, usually surrounding a park or observatory, that restricts artificial light pollution.
- ❖ The purpose of the dark-sky movement is generally to promote astronomy.
- ❖ Pench Tiger Reserve or Pench National Park is one of the premier tiger reserves of India.
- ❖ It is the first one to span across two states - Madhya Pradesh and Maharashtra.



### Tallest Ambedkar Statue

- ❖ The Andhra Pradesh government unveiled the world's tallest statue of BR Ambedkar in Vijayawada.
- ❖ It is standing 206 feet from the ground, the 'Statue of Social Justice' statue will be in the list of the top 50 tallest statues in the world.

- ❖ The second-tallest Ambedkar statue, which is 175 feet, is situated in neighbouring Telangana.



### Buffalo Fights - Assam

**KEEPING THE TRADITION ALIVE**



A buffalo fight marks the Magh Bihu fest at Ahatguri

<ul style="list-style-type: none"> <li>➤ Traditional Moh-juj (buffalo fights) is said to have been introduced by <b>Ahom King Rudra Singha</b></li> <li>➤ In 2014, the <b>SC</b> outlawed the the <b>bull-taming sport Jallikattu</b> and <b>bullock cart races</b> in Tamil Nadu and Maharashtra respectively</li> <li>➤ A year later, <b>buffalo fights</b> and <b>bulbul fights</b> were banned by the Assam in 2015</li> </ul>	<ul style="list-style-type: none"> <li>➤ In 2023, the <b>SC</b> upheld the validity of laws passed by Tamil Nadu, Maharashtra and Karnataka to allow Jallikattu, <b>bullock-cart races</b> and <b>buffalo racing sport Kambala</b> in their respective regions</li> <li>➤ Following this, the Assam cabinet allowed <b>buffalo fights</b> and <b>bulbul fights</b> and issued a strict <b>SOP</b> for that in December last year</li> </ul>
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- ❖ After nine years, the traditional buffalo fight was organized for the first time under stringent government guidelines during Magh Bihu in Assam.
- ❖ The fight was banned in 2015 by state government following a judgment of the Supreme Court.
- ❖ The buffalo fight, along with elephant as well as bulbul fight, was introduced by Ahom King Rudra Singha.
- ❖ Since then, the buffalo fight has remained a part and parcel of the Assamese community.

### **9th Pakke Paga Hornbill Festival**

- ❖ This festival focuses on wildlife conservation, with a particular emphasis on hornbills.
- ❖ Four species of the birds - Wreathed, Great Indian, Oriental Pied and the endangered Rufous-necked - are found in the Pakke Tiger Reserve (PTR) of Arunachal Pradesh.
- ❖ The area is also home to the Nyishi, the largest tribal group in Arunachal Pradesh.
- ❖ The festival aims to recognise the role played by the Nyishi in conserving hornbills in PTR.

### **Vulture restaurant - Jharkhand**

- ❖ The restaurant has been set up in Koderma district.
- ❖ It aims to conserve the fast-dwindling population of the bird species due to rampant use of drugs in livestock.
- ❖ It will begin functioning once the protocol for goshalas (cow shelter) and municipalities for providing diclofenac-free animal carcasses is ready.
- ❖ Carcasses of livestock from the goshalas and municipalities will be served as food to the scavenger birds at the 'vulture restaurant', a demarcated feeding site.
- ❖ The Koderma 'vulture restaurant' has been established at Gumo under Tilaiya Nagar Parishad as it is considered to be a feeding site for the birds.
- ❖ In Koderma, vultures were not seen for almost two decades.
- ❖ They were sighted again in the region since 2019.



### **Startup ecosystem**

- ❖ Gujarat, Kerala and Karnataka have emerged as the best-performing States in developing startup ecosystems for budding entrepreneurs.

- ❖ Tamil Nadu, Himachal Pradesh, Maharashtra, Odisha and Telangana are also categorised as top performers.
- ❖ The States' startup ranking for 2022 was prepared by the Department for Promotion of Industry and Internal Trade (DPIIT).
- ❖ A total of 33 States and UTs participated in the exercise.
- ❖ DPIIT ranked them under five categories -- best performers, top performers, leaders, aspiring leaders and emerging startup ecosystems.
- ❖ The rankings are based on the initiatives taken to develop the startup ecosystem for promoting budding entrepreneurs.



### Regenerative tourism model

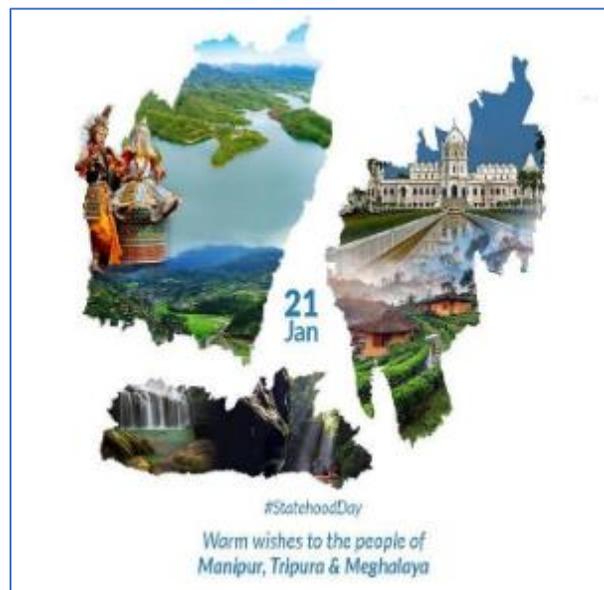
- ❖ Goa's tourism department unveiled a groundbreaking model for regenerative tourism.
- ❖ This innovative approach seeks to revolutionise the Indian tourism industry by advocating environmental restoration, cultural preservation, and community empowerment through four key pillars.
- ❖ The 4 pillars are spirituality, indigeneity, civilizational and cultural nationalism, and conscious tourism.



### **Puri Jagannath Temple's Heritage Corridor**

- ❖ Odisha inaugurated the ₹ 800-crore heritage corridor project.
- ❖ It aims at providing improved amenities for pilgrims around the historic Jagannath Temple in Puri.
- ❖ The 75-metre-wide space encircling the temple, known as the heritage corridor.
- ❖ It has now been named the Shree Mandir Parikrama Prakalpa (SMPP), and divided into nine different zones.

### **States Foundation Day 2024**





- ❖ The states of Manipur, Meghalaya, and Tripura celebrated their foundation day on January 21.
- ❖ In 1972, they became full-fledged states under the North Eastern Region Re-Organisation Act, 1971.
- ❖ Prior to this, Meghalaya was a part of Assam, and Tripura and Manipur were the princely states.

### **C4IR – Hyderabad**

- ❖ The World Economic Forum has agreed to set up its Centre for Fourth Industrial Revolution (C4IR) in the Telangana State capital.
- ❖ The C4IR will be launched during the Bio Asia- 2025 scheduled in the city in February next year.
- ❖ Setting up of the centre will go a long way in designing the State Health Tech Landscape aimed at improving healthcare in the State.

### **Kolam tribes**

- ❖ The Central government extended basic facilities to the endangered Kolam tribe under the Jan Jati Adivasi Nyay Maha Abhiyan.
- ❖ They are listed as Particularly Vulnerable Tribal Group (PVTG) in the state of Maharashtra and Andhra Pradesh.
- ❖ It will focus on the health and education of these primitive tribal groups living in villages by strengthening local primary healthcare centres (PHCs) and imparting special training to teachers.
- ❖ Under the scheme, road connectivity will be improved to these villages from mandal headquarters.
- ❖ Also focusing improving internal roads, providing potable drinking water, electricity or solar energy, and LPG gas stoves and cylinders.
- ❖ Kolam tribes, also known as Kolamboli, Kulme and Kolmi, occupy a major portion of Madhya Pradesh.
- ❖ These tribal groups are listed as scheduled tribes and also reside in some parts of Maharashtra and Andhra Pradesh.

Cabinet Decisions  
29<sup>th</sup> Nov 2023

myGov

## Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (JANMAN)

**Elevating PVTG\* socio-economically**  
in 18 States & Andaman-Nicobar

**Benefits to more than 28L+ people**  
in 22.5K+ habitations  
across 220 districts

**11 critical interventions**  
for essential amenities -  
pucca house,  
road connectivity,  
piped water supply etc



\*Particularly Vulnerable Tribal Groups

Financial Outlay: ₹24,104 crore

### Ayodhya's Ties to Korean Queen

- ❖ Queen Heo, also known as Suriratna, was the cherished princess of Ayodhya.
- ❖ Historical records suggest that she journeyed to Korea and married King Suro.
- ❖ The event is believed to have occurred in 48 AD and is acknowledged in South Korea and India.
- ❖ King Suro, who established the Karak dynasty in 42 AD, was Queen Heo's spouse.
- ❖ In 2001, the Uttar Pradesh government, in partnership with Gimhae City in South Korea, established the Queen Huh Memorial Park in Ayodhya.



### **Kumki Elephants for Odisha**

- ❖ The Odisha government has sought four Kumki elephants along with their mahouts from Tamil Nadu given the southern state's successful programme.
- ❖ In Odisha, there have been 230 encounters between humans and elephants in this financial year (2023-24).
- ❖ In these encounters, 139 humans have been killed and 108 injured.
- ❖ Last financial year, there were 257 encounters in which 146 persons were killed and 157 injured.
- ❖ As there are two more months left in the current financial year, the human casualties in elephant attacks could be an all-time high.
- ❖ Kumki elephants can be deployed strategically to help us to manage and drive wild elephants thereby reducing damage to crops, human habitations and the potential loss of both human and elephant lives.
- ❖ These elephants can also be deployed for forest patrolling and rescue operations.

### **Nitish Kumar - Bihar Chief Minister**

- ❖ Nitish Kumar took oath as the Chief Minister of Bihar for a record ninth time, at the head of a fresh government formed.
- ❖ This is the fifth time in a decade the party has changed camp.
- ❖ In 2000, he assumed the role of Chief Minister for the first time but resigned within seven days before proving his majority.



### **GI for Arunachal Products 2024**

- ❖ Twelve distinctive products from Arunachal Pradesh have obtained the Geographical Indication (GI) tags.

- ❖ The products are Apatani, Monpa, Adi, Galo, Tai Khamti and Nyishi textiles, Monpa handmade paper, Singpho Phalap (Singpho tea), Adi Apong, Dao (machete), Angnyat millet and Marua Apo (Marua millet beverage).
- ❖ NABARD has actively supported the GI registration process.
- ❖ Altogether 18 products endorsed by NABARD have successfully secured the coveted GI registration from the state.



## PERSONALITIES, AWARDS AND EVENTS

### National Youth Award 2024

- ❖ Union Ministry of Youth Affairs and Sports has selected Bisathi Bharat of Anantapur district for the National Youth Award.
- ❖ It was conferred annually to individuals and voluntary organisations serving in the arena of youth development.
- ❖ The award will be presented during the 27<sup>th</sup> National Youth Day to be observed on January 12.



### **M S Swaminathan Award**

- ❖ Haryana Agricultural University's Vice Chancellor Prof. B.R. Kamboj has been honoured with the prestigious M.S. Swaminathan Award.
- ❖ This is the recognition of his contributions as a scientist and extension specialist in the field of agronomy.
- ❖ The award is highly regarded and was created in 2004.
- ❖ It recognizes the lifelong contributions of distinguished individuals who have had a global impact on agriculture, including food security and sustainability in India.

### **Winners Under NIAC Program**

- ❖ NASA announced the winners of Phase 1 of the 2024 NIAC (NASA Innovative Advanced Concepts) programme.
- ❖ This programme fosters pioneering ideas by funding early-stage technology concept studies for future consideration and potential commercialization.
- ❖ In phase 1, NASA is funding 13 concepts it has chosen from among companies and institutions across the United States.

### **Creative Arts Emmy Awards**

- ❖ Barack Obama won his second Emmy, and John Mulaney won his third of the Creative Arts Emmy Awards.
- ❖ Obama has two Grammys for his voice work on the audiobooks of his two memoirs.
- ❖ “HBO’s The Last of Us” has walked away with the eight awards.
- ❖ The Bear, Wednesday, and The White Lotus all tied with four each.

### **81st Golden Globe awards**

- ❖ The Golden Globe Awards are awards for excellence in American and international film and television.
- ❖ The first Golden Globe Awards were held in January 1944 in Los Angeles.
- ❖ The film Barbie was nominated in the maximum categories in 9 categories and Oppenheimer in 8.
- ❖ Oppenheimer won awards in Best Director, Best Male Actor, Best Supporting Actor and Best Motion Picture category.
- ❖ Barbie won awards in Cinematic and Box Office Achievement and Best Original Song category

### **Savita Kanswal**

- ❖ President Droupadi Murmu honoured the late Savita Kanswal posthumously with Tenzing Norgay National Adventure Award 2022 in Land Adventure.
- ❖ Savita made history by becoming the first Indian woman to climb both Mt. Everest and Mt. Makalu within a remarkable 16-day period.
- ❖ She died in an avalanche accident on October 4, 2022.



### **Wings India 2024**

- ❖ Bengaluru and Delhi Airports were jointly adjudged as the best airports at Wings India 2024.
- ❖ Skyways Air Services has secured the prestigious “Best Cargo Services Award”.
- ❖ Vistara-Tata SIA Airlines Ltd bagged the best airline of the year award.
- ❖ Wings India Awards are the benchmark for excellence for those demonstrating the best practices and innovation in the aviation sector.

### **PM Rashtriya Bal Puraskar 2024**

- ❖ Pradhan Mantri Rashtriya Bal Puraskar (PMRBP) is given to children with exceptional abilities and outstanding achievements.
- ❖ The awards are given to children in the age group 5 – 18 years for their excellence in seven categories.
- ❖ They are Bravery, Art & Culture, Environment, Innovation, Science & Technology, Social Service and Sports that deserve national recognition.

### **Bharat Ratna - Karpoori Thakur**

- ❖ Karpoori Thakur, the former Chief Minister of Bihar, was chosen for the country's highest civilian award Bharat Ratna (posthumously).



- ❖ He participated in the freedom struggle and was also jailed for it.
- ❖ In independent India, he was voted in as an MLA in 1952.
- ❖ When he first became an MLA in 1952, he was selected for an official delegation to Austria.
- ❖ He remained an MLA till his death in 1988, except when he became an MP in 1977 and when he lost an Assembly election in 1984.
- ❖ Thakur was education minister of Bihar from March 5 1967 to January 28, 1968.
- ❖ He became the state's chief minister in December 1970 with the Samyukta Socialist Party, but his government fell after six months.
- ❖ He came to the post again in June 1977, but could not finish a full term, losing power in about two years.
- ❖ In June 1970, the Bihar government appointed the Mungeri Lal Commission.
- ❖ Its report of February 1976 named 128 "backward" communities, 94 of which were identified as "most backward".
- ❖ Thakur government implemented the recommendations of the Commission.
- ❖ The 'Karpooi Thakur Formula' provided 26% reservation.
- ❖ Of which OBCs got a 12% share, the economically backward classes among the OBCs got 8%, women got 3%, and the poor from the "upper castes" got 3%.
- ❖ Due to this his government fell, and he witnessed major opposition from upper castes.

## **SPORTS**

### **David warner retirement**

- ❖ Warner announced his retirement from One Day International (ODI) on January 1, 2024, and from Test cricket on January 6, 2024.
- ❖ He made his ODI debut in 2009 against South Africa.
- ❖ He had played 161 ODIs, scoring 6,932 runs, and 111 Tests, amassing 8,695 runs.
- ❖ He is 'Australia's fifth-leading run-scorer in Test history.



### **9th Asian Winter Games**

- ❖ The slogan, emblem and mascots for the 9th Asian Winter Games have been officially unveiled recently.
- ❖ "Dream of Winter, Love among Asia" is the official slogan of the event.
- ❖ They presented the adorable tiger mascots "Binbin" and "Nini" and the official emblem which is the fusion of a short track speed skater figure, a lilac flower and dancing ribbons.

### **Diu Beach Games 2024**

- ❖ The inaugural Beach Games 2024, a multi-sports extravaganza, was held at the pristine Ghoghla Beach in Diu.
- ❖ Madhya Pradesh is emerging as a champion with 18 medals, including 7 golds.
- ❖ Maharashtra clinched 14 medals, including 3 golds, while Tamil Nadu, Uttarakhand, and hosts Dadra, Nagar Haveli, Diu & Daman secured 12 medals each.
- ❖ Notably, Assam secured 8 medals, with an impressive 5 golds.

### **FIFA Football Awards 2023**

- ❖ Lionel Messi won the best men's player award for the second successive year after winning a tie-breaker with Erling Haaland.
- ❖ Spain's Aitana Bonmati was the stand-out winner for the women's best player award.
  - The Best FIFA Men's Goalkeeper: Ederson.
  - The Best FIFA Women's Goalkeeper: Mary Earps

- The Best FIFA Men's Coach: Pep Guardiola
- The Best FIFA Women's Coach: Sarina Wiegman
- The FIFA Puskas Award: Guilherme Madrugá
- The FIFA Fair Play Award: Brazil national team
- ❖ Pep Guardiola was honoured with the best men's manager award.

### **BCCI awards 2024**

- ❖ Initiated in 2006-07, the BCCI Awards honour exceptional cricket achievements.
- ❖ Ashwin won the Dilip Sardesai Award for finishing as the highest wicket-taker in Test cricket - 2022-23.
- ❖ Ashwin also won the Polly Umrigar Award for best international cricketer of the year for the second time in his career.
- ❖ Mohammad Shami, Shubman Gill and Bumrah got the awards for the best international cricketers in 2019-20, 2022-23 and 2021-22 respectively.
- ❖ Kashvee Gautam, won the Jagmohan Dalmiya Trophy for the Best Women Cricketer (Jr Domestic)
- ❖ Ravi Shastri and Farokh Engineer were bestowed with the Col CK Nayudu Lifetime Achievement Awards.
- ❖ Highest Run-Getter in ODIs - Women: Punam Raut (2019-20), Mithali Raj (2020-21), Harmanpreet Kaur (2021-22), Jemimah Rodrigues (2022-23)
- ❖ Best International Cricketer - Women go to Deepti Sharma for 2019-20, Smriti Mandhana for 2020-22 and Deepti Sharma for 2022-2023.



## IMPORTANT DAYS

### Global Family Day 2024 - January 01

- ❖ This day revolves around the idea of promoting positivity, fostering unity, and cultivating a sense of community and brotherhood among nations.
- ❖ This day was established in 1999.
- ❖ The theme for 2024 is “Embracing Diversity, Strengthening Families”.



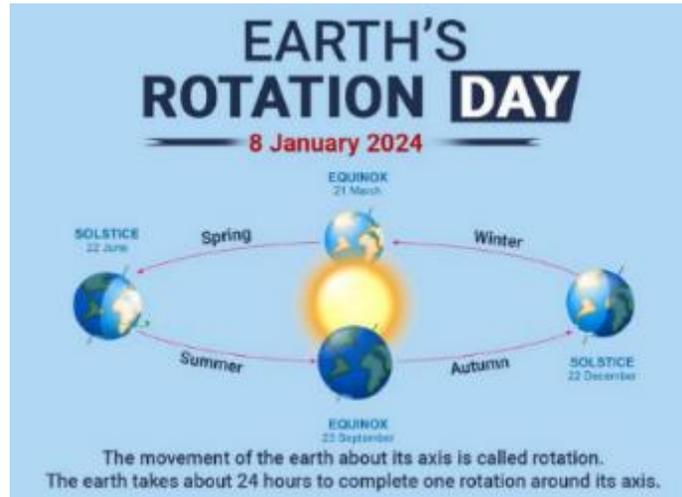
### World Braille Day 2024 - January 04

- ❖ This will be honouring Braille's importance as a communication tool for blind and partially sighted individuals.
- ❖ Louis Braille was born in Coupvray, close to Paris, on January 4, 1809.
- ❖ He created a reading and writing system based on Charlie Barbier's night writing system which is known today as braille.
- ❖ Braille is a tactile representation of alphabetic and numerical symbols using six dots.
- ❖ They can represent each letter and number and even musical, mathematical and scientific symbols.

### African National Congress Foundation Day 2024 - January 08

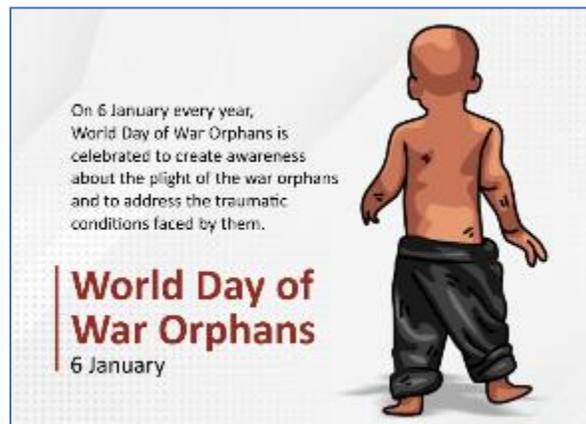
- ❖ The African National Congress (ANC) was first established in 1912 as a national liberation movement.
- ❖ On this day, all the African people united across the world for their rights.
- ❖ The aim of this organisation was to unite and bring all the black South Africans together to achieve their rights and freedoms.
- ❖ The African National Congress has consistently been in power since the transition to democracy in April 1994.

## Earth's Rotation Day 2024 - January 08



- ❖ In 470 BC, the Greeks claimed that the earth rotated on its own back.
- ❖ In 1851, French Physicist Leon Foucault showed the world's rotation with the assistance of a pendulum.
- ❖ There are about 11 locations in India where the Foucault Pendulum is displayed, including the New Parliament building.
- ❖ The Earth takes 24 hours to complete a rotation with respect to the sun.
- ❖ The Earth's diameter is 12,714 kilometres (7,900 miles) from the North toward the South Poles and 12,756 kilometres (12,756 miles) via the equator (7,926 miles).

## World Day of War Orphans 2024 - January 06



- ❖ The day aims to raise awareness about the trauma experienced by orphans and the social, psychological and physical obstacles they often need to overcome to lead a normal life.

- ❖ This day was founded by the French organisation SOS Enfants en Detresses.
- ❖ According to the UNICEF, more than 30 million children have been displaced by conflict.

### Pravasi Bharatiya Divas 2024 - January 09

- ❖ Pravasi Bharatiya Divas is also known as NRI Day (Non-Resident Indian).
- ❖ This day marks the contribution and achievements of overseas Indians in various fields, fostering a strong connection between the homeland and its diasporic communities.
- ❖ The theme of 2024 is Connecting for a Brighter Tomorrow.
- ❖ Pravasi Bharatiya Divas was first introduced in 2003.
- ❖ The day holds historical significance as it marks the return of MK Gandhi to India from South Africa on January 9, 1915.

A PERSON OF INDIAN ORIGIN (PIO)	PIO VS OCI	OVERSEAS CITIZEN OF INDIA (OCI)
<ul style="list-style-type: none"> <li>➤ Means a <b>foreign citizen</b> (except a national of Pakistan, Afghanistan, Bangladesh, China, Iran, Bhutan, Sri Lanka and Nepal)</li> <li>➤ A <b>foreign citizen</b> whose one of the parents/ grandparents/ great grandparents was born and a permanent resident of India</li> <li>➤ Who is a <b>spouse</b> of a citizen of India or a PIO</li> </ul>		<p>A <b>foreign national</b>, who was eligible to become citizen of India on <b>26.01.1950</b> or was a citizen of India on or at anytime after <b>26.01.1950</b> or belonged to a territory that became part of India after <b>15.08.1947</b> is eligible for registration as <b>Overseas Citizen of India (OCI)</b>. Minor children of such person are also eligible for OCI. However, if the applicant had ever been a citizen of Pakistan or Bangladesh, he/she will not be eligible for OCI.</p>
<p><b>BENEFITS</b></p> <ol style="list-style-type: none"> <li>PIO card holders <b>do not require a visa to visit India</b> for a period of 15 years from the date of issue of the PIO card.</li> <li>They are <b>exempted from registration at FRRO/ FRO</b> if their stay does not exceeds 180 days. In case if the stay exceeds 180 days, they shall have to register with FRRO/ FRO within the next 30 days</li> <li>They <b>enjoy parity with NRIs in economic, financial and educational benefits</b></li> <li>All <b>future benefits</b> that would be exempted to NRIs would also be available to the <b>PIO card holders</b></li> </ol>		<p><b>BENEFITS</b></p> <p>OCIs are <b>entitled to a multipurpose, multiple entry, lifelong visa</b> allowing them to visit India at any time, for any length of time and for any purpose</p> <ul style="list-style-type: none"> <li>➤ <b>Exempted from police reporting</b> for any length of stay in the country</li> <li>➤ <b>Have also been granted all rights in the economic, financial and education fields in parity with NRIs</b> except, the right to acquisition of agricultural or plantation properties</li> </ul>

### World Hindi Day 2024 - January 10

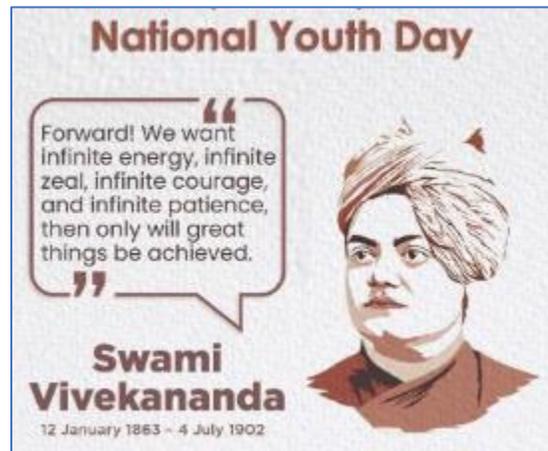
- ❖ This day was initially observed on January 10, 2006.
- ❖ This date was chosen to commemorate the historic occasion in 1949 when Hindi was spoken for the first time in the United Nations General Assembly.
- ❖ The theme for 2024 is 'Hindi – Bridging Traditional Knowledge and Artificial Intelligence'.

### **National Road Safety Week 2024 - January 11 to 17**

- ❖ It aims to educate the public about the perils of reckless or irresponsible driving.
- ❖ The National Road Safety Week was first observed in 1989.
- ❖ Theme of 2024 is “Be a road safety hero.”
- ❖ In India, a traffic accident claims the life of one person approximately every three and a half minutes.
- ❖ According to India's most recent Road Accidents data, there are 1,264 road accidents and 462 fatalities on average every day.

### **National Youth Day 2024 - January 12**

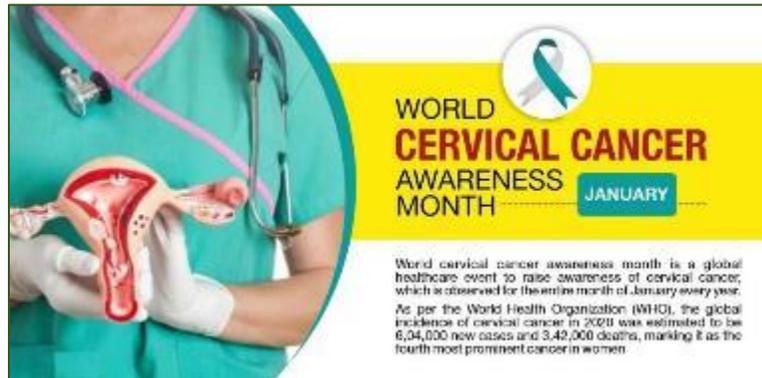
- ❖ India marks National Youth Day to commemorating the birth anniversary of Swami Vivekananda.
- ❖ It was established in 1984.
- ❖ This day honors Vivekananda's teachings and emphasizes the importance of youth in nation-building.
- ❖ Swami Vivekananda was born on January 12, 1863.
- ❖ This year's theme: 'MYBharat-ViksitBharat@2047- By the Youth, For the Youth'.



### **Cervical Cancer Awareness Month - January**

- ❖ This global healthcare event observed for the entire month of January every year, its aim to raise awareness of cervical cancer globally.
- ❖ This year's theme is “Learn. Prevent. Screen”.
- ❖ The global incidence of cervical cancer in 2020 was estimated to be 6,04,000 new cases and 3,42,000 deaths.

- ❖ In 2020, nearly 90% of new cases and deaths were reported in low- and middle-income nations.



### **NDRF raising day 2024 - January 19**

- ❖ The successive natural calamities from 1990 to 2004 led to the enactment of the Disaster Management Act on December 26, 2005.
- ❖ The act formulated the National Disaster Management Authority (NDMA) as the apex body for natural disasters.
- ❖ It also creates the NDRF as the specialised rescue force under the NDMA's mandate.

### **Kokborok Day 2024 - January 19**

- ❖ It aims to recognise, promote and preserve the indigenous language.
- ❖ The Kokborok language acts as a lingua franca of most of the 19 tribal communities of the Tripura state.
- ❖ Around 8,14,375 people from Tripura, Reang, Jamatia, Noatia, Kalai, Rupini, Murasing and Uchoi communities speak Kokborok in Tripura.
- ❖ The tribal language became the state official language in 1979.
- ❖ However, the indigenous language is yet to get its own script.

### **Parakram Diwas 2024 - January 23**

- ❖ This day commemorates the birth anniversary of Subhas Chandra Bose, one of India's most prominent freedom fighters.
- ❖ The day is celebrated as 'Parakram Diwas' or Courage Day.
- ❖ This year marks the 127<sup>th</sup> Birth Anniversary of Netaji Subhas Chandra Bose.
- ❖ Subhas Chandra Bose was born on 23 January 1897 in Cuttack, Odisha.

- ❖ It was in 1921 that he resigned from the Indian Civil Service and returned to India.
- ❖ He left the Congress Party to form the Swaraj Party in 1922.
- ❖ In 1923, Netaji was elected the President of the All-India Youth Congress Committee and the Secretary of the Bengal State Congress.
- ❖ In 1942, he formed the Indian National Army in Southeast Asia with the help of Japan.
- ❖ Netaji established a provisional government of Free India or Azad Hind in 1943 in Andaman and Nicobar.



### **International Day of Education 2024 - January 24**

- ❖ Back in 2018, the United Nations decided that January 24 would be the International Day of Education.
- ❖ This decision was made by 59 countries who wanted to highlight the importance of education.
- ❖ The theme for 2024 is 'learning for lasting peace'.

### **National Girl Child Day 2024 - January 24**

- ❖ This day aims to raise awareness about gender inequality in the country.
- ❖ The Ministry of Women and Child Development established the National Girl Child Day in 2008.

- ❖ It highlights the discrimination girls face on a day-to-day basis in our society.
- ❖ The Beti Bachao, Beti Padhao Scheme (Save the Girl Child, Educate the Girl Child) launched in 22<sup>nd</sup> Jan 2015.

### **National Voters Day 2024 - January 25**

- ❖ This day commemorates the formation of the Election Commission of India (ECI) on January 25, 1950.
- ❖ The day underscores the importance of voting and creates awareness among the citizens.
- ❖ In 2011, the Election Commission of India initiated observance of the National Voters' Day.
- ❖ The theme for 2024 is 'Nothing Like Voting, I Vote for Sure'.



### **National Tourism Day 2024 - January 25**

- ❖ The first celebrated National Tourism Day was in 1948.
- ❖ Its aims were to promote popular tourist destinations across the country and to preserve the nation's cultural heritage.
- ❖ The theme for 2024 is "Sustainable Journeys, Timeless Memories".

### **International Customs Day 2024 - January 26**

- ❖ This date commemorates the founding of the World Customs Organisation (WCO).
- ❖ This day highlights the importance of customs in facilitating smooth cross-border trade operations.

- ❖ The WCO was formerly known as the Customs Co-operation Council (CCC), in 1952.
- ❖ WCO's inaugural session took place on January 26, 1953, with 17 participating member nations.
- ❖ Now it has 183 member administrations overseeing nearly 98% of world trade.
- ❖ The theme for 2024 is 'Customs Engaging Traditional and New Partners with Purpose'.



### **International Day of clean energy 2024 - January 26**

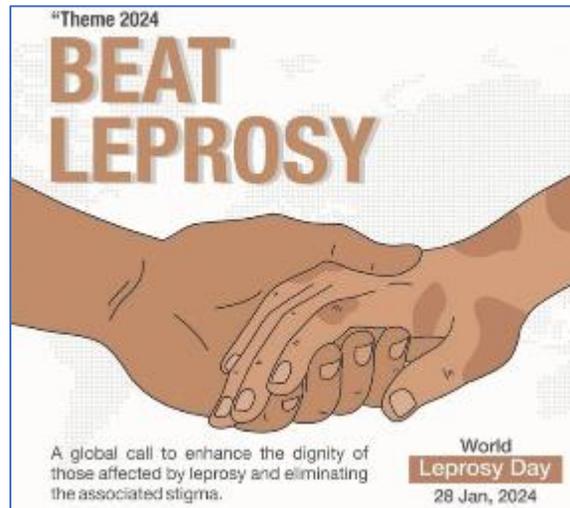
- ❖ This year January 26 is the first-ever International Day of Clean Energy.
- ❖ It aims to spread awareness and encourage action for a fair and inclusive transition to clean energy that benefits everyone.
- ❖ Adopting clean energy is integral to the fight against climate change.
- ❖ Global clean energy cumulative capacity expected to reach over 4,500 GW by the end of this year.
- ❖ G20 countries account for almost 90% of global clean energy capacity today.

### **International Holocaust Remembrance Day 2024 - January 27**

- ❖ Germany has been observing it since 1996.
- ❖ In November 2005, the United Nations General Assembly designated this day.

- ❖ On January 27, 1945, the forces of the Soviet Union liberated the Nazi concentration and extermination camp Auschwitz-Birkenau.
- ❖ Some 1.1 million people were killed in Auschwitz, the vast majority (about 90%) of them Jews.

### **World Leprosy Day 2024 - January 28**

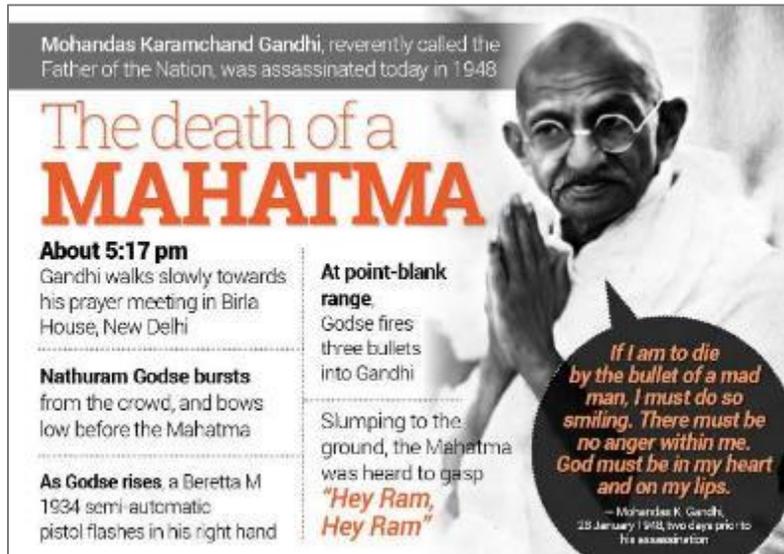


- ❖ Every year, World Leprosy Day is celebrated on the last Sunday of the month of January.
- ❖ In 1954, French Journalist Raoul Follereau established this day create awareness about this disease and explore the treatment options available.
- ❖ The theme of this year's is – Beat Leprosy.

### **Indian Newspaper Day 2024 - January 29**

- ❖ India and Asia's first printed newspaper were the English weekly 'Hicky's Bengal Gazette'.
- ❖ It was started by an Irishman on January 29, 1780.
- ❖ This day aims at promoting newspapers and encouraging people to pick up the newspaper and read it every day.
- ❖ James Augustus Hickey, the founder of 'Hickey's Bengal Gazette', is considered the "father of Indian press".
- ❖ The oldest existing newspaper in India is Mumbai Samachar (formerly Bombay Samachar) published for the first time in 1822 in Gujarati.
- ❖ The first Tamil newspaper in India was the Swadesa Mitran, which was started as a weekly in 1882 by G. Subramanya Aiyer.

## Martyr's Day 2024 – January 30



- ❖ On January 30, 1948, Mohandas Karamchand Gandhi was assassinated.
- ❖ During Mahatma Gandhi's evening prayer at Birla Bhavan, Delhi, he was shot thrice by Nathuram Vinayak Godse.
- ❖ In November 1949, Godse was sentenced to death.
- ❖ Gandhi's birth anniversary – October 2 – is celebrated as the International Day of Non-violence.

## MISCELLANEOUS

### Leap Year 2024

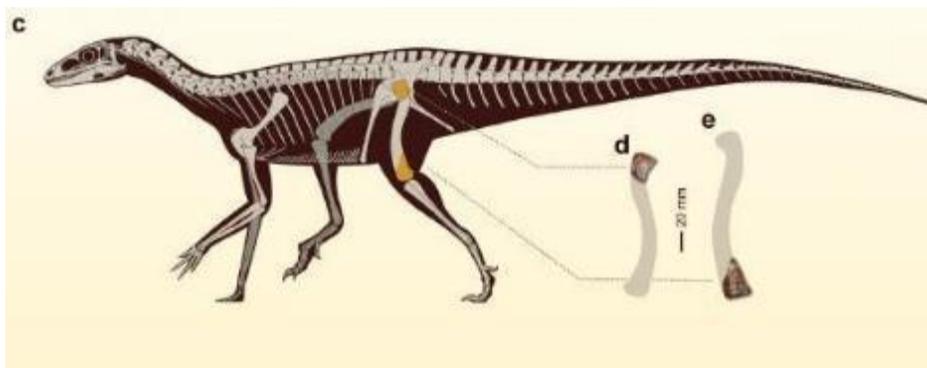
- ❖ 2024 is a leap year.
- ❖ It means this year will have 366 days instead of 365, and the February month, will have 29 days instead of 28.
- ❖ Generally, a leap year comes every four years.
- ❖ The last leap year was 2020.
- ❖ But the leap year does not come every four years, making a few years an exception.
- ❖ The Earth takes 365 days, five hours, 48 minutes, and 46 seconds to complete one revolution around the Sun.

- ❖ Thus, scholars, engaged by Roman General Julius Caesar in 46 BC, rounded the year to 365 days.
- ❖ They multiplied the remaining six hours by four to make it 24 hours (one day) and added it to every fourth year.
- ❖ Later, it was decided that the years ending with 00, which were divisible by 400, would be called leap years.
- ❖ Thus, 1900 and 2100 will not be counted as leap years, but 2000 was.



### **New dinosaur species - silesaur**

- ❖ A new genus and species of silesaur being named *Amanasaurus nesbitti* has been discovered in Brazil.
- ❖ *Amanasaurus nesbitti* lived in what is now Brazil during the Carnian age of the Late Triassic epoch, some 233 million years ago.
- ❖ The ancient creature was a member of Silesauridae, an extinct family of Triassic dinosauriform reptiles.
- ❖ They are most commonly considered to be a group of non-dinosaur dinosauriforms, and the sister group of dinosaurs.



### On-time performance review of 2023

- ❖ Hyderabad and Bengaluru airports have bagged the global second and third rank in the list.
- ❖ IndiGo stood fourth best among Asia Pacific airlines with over 82 per cent on-time arrivals.
- ❖ Kolkata airport stood ninth in the medium airports category.
- ❖ St Paul airport in Minneapolis, US, took the top spot among global airports, ahead of Bengaluru and Hyderabad.
- ❖ Avianca Airlines of Colombia was the first among global airlines for punctuality.

The top performing global airports of 2023 were:			
Airport	On time ranking	On time departure	Total flights
Minneapolis-St. Paul International Airport (MSP)	1	84.44%	289,817
Rajiv Gandhi International Airport (HYD)	2	84.42%	168,426
Kempegowda International Airport (BLR)	3	84.08%	237,461
El Dorado International Airport (BOG)	4	84.01%	292,486
Salt Lake City International Airport (SLC)	5	83.99%	226,705

### Plastic-like films for packaging



- ❖ The Indian Institute of Technology – Bombay (IIT-B) has developed plastic-like films for the packaging industry that can degrade into harmless components.
- ❖ This is a combination of non-toxic, edible sugar-based or fat-based biopolymers approved by the Food Safety and Standards Authority of India.
- ❖ It can degrade in about a week or a month.

- ❖ High-density polyethylene (HDPE) is the standard non-degradable plastic barrier film.
- ❖ It is used for both consumer goods and food, by most packaging industries in India and overseas.

### **10<sup>th</sup> century Kadamba Inscription**



- ❖ An inscription written in Kannada and Sanskrit and said to be of 10th century A.D. Kadamba period has been discovered in the Mahadeva temple at Cacoda in southern Goa.
- ❖ It is in the literary style of Talangre inscription of Jayasimha I of the same period.
- ❖ The Kadambas of Goa were the subordinates of Chalukyas of Kalyana.
- ❖ Chalukyan emperor Tailapa II has appointed Kadamba Shasthadeva as maha mandaleshwara of Goa for his help in overthrowing the Rashtrakutas.
- ❖ Kadamba Shasthadeva conquered the city of Chandavara from the Shilaharas in 960 A.D.

### **16<sup>th</sup> century Telugu inscriptions**

- ❖ Two Telugu inscriptions of the 16<sup>th</sup> century have been found near the Poleramma (local village deity) temple inside the Nallamala forest at Palutla.
- ❖ They are written in Telugu and contain characters of the 16th century C.E., dated in the cyclic year Akshaya, Sravana, Su 10.
- ❖ One of the inscriptions records the construction of cradle pillars (uyyala-kambalu) to Goddess Poleramma by Jangam, son of Linggabattu, of Gurazala.

- ❖ The other inscription (letters are not clear on it), seems to refer to a hero fighting with a tiger.



### **Paleolithic Tools in Telangana**



- ❖ Paleolithic tools, including a stone axe and stone ornament were found in a stream between Gurrevula and Bhupathipuram villages in Telangana's Mulugu district.
- ❖ Experts have confirmed that the tool was dated to early Stone Age.
- ❖ Palaeolithic Age is also known as Palaeolithic Age or Old Stone Age or early Stone Age.
- ❖ It dates back to 33 lakh years BC and lasted for 10,000 years.

### **Maori haka**

- ❖ New Zealand's youngest MP Hana-Rawhiti Maipi Clarke delivered a captivating maiden speech.
- ❖ She has delivered her first speech performing the 'Maori haka' to honor her indigenous roots.

- ❖ The 21-year-old member of the Maori community, Hana-Rawhiti Maipi Clarke, made history as the youngest MP in 170 years.
- ❖ Maori are the indigenous Polynesian people of New Zealand, originating with settlers from East Polynesia.
- ❖ They arrived in New Zealand in several waves of canoe voyages between 1320 and 1350.
- ❖ They are the second-largest ethnic group in New Zealand after the European New Zealanders.
- ❖ The Maori language is spoken to some extent by about a fifth of all Maori representing three percent of the total population.
- ❖ The traditional Maori performance of haka is a source of absolute pride for all New Zealanders.



### **Lime-based trichoderma bio-pesticide**

- ❖ The ICAR-Indian Institute of Spices Research, Kozhikode has developed a new granular lime-based Trichoderma formulation, a fungal bio-control agent.
- ❖ The formulation named 'Tricholime', integrates Trichoderma and lime into a single product, making the application easier for farmers.
- ❖ It has proven effective in suppressing several soil-borne plant pathogens and serves as a successful bio-pesticide and bio-fertilizer in crop production.
- ❖ Tricholime can successfully eliminate the need for a time-consuming two-step process.
- ❖ This lime-based formulation neutralizes the soil acidity while promoting plant growth and shields crops from soil-borne pathogens.

### **Sidersaura Marae - New Species of Dinosaur**

- ❖ Paleontologists in Argentina have found fossil fragments from a new genus and species of rebbachisaurid sauropod dinosaur.

- ❖ They lived in what is now Argentina during the Cenomanian age of the Late Cretaceous epoch, between 96 and 93 million years ago.
- ❖ This species Scientifically is named as *Sidersaura marae*.
- ❖ The ancient beast was up to 20 m in length, had an estimated mass of 15 tons, and had a very long tail.



### **3000-Year-Old City**

- ❖ A huge city hidden by the luxuriant vegetation of the Amazon rainforest has been discovered in Ecuador.
- ❖ The houses and plazas in the ancient city in Upano valley were connected by a network of roads and canals.
- ❖ The area lies in the shadow of a volcano that created rich local soils.
- ❖ This is older than any other site we know in the Amazon.
- ❖ The city is between 3,000 and 1,500 years old - older than other pre-Columbian ones discovered in the Amazon.
- ❖ It also said that people lived there for up to 1,000 years.
- ❖ The discovery was made using LiDAR, a popular remote sensing method.
- ❖ It uses light to measure distances and is also known as laser scanning or 3D scanning.



## Strongest brand for 2024



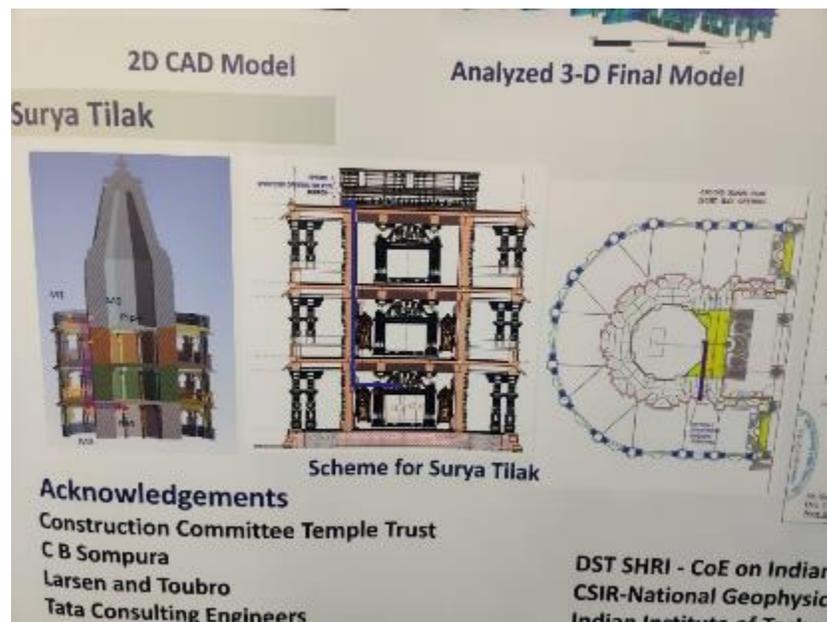
- ❖ Jio, the telecom and digital arm of Reliance, continues to be the strongest Indian brand.
- ❖ In the 2024 ranking, Jio is placed at the 17<sup>th</sup> position among the world's strongest brands.
- ❖ LIC is placed at the 23<sup>rd</sup> place on the list, followed by SBI at 24<sup>th</sup> rank.

## Soligas and Yeravas tribals diet

- ❖ Indigenous groups Soligas and Yeravas have been living in the Cauvery Basin and the surrounding hills of peninsular India for thousands of years.
- ❖ Soligas, one of the oldest indigenous communities in the country, are the original inhabitants of Karnataka and live mostly in the Chamarajanagar and Mandya districts.
- ❖ The Yeravas, on the other hand, came to the state from Wayanad district in Kerala and settled in Kodagu district of the state.
- ❖ A recent book has looked into the diets of these communities.
- ❖ It is giving fresh insights into the foods that these two tribes forage from the forests.
- ❖ The foods that these two tribes forage from the forests.
- ❖ Such foods form around 25 per cent of the Soligas diet and around 30 percent of the Yerava diet.

- ❖ Honey is an important part of the diet for the Soliga people, who still forage large parts of their food from the biodiversity-rich Ghats.
- ❖ There are some 10-12 wild food plants that are unique to each community as they live in different landscapes.
- ❖ Mushrooms become part of the Yerava diet during monsoons, when they emerge overnight from barren land.

## Surya Tilak



- ❖ Scientists from top government institution (Indian Institute of Astrophysics in Bengaluru) have designed a special mirror- and lens-based apparatus.
- ❖ It will ensure that every Ram Navami Day at noon, there is a ray of sunlight that falls directly on the forehead of the 'achal Ram Lalla' idol at Ayodhya.
- ❖ It is officially called the 'Surya Tilak mechanism'.
- ❖ The Surya Tilak mechanism would be fully operational when the full temple is constructed.

