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TNPSC BITS

- ❖ Tamil Nadu's Chief Minister released a digital commemoration titled 'Tamilvel P.T. Rajan Ninaivugalil 50' to mark the 50th death anniversary of the Justice Party leader and former CM of the erstwhile Madras Presidency P.T. Rajan.
- ❖ Keeladi has been selected as the Best Tourism Village 2024 under the heritage category by the Union Ministry of Tourism.
- ❖ Tamil Nadu's Minister for Youth Welfare and Sports Development Udhayanidhi Stalin, has been elevated as Tamil Nadu's Deputy Chief Minister.
- ❖ The Mankidia community becomes 6th PVTG to get habitat rights over forests in Odisha.
- ❖ The Maharashtra government has approved renaming Pune Airport to 'Jagadguru Sant Tukaram Maharaj Pune International Airport' to honour the 17th-century saint.
- ❖ The 10th Commonwealth Parliamentary Association (CPA) India Region Conference was held in New Delhi.
- ❖ The Ministry of Agriculture & Farmers' Welfare organized the National Conference on Implementing Digital Public Infrastructure (DPI) in New Delhi.
- ❖ Bollywood producer Vinod Bachchan received the prestigious Global Prestige Award at the House of Lords, UK for his significant contributions to the Indian film industry.
- ❖ The 2024 SASTRA Ramanujan Prize will be awarded to Alexander Dunn of the Georgia Institute of Technology, U.S.
- ❖ India launched the Computer Security Incident Response Team- POWER (CSIRT-POWER) in New Delhi.
 - The facility will aim to address the specific cyber security issues faced by the Power sector in India.
- ❖ Pappammal at 109, a Padma awardee and organic farmer at Thekkampatti in Coimbatore district, passed away recently.
- ❖ The Summit of the Future was held at the United Nations in New York With the theme "Multilateral solutions for a better tomorrow".
- ❖ Union government inaugurated the Computer Security Incident Response Team – Power (CSIRT-Power) at Northern Regional Power Committee in New Delhi.
- ❖ The 41st edition of Indian Coast Guard (ICG) Commanders' Conference was held in New Delhi.
- ❖ Union Ministry of Textiles launched India-specific fashion trend book, "Paridhi 24x25" a bilingual web portal of VisioNxt and the AI Taxonomy e-book.



- ❖ The IMF has approved a \$7 billion loan for Pakistan, aimed at boosting its struggling economy, with disbursement starting at \$1 billion.
- ❖ The Ministry of Rural Development recently organized a National Conclave in New Delhi to focus on Gender Mainstreaming.
 - This event held in collaboration with IWWAGE (Initiative for What Works to Advance Women and Girls in the Economy).
- ❖ Tamil Nadu's 50th SIPCOT industrial park will be opened at Panapakkam along with the Tata Motors-JLR project.
 - Seventeen other industrial parks are expected to come up over the next year.
- ❖ Russia and China have conducted a large-scale naval exercise called "Ocean-24" in the Sea of Japan with the participation of about 15 countries.
- ❖ International Coffee Day is observed in October 1 since 2015, to recognize and promote the global coffee industry.
- ❖ World Vegetarian Day is celebrated every year on October 1 to spread awareness around benefits of vegetarianism and how it plays an important role in shrinking environment footprint.
- ❖ Tamil Nadu Chief Minister laid the foundation stone for the ₹9,000-crore Jaguar Land Rover (JLR) and Tata Motors' manufacturing facility in Ranipet.
- ❖ The Department of Science and Technology launched the Women in Space Leadership Programme (WiSLP) in collaboration with the British Council as part of the UK-India Education and Research Initiative.
- ❖ The Ninth Annual Meeting of Board of Governors of Asian Infrastructure Investment Bank (AIIB) was held in Samarkand, Uzbekistan.
- ❖ India is set to host the World Telecommunication Standardization Assembly (WTSA) in New Delhi.
- ❖ The Nasa astronaut Sunita Williams has officially taken command of the International Space Station (ISS) for the 2nd time.
- ❖ Veteran Bollywood actor Mithun Chakraborty will be honoured with the Dadasaheb Phalke Award.
- ❖ Air Marshal Amar Preet Singh succeeded Air Chief Marshal VR Chaudhari as the new Air Force chief.
- ❖ The Annual International Conference and Exhibition (AICE) 2024 has been relocated for their 10th edition from Bari, Italy, to Dubai, the UAE.
 - It took place in Dubai under the new name, World FZO 10th World Congress.
- ❖ Lay's is named Official Sponsor of FIFA World Cup 26™ & FIFA Women's World Cup 2027.



- ❖ India's first Oxygen Bird Park near Nagpur (Maharashtra) is spread across 8 hectares housing over 8,000 diverse plant species.
- ❖ Former Defence Minister Shigeru Ishida became the 102nd Prime Minister of Japan.
- ❖ The seventh edition of the Global Aerospace Summit, a premier forum for the world's aerospace supply chain, was held in Abu Dhabi, UAE.
- ❖ The Tamil Nadu government has nominated retired Madras High Court judge S. Tamilvanan as the chairperson of the Tamil Nadu State Commission for the Scheduled Castes and Scheduled Tribes.
- ❖ A two-day national 'Tholkudi' conference on 'Preservation and Promotion of Tribal Cultural Heritage of Tamil Nadu' was organised by Department of Adi Dravidar and Tribal Welfare and the Madras School of Social Work.
- ❖ Tamil Nadu govt developed TN-Alert, a bilingual mobile application, to inform the public about the real-time weather forecast, rainfall data, alerts and reservoir levels.
- ❖ The Manimegalai Awards for 2022-23 and 2023-24 was awarded to 70 SHGs and federations by the Tamil Nadu Corporation for Development of Women.
- ❖ India's Gulveer Singh broke his national record in the men's 5000m event by clocking 13:11.82 to win gold at World Athletics Continental Tour in Niigata, Japan.
- ❖ The Maharashtra Government declared desi (indigenous) cows as 'Rajyamata-Gomata' considering factors like their significance since Vedic period.
- ❖ The India Sugar & Bio-Energy Conference was organized by the Indian Sugar & Bio-Energy Manufacturers Association (ISMA) in New Delhi.
- ❖ India has become the World's third largest Producer and Consumer of Ethanol.
- ❖ Squadron Leader Mohana Singh has become the first woman fighter pilot to operating India's indigenously 'Made in India' LCA Tejas fighter jet.
- ❖ Center launched the Ideas4LiFE portal for inviting ideas related to products and services for inducing behavioural changes related to environment-friendly lifestyles.
- ❖ The central government launched the 5-year Cruise Bharat Mission, aiming to boost cruise tourism in India to 1 million passengers and create 400,000 jobs by 2029.
- ❖ India launched world's first State-funded project of its kind, BharatGen, an initiative to make the generative AI available to citizens in the different Indian languages.
- ❖ India will soon become the fifth country to run hydrogen-fuelled trains, after Germany, France, Sweden, and China.



- ❖ Virat Kohli completed 27000 international runs and became the fastest cricketer to reach that milestone and broke the record of Sachin Tendulkar.
- ❖ Ishpreet Singh Chadha beat the four-time world champion Mark Selby in the Pro circuit snooker held at England to make place in the semifinal of that tournament.
- ❖ The eighth edition of India-Kazakhstan Joint Military Exercise KAZIND-2024 commenced in Uttarakhand.
- ❖ Archaeologists have unearthed the oldest eyeliner from the ruins of a prehistoric city in Turkey, has proved that humans were using makeup more than 8,000 years ago.
- ❖ BioNTech has started the international clinical trials for BNT116, an mRNA vaccine aimed at treating non-small cell lung cancer (NSCLC).
- ❖ The Institute of Tropical Meteorology (IITM) has introduced 'high-performance computing' or HPC named 'Arka' and 'Arunika' for the weather and climate research.
- ❖ Operation Amrith (Antimicrobial Resistance Intervention for Total Health) of Kerala has seen a sharp decline in the irrational use of antibiotics in the state.
 - In early January this year, Kerala became the first State in the country to ban the over-the-counter sale of antibiotics without a prescription.
- ❖ German Unity Day celebrated on 3 October to commemorate the anniversary of German reunification in 1990.
- ❖ Meta has released its first open-source model Llama 3.2 with both image and text processing abilities.
- ❖ Telangana has become the first State, in the country, to get a chapter of NITI Aayog's Women Entrepreneurship Platform (WEP).
- ❖ The Indian Air Force conducted a massive air show in Chennai to commemorate the 92nd anniversary of the Force.
- ❖ The World Green Economy Forum was held in Dubai, under the theme, "Empowering Global Action: Unlocking Opportunities and Advancing Progress".
- ❖ The Indian Military Nursing Service (MNS) marked its 99th Raising Day on Oct 1st, 2024.
- ❖ India is going to host first-ever Kho Kho World Cup in 2025.
- ❖ The World Health Organization has adopted the Global Strategic Preparedness, Readiness, and Response Plan, or SPRP, to minimize the dengue and other threats from Aedes-borne arboviruses.



- ❖ Idagunji Mahaganapati Yakshagana Mandali Keremane has received recognition from the UNESCO convention for safeguarding the Intangible Cultural Heritage (for the promotion of Yakshagana Dance).
- ❖ Typhoon Krathon made landfall in the major port city of Kaohsiung, Taiwan.
- ❖ The Union Cabinet has approved the ₹63,246 crore Chennai Metro Rail's phase II project
 - This will span across 118.9 km with 128 stations and will have multi-modal integration at 21 locations.
- ❖ The 2024 CM Trophy was inaugurated recently at Chennai and it is witnessing over 33,000 participants from 38 districts competing in five categories.
- ❖ The road in front of the Jamaica High Commission in New Delhi has been officially renamed as 'Jamaica Marg'.
- ❖ The National Wildlife Week 2024 was observed during October 02/08 to educate the community on the importance of preserving biodiversity and promoting coexistence of humans and wildlife.
- ❖ Prime Minister inaugurated the 'Lal Tipara Gaushala' with a Bio-CNG plant in Gwalior, Madhya Pradesh.
- ❖ India, Nepal, and Bangladesh have signed a trilateral agreement to export 40 megawatts of electricity from Nepal to Bangladesh via India's power grid.
- ❖ Under the Pradhan Mantri Bhartiya Janaushadhi Pariyojana, as of September 30, 2024, a total of 13,822 Jan Aushadhi Kendras have been established across the country.
- ❖ In a step forward towards landing astronauts on the Moon by 2030, China has unveiled the design of its special 'lightweight' lunar spacesuit.
- ❖ NATO will set up a new land command in Finland near the Russian border next year.
- ❖ The 26th Water, Energy, Technology and Environment Exhibition (WETEX) 2024 was held in Dubai.
- ❖ Kerala has inaugurated India's first supercapacitor manufacturing facility in Kallyassery, Kannur.
- ❖ Ayush Medical Value Travel Summit 2024, themed 'Global Synergy in Ayush: Transforming Health and Wellness through Medical Value Travel' was held in Mumbai.
- ❖ Prime Minister inaugurated GAIL's first CBG Plant in Ranchi, Jharkhand.
 - It will process 150 tonnes of Municipal Solid Waste to produce 5,000 kg Bio-CNG and 25 tons of fermented bio manure per day.
- ❖ Euronaval 2024, the world's largest naval defence trade show, is to be held in November at Paris.



- ❖ Tamil Nadu govt launched "Nallosai" in college and "Katrathal Inithu" in schools, to help students, to develop holistic skills in arts, science, sports, information technology, and soft and work skills After school/college hours.
- ❖ Madras Atomic Power Station Unit 2 at Kalpakkam has completed one year of continuous operations recently.
- ❖ The centre has approved the establishment of a National Centre of Excellence (NCoE) for Animation, Visual Effects, Gaming, Comics, and Extended Reality (AVGC-XR) in Mumbai.
- ❖ The 2024 edition of the annual apex-level international conference of the Indian Navy – the Indo-Pacific Regional Dialogue (IPRD) was held in New Delhi.
- ❖ Mumbai Cricket team clinched the Irani Cup trophy for the 15th time after 27 years.
- ❖ Tamil Nadu Chief Minister has inaugurated the Kalaignar Centenary Park on Cathedral Road in Chennai.
- ❖ With the Union government's finance of 65% of the estimated cost of the project of ₹63,246 crore, Chennai Metro Rail's Phase-2 becoming a 'Central sector' project.
- ❖ The Conference on Maritime Decarbonization in India, co-hosted by the Ministry of Ports, Shipping and Waterways and the Asian Development Bank, held in New Delhi.
- ❖ DRDO has successfully conducted flight-tests of the 4th generation, technically-advanced miniaturised Very Short-Range Air Defence System (VSHORADS) at Pokhran.
- ❖ Mark Zuckerberg surpassed Amazon founder Jeff Bezos become the world's second richest person, after Elon Musk according to the Bloomberg Billionaire Index.
- ❖ Taiwan has received its first shipment of 100 land-based Harpoon anti-ship missile systems from the United States.
- ❖ Tamil Nadu Chief Minister M.K. Stalin was presented with the Asia HRD Lifetime Achievement award.
- ❖ Tamil Nadu's Health and Family Welfare Department has bagged the 'UN Inter agency Task Force Awards (UNIATF) for 2024' under the category of Ministries of Health for its flagship scheme 'Makkalai Thedi Maruthuvam'.
- ❖ The Maritime Exercise Malabar 2024 is held in Vizag with the participation from Australia, Japan, and the United States.
- ❖ The Chief Minister of Chhattisgarh has inaugurated the Jal-Jagar Mahotsav at the Ravishankar Reservoir in Gangrel Dam, Dhamtari district.



- ❖ The Indian and UAE governments are working on interlinking of UPI of India and the AANI of UAE to facilitate the seamless cross-border transactions between two countries.
- ❖ India has extended support of 400 million dollars and a bilateral currency swap of 3,000 crore rupees to the Maldives.
- ❖ The Ministry of Electronics and Information Technology (MeitY), has launched the Vishvasya-Blockchain Technology Stack to support the various permissioned Blockchain based applications.
- ❖ India will host the World Telecommunication Standardization Assembly (WTSA) of the International Telecommunication Union in New Delhi.
- ❖ Union Minister of Health and Family Welfare has been elected as the Chairperson of the 77th Session of the WHO South-East Asia Region.
- ❖ India participated in the 44th session of the Codex Committee on Nutrition and Foods for Special Dietary Uses (CCNFSDU) held in Dresden, Germany.
- ❖ The Greater Chennai Corporation launched 24-hour helpline, 1913 to report instances of illegal dumping of construction debris, sewage, and waste in public spaces and waterbodies.
- ❖ INS Nirdeshak, the second in a series of four Survey Vessels (Large) was delivered to the Indian Navy.
- ❖ Bihar will develop Kaimur Wildlife Sanctuary as its second tiger reserve due to Valmiki Tiger Reserve reaching capacity.
- ❖ Hurricane Milton made landfall on the west coast of Florida (USA).
- ❖ The 100th birth anniversary of Immanuel Sekaran (October 9) was observed recently.
 - He participated in the freedom struggle through the quit India movement while he was just 18 and was murdered in 1957 when he was only 33.
- ❖ The one-man commission of judge B. Gokuldas, to probe the methanol-laced arrack resulting in the deaths in Kallakurichi district, has asked members of the public, social activists and NGOs to present their views, opinions and suggestions on the incident.
- ❖ The Indian Institute of Skills (IIS) Mumbai is established through a Public-Private Partnership (PPP) model with a collaboration between the Ministry of Skill Development and Entrepreneurship, and Tata IIS.
- ❖ The National e-Governance Division (NeGD) has recently announced the integration of the UMANG app with DigiLocker - India's Digital Wallet.
- ❖ The Cabinet Committee approved deals for the purchase of 31 MQ-9B High Altitude Long Endurance (HALE) Unmanned Aerial Vehicles (UAV) from U.S. as well indigenous construction of two Nuclear Attack Submarines.



- ❖ The IIT Indore has developed a device for early detection of breast cancer by using optical and acoustic signals combo at an affordable cost.
- ❖ India's textile sector is expected to grow to nearly 350 billion dollars by 2030.
- ❖ The 38th National Games will take place in Uttarakhand from January 28 to February 14 next year.
- ❖ India has launched its 'Study in India' campaign at the 20th International Education Show in Sharjah (UAE), aiming to attract international students to its universities.
- ❖ Nepali mountaineer, Nima Rinji Sherpa (18), made history by becoming the youngest person to summit all 14 of the world's 8,000-meter (26,246-foot) peaks.
 - The record for summiting all 14 of the world's highest peaks was previously held by Mingma Gyabu "David" Sherpa (30).
- ❖ INS Talwar is participating in the eighth edition of IBSAMAR, a joint multinational maritime exercise among Indian, Brazilian, and South African Navy held at South Africa (Simon's Town).
- ❖ The India Digital Agri Conference 2024, co-organized by ICFA and IIT Ropar TIF – AwaDH was held at New Delhi.
- ❖ India took part in the 19th East Asia Summit (EAS) held in Vientiane, Lao.
- ❖ The central government has upgraded Hindustan Aeronautics Limited (HAL) as the 14th Maharatna Central Public Sector Enterprises (CPSE).
- ❖ The Director-General of UNESCO announced the designation of Rabat (Morocco) as World Book Capital for 2026.
- ❖ The Tamil Nadu government is introducing help desks at all primary health centres (PHCs) to improve patient guidance, operational efficiency and improve patient satisfaction.
- ❖ Inflation in India's wholesale prices increased to 1.84% in September from 1.31% in August.
 - This is due to the food prices surging 9.5% from a 10-month low of 3.3% in August as vegetables became nearly 49% costlier than last year.
- ❖ Pritpal Kaur, SP of Phek district in Nagaland, has been selected as the '2024 IACP 40 Under 40' awardee by the prestigious US-based International Association of Chiefs of Police (IACP).
- ❖ Lok Sabha Speaker Om Birla led a parliamentary delegation to the 149th Assembly of the Inter-Parliamentary Union (IPU) in Geneva, Switzerland.
- ❖ Noel Tata has been appointed the new chairman of Tata Trusts.
- ❖ The US-India Strategic Partnership Forum (USISPF) hosted its annual 'India Leadership Summit 2024' in New Delhi.



- ❖ Dipa Karmakar, the first Indian female gymnast to compete in the Olympics at Rio 2016 has announced her official retirement from professional competition.
- ❖ The Indian Navy has recently launched its first indigenous multi-purpose vessel Samarthak.
- ❖ Maharashtra government has decided to rename the Maharashtra State Skills Development University as Ratan Tata Maharashtra State Skills Development University.
- ❖ The Indian Railways has introduced a new Vande Bharat train service, marking the longest journey in the country which runs 994 kilometres from Delhi to Patna.
- ❖ For the first time in India, 19th International Conference of Drug Regulatory Authorities was held in New Delhi.
- ❖ ISRO Chairman S. Somanath has received the International Astronautical Federation's (IAF) prestigious World Space Award for Chandrayaan-3's remarkable achievement.
- ❖ Telangana will become the third state to hold a comprehensive household caste survey after Andhra Pradesh and Bihar.
- ❖ The maharaja of the erstwhile princely state of Nawanagar, known as Jamnagar, in Gujarat, has declared his nephew and former cricketer Ajay Jadeja as his heir to the throne.
- ❖ Navi, a fintech company, has become India's fifth-largest ecosystem player for second consecutive time on the UPI.
- ❖ Mountaineer Arjun Vajpai (Maharashtra) summited Mt. Shishapangma (China) and, became the first Indian to scale the peak.
- ❖ The International Shooting Sport Federation (ISSF) confirmed that India will host the ISSF Junior World Cup in 2025.
- ❖ The State-owned BEML secures ₹866.87 Crore contract for 'Made in India' Bullet Trains.
- ❖ The Nagarjuna Sagar-Srisailem Tiger Reserve (NSTR) in the Nallamala Forest has been ranked first among India's 55 tiger reserves for its leopard population, with an estimated 360 leopards.
- ❖ National Conference (NC) vice-president Omar Abdullah was sworn in as Jammu and Kashmir Chief Minister.
- ❖ Indian woman scientist, Shubha Tole, has been appointed as the president-elect of the International Brain Research Organisation (IBRO).
- ❖ The Kerala Legislative Assembly unanimously passed a resolution and urged the central government to withdraw the 2024 Waqf Amendment Bill.
- ❖ The Indian Army has rolled out its first overhauled T-90 Bhishma tank, further enhancing its operational readiness.



- ❖ According to UNICEF, the Indian suppliers are the third largest provider of the organisation's health and nutrition support to children globally.
- ❖ Global SWF has crowned Abu Dhabi with the title of world's richest country, in terms of its sovereign wealth funds.
- ❖ A new data from Indeed, reveals a 14% increase in cybersecurity jobs from September 2023 to September 2024 in India.
 - Bangalore leads the openings, with 10 per cent of listings, followed by Delhi NCR (4%), remote jobs (2.2%), and Hyderabad (2%). Mumbai ranks fifth with 2 per cent.
- ❖ The Union Ministry of Information and Broadcasting will set up an iGOT Lab to facilitate online learning for all employees within the Ministry.
- ❖ Nayab Singh Saini took oath as new Chief Minister of Haryana for the second term.
- ❖ Nikita Porwal from Madhya Pradesh was crowned Femina Miss India 2024 and Rekha Panday representing the Union Territories in second place.
- ❖ The International 6G Symposium was the event organized by the Bharat 6G Alliance was held in New Delhi.
- ❖ The South Eastern Coalfields Limited (SECL), Chhattisgarh has inaugurated the country's 216th AMRIT (Affordable Medicines and Reliable Implants for Treatment) Pharmacy.
- ❖ NITI Aayog hosted the Second International Methanol Seminar and Expo 2024 in New Delhi.
- ❖ India's Akhil Sheoran clinched a bronze medal in the men's 50m rifle 3 positions shooting event at the ISSF World Cup Final 2024 in New Delhi.
- ❖ Prime Minister has inaugurated the 'Karmayogi Saptah' National Learning Week aimed at enhancing the individual and organizational capacity of civil servants.
- ❖ The Indian Army's Sudarshan Chakra Corps is conducting a major exercise called "Exercise Swavlamban Shakti" near Jhansi, Uttar Pradesh.
- ❖ Prabowo Subianto sworn in as 8th President of Indonesia.
- ❖ Odisha will host the 18th Pravasi Bharatiya Divas in Bhubaneswar from 8th to 10th of January next year.
- ❖ Thiruvananthapuram becomes India's first airport to get "world's first self-powered indoor air quality monitor" called Pavana Chitra.
- ❖ Indian Navy and the Royal Navy of Oman recently concluded their bilateral naval exercise, 'Naseem Al Bahr' off the coast of Goa.
- ❖ The Indian Coast Guard successfully conducted the coastal security exercise 'Sagar Kavach' across Gujarat and the Union Territory of Daman & Diu.



- ❖ The New Zealand Women's cricket Team for the first time lifted the ICC T20 World Cup after 23 Years by defeating the South Africa, held at UAE.
- ❖ The Asia-Pacific Ministerial Conference on Disaster Risk Reduction (APMCDRR) 2024 was held in Manila, Philippines.
- ❖ Narayana Murthy, Founder of Infosys, was honoured with the India Lifetime Achievement Award as part of the 2024 Patrick J. McGovern Awards.
- ❖ Mohanji, the renowned humanitarian and spiritual leader, was honoured with Humanitarian Award at 2024 Conscious Companies Awards in Johannesburg, South Africa
- ❖ Popular film Producer Rajkumar Hirani was given the National Kishore Kumar Award in Khandwa, Madhya Pradesh.
- ❖ Chennai Metro Rail's first driverless train for the phase II project is likely to have its first trial run on October 26.
- ❖ The Tamil Nadu government will provide 100 e-autos to 'climate warriors', women from Self Help Groups, to enhancing climate awareness among the public and creating livelihood opportunities for these women.
- ❖ IIT Madras is set to launch its first international flagship centre in Dubai for research, innovation, and entrepreneurship in early 2025.
- ❖ The Andhra Pradesh government decided to do away with the two-child policy for individuals having more than two children from contesting local body polls.
- ❖ Pakistan's Senate passed the controversial 26th Constitution Amendment Bill, which capping Pakistan's Chief Justice tenure for three years.
- ❖ Egypt has been declared malaria-free by the WHO, making it the second country globally to achieve this status in 2024 after Cabo Verde.
- ❖ Kargil district's Kaksar Bridge (Ladakh) was renamed Capt. Amit Bhardwaj Setu to honor the sacrifice of Capt. Amit Bhardwaj during the Kargil War.
- ❖ HDFC Bank, India's leading private sector bank, inaugurated its first branch in Singapore to provide banking services in Singapore.
- ❖ 6th Assembly of International Solar Alliance is to be held in New Delhi.
- ❖ The Indian Railways have reduced the advance reservation period from 120 days to 60 days, effective from November 1.
- ❖ The Centre of Excellence in Ayurveda Research to be established on the campus of the CSIR-National Institute for Interdisciplinary Science and Technology (NIIST) at Pappanamcode.
- ❖ The 14th biennial lake conference took place in Moodbidri, Karnataka on the theme 'Lake 2024 – wetlands for human wellbeing'.
- ❖ Hurricane Oscar made landfall as a tropical storm near the city of Baracoa in eastern Cuba.



- ❖ The cyclonic storm, Dana, caused extremely heavy rainfall in Odisha & West Bengal and made landfall in Odisha coast.
 - Its name was suggested by Qatar.
- ❖ India and Colombia signed the Audio-Visual Co-Production Agreement, enabling filmmakers from both countries to collaborate on various aspects of film production.
- ❖ The Indian Air Force (IAF) and Singapore Air Force participate in the 12th Joint Military Training (JMT) exercise at Kalaikunda Air Force station, West Bengal.
 - Singapore is the only country in the world to which India offers its military training facilities.
- ❖ The Tamil Nadu government has awarded the task of preparation of master plans for 42 towns to four consultants under the Union government's scheme of Amrut 2.0.
- ❖ The Vellore district administration will set up a modern compost yard to handle waste generated from six village panchayats at least 2 km away from Indian Naval Station (INS) Rajali in Arakkonam to prevent bird hits.
- ❖ The Madras High Court has ruled that contract employees too are entitled to maternity benefits and that the provisions of the Maternity Act of 1961 would prevail over contractual conditions if the latter either deny or offer less favourable benefits.
- ❖ Lignite and coal mines of NLC India Ltd. (NLCIL) have got top scores and five-star ratings for the year 2022-23 in a Union Coal Ministry survey.
- ❖ The former chairperson of the Maharashtra State Commission for Women, Vijaya Rahatkar has been appointed as chairperson of the National Commission for Women (NCW).
- ❖ A special parliamentary committee in Pakistan has appointed Justice Yahya Afridi as the next Chief Justice, bypassing the traditional seniority principle.
- ❖ Footballer Bala Devi of Manipur has become the first Indian woman to score 50 international goals.
- ❖ 25 years after Kamarajar Port was named the country's 12th major port, the mega international container transshipment port (ICTP) at Galathea Bay in the Great Nicobar Island has been notified as the 13th major port.
- ❖ India's fourth nuclear-powered ballistic missile submarine (SSBN), referred to as S4*, was launched in Visakhapatnam.
- ❖ Three new airports are inaugurated in Chhattisgarh's Surguja, Madhya Pradesh's Rewa and Uttar Pradesh's Saharanpur.
- ❖ The government of India will commemorate Sardar Patel's 150th birth anniversary with a two-year-long nationwide celebration from 2024 to 2026.



- ❖ Madhya Pradesh's Ratapani Wildlife Sanctuary near Bhopal will be notified as the state's eighth tiger reserve.
- ❖ India's Deepika Kumari won the silver medal in the women's recurve event at the Archery World Cup Final 2024 in Tlaxcala, Mexico.
- ❖ Urmila Chaudhary of Nepal won the Global Anti-Racism Championship Award 2024.
- ❖ Israel officially joined the Asian Development Bank (ADB) as its 69th member and 20th nonregional member.
- ❖ Google has named its Senior Vice President and IIT-Madras Alumnus Prabhakar Raghavan as its new Chief Technologist.
- ❖ The 2024 edition of the Embassy's flagship diaspora engagement event, Pravasi Parichay, was inaugurated at the Embassy Auditorium in Riyadh.
 - This week-long cultural celebration was titled "Classical Languages of India" designed to showcase the country's rich linguistic diversity.
- ❖ The Amaravati Drone Summit 2024, hosted by the Government of Andhra Pradesh, was drawing an impressive turnout of over 11,000 visitors.
- ❖ The second edition of the Indian Army's flagship international seminar, the Chanakya Defence Dialogue, was held in Delhi.
- ❖ The 14th All India Civil Defence and Home Guards conference was held at Gandhinagar, Gujarat.
- ❖ Centre launched the 21st Livestock Census to update data on the livestock population.
- ❖ The European Union has awarded its top human rights prize - Sakharov Prize - to Venezuelan opposition leaders Maria Corina Machado and Edmundo Gonzalez Urrutia.
- ❖ Global industry body International Copper Association (ICA) has elected Aditya Birla Group firm Hindalco Industries Ltd as its newest member.
- ❖ The 31st edition of the Singapore-Indian Maritime Bilateral Exercise (SIMBEX) was held at Visakhapatnam.
- ❖ Mormugao Port Authority, Goa became the first Indian port to be listed on the Environmental Ship Index (ESI) portal for their Harit Shrey program.
- ❖ India's top women wrestlers Sakshi Malik had authored her memoir as 'Witness'.
- ❖ The Maharashtra government has launched India's first integrated state-level Cyber Command and Control Centre, equipped with world-class technology and expertise.
- ❖ Thanu village near Dehradun is designated as the 'Writer's village' where writers will get a calm and creative environment necessary for the creation of their works.



- ❖ IndiaAI and Meta have announced the establishment of the Centre for Generative AI- Srijan, at IIT Jodhpur, Rajasthan.
- ❖ India's first-ever coal gallery was unveiled at the National Science Centre in New Delhi.
- ❖ A new memorial named Satark Park unveiled in Pune to honour the sacrifices of Military Intelligence personnel who died in the line of duty.
- ❖ Google has signed a deal to use small nuclear reactors to generate the vast amounts of energy needed to power its artificial intelligence (AI) data centres.
- ❖ Ratcliffe-on-Soar, the UK's last coal power station, at Ratcliffe-on-Soar, finishes operations recently after running since 1967.
- ❖ Nvidia became the world's most valuable company, by overtaking Apple with the value of 3.53\$tn.
- ❖ T V Narendran, MD and CEO of Tata Steel, has been elected as the Chairman of the World Steel Association (world steel).
- ❖ The Steel Authority of India Limited (SAIL) has been awarded with SHRM - HR Excellence Awards for 'Excellence in Inclusion, Equity & Diversity' and 'Excellence in Managing the Distributed Workforce' categories.
- ❖ India's coking coal imports for the first six months of the current fiscal (April – September) were at a six-year-high at 29.6 million tonnes (mt).
 - Shipments from Russia witnessing a substantial rise of over 200 per cent during this period.
- ❖ The Ministry of Information & Broadcasting has announced that Australia as the "Country of Focus" for the 55th edition of the International Film Festival of India (IFFI).
- ❖ Meghalaya's capital, Shillong, has become the most popular travel destination for Indians in 2025.
- ❖ Actor Darasing Khurana has received the Mahatma Gandhi Leadership Award for his work towards raising awareness around mental health issues as the 'Commonwealth Year of Youth Champion'.
- ❖ The 11th Asia Clean Energy Summit (ACES) recently took place in Singapore.
- ❖ The U.S., France and Armenia have emerged as the top three customers for Indian military exports.
- ❖ As a new conservation initiative, the Global Ecosystems Atlas, has been launched to provide a comprehensive and unified resource for mapping and monitoring ecosystems worldwide.
- ❖ The total investor count of mutual fund had stood at 50.1 million at the end of September 2024.

TAMIL NADU

Chief Justice of Madras High Court 2024

- ❖ Tamil Nadu Governor administered the oath of office to Justice Shriram on his assumption of office as the 53rd Chief Justice of the Madras High Court.
- ❖ The Madras High Court has got a Tamil-speaking Chief Justice after a long gap of 43 years.
- ❖ The last Tamil-speaking Chief Justice of the High Court was M.M. Ismail who resigned on July 9, 1981.

Tamil Nadu State Dog Breeding Policy, 2024

- ❖ The Tamil Nadu State Dog Breeding Policy, 2024 was released recently.
- ❖ The policy prohibits the breeding of dogs that cannot withstand Indian climatic conditions.
- ❖ It includes Pug and Chow Chow on the list of cold climate dogs whose breeding is to be prohibited, given their health and welfare.
- ❖ Though the draft policy, released in February this year, had listed only these nine breeds, the final policy includes two more: Pug and Chow Chow.
- ❖ The final policy has listed Rajapalayam, Kombai, Chippiparai, and Kanni as the recognised breeds of Tamil Nadu.
- ❖ Kattai, Ramanathapuram Mandai, Malaipatti, and Sengottai, have to be standardised, recognised, and registered to prevent the native dogs from becoming extinct.
- ❖ It says the government will take steps to promote breeding of native breeds at centres.
- ❖ The native dogs will not be recommended to be raised in a house with restricted space.



Ramsar tag for two bird sanctuaries

- ❖ The Tamil Nadu Wetlands Mission is pursuing Ramsar designation for two more bird sanctuaries in Ramanathapuram.
- ❖ Ramanathapuram is home to five bird sanctuaries — Therthangal, Sakkara kottai, Melaselvanoor-Keelaselvanoor, Kanjirankulam, and Chitrangudi.
- ❖ Of them, the Chitrangudi and Kanjirankulam sanctuaries received the Ramsar status in 2021 and 2022 respectively.
- ❖ Tamil Nadu now boasts 18 Ramsar sites, the highest in India.
- ❖ The State's wetlands constitute 6.92% of the total geographical area, above the national average of 4.86%.
- ❖ The Point Calimere Wildlife and Bird Sanctuary, the first to receive the Ramsar tag in 2002.

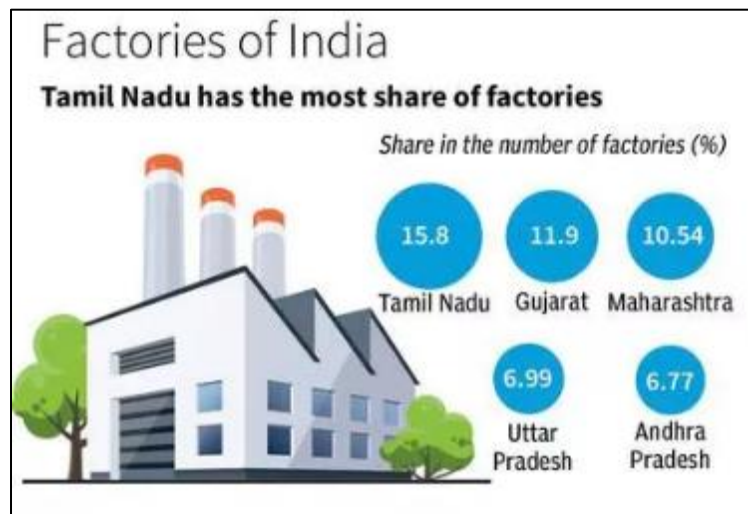
GREEN AND GOOD

List of 13 wetlands identified as potential wetlands of international significance and proposed to be designated as Ramsar sites

WETLAND	DISTRICT
Koonthakulam bird sanctuary	Tirunelveli
Chitrangudi bird sanctuary	Ramanathapuram
Vembanur	Kanyakumari
Suchuindraram-Theroor wetland complex	Kanyakumari
Vaduvur bird sanctuary	Tiruvarur
Udayamarthandapuram bird sanctuary	Tiruvarur
Vellode bird sanctuary	Erode
Pallikaranai marsh	Chennai
Gulf of Mannar Marine Biosphere reserve	Ramanathapuram
Kanjirankulam bird sanctuary	Ramanathapuram
Pichavaram mangrove	Cuddalore
Vedanthangal bird sanctuary	Chengalpattu
Karikili bird sanctuary	Chengalpattu

Factory employment in the state

- ❖ The Annual Survey of Industries (ASI) 2022-23 was released by the Union Ministry of Statistics and Programme Implementation.
- ❖ Tamil Nadu was the top State employing the highest number of persons in the manufacturing.
- ❖ 1,84,94,962 number of persons were engaged in factories across India, and Tamil Nadu accounted for 15%.
- ❖ The State also has the highest number of factories accounting for 15.66% of the total 2,53,334 number of factories.
- ❖ The top five States employing highest number of persons in manufacturing were Tamil Nadu, Maharashtra, Gujarat, Uttar Pradesh and Karnataka.
- ❖ These 5 states contributing about 55% of total manufacturing employment.
- ❖ Among the major states, in terms of Gross Value Added (GVA), Maharashtra ranked first in 2022-23.
- ❖ It is followed by Gujarat, Tamil Nadu, Karnataka and Uttar Pradesh.



Inter-se seniority of Ministers

- ❖ Tamilnadu Deputy Chief Minister Udhayanidhi Stalin stands third in the inter-se seniority of Ministers of the Tamil Nadu government.
- ❖ Prior to his appointment as Sport Minister, he stood 10th in the seniority list.
- ❖ His inter se seniority follows that of the Chief Minister and Minister for Water Resources Duraimurugan.
- ❖ On September 28, the Governor appointed Minister Udhayanidhi as the Deputy CM under Article 164 of the Constitution.

- ❖ He is thirdly occupied the deputy chief minister Post.
- ❖ Since 2009, Tamil Nadu has had 2 deputy CMs, none of whom have served at least one full term.
- ❖ The first was former CM of Tamil Nadu M. Karunanidhi's third son, M. K. Stalin (2009-2011).
- ❖ O. Panneerselvam became the second deputy chief minister During 2017-2021 at Edappadi K. Palanisami's government.
- ❖ There are no provisions in the Constitution for the designation of Deputy Prime Minister or Deputy Chief Minister.

			
M.K. Stalin Chief Minister	Duraimurugan Minister for Water Resources	Udhayanidhi Stalin Minister for Youth Welfare and Sports Development	K.N. Nehru Minister for Municipal Administration
Portfolios: Public, General Administration, Indian Administrative Service, Indian Police Service, Indian Forest Service, Other All India Service, District Revenue Officers, Police, Home, Special Initiatives and Welfare of Differently abled persons.	Portfolios: Irrigation Projects including small irrigation, Legislative Assembly, Governor and Ministry, Elections and Passports, Minerals and Mines.	Portfolios: Youth Welfare, Sports Development, Special Programme Implementation Department & Poverty Alleviation Programme, and Rural Indebtedness	Portfolios: Municipal Administration, Urban and Water Supply.

Heat wave Mitigation Road map

- ❖ Global reports indicate that India will lose up to 5% of its Gross Domestic Product by 2030 to rising temperatures.
- ❖ Tamil Nadu with its warm tropical weather, is projected to be severely impacted by heat.
- ❖ The State Planning Commission brought a report, 'Beating the Heat-Tamil Nadu Heat Mitigation Strategy'.
- ❖ The temperature range at which humans can thrive is 25 degrees Celsius to 30 degrees Celsius, with 60% humidity.
- ❖ However, in many parts of Tamil Nadu, this threshold is regularly breached.
- ❖ At present, nearly 74% of the State's population is exposed to air temperature of over 35°C.

- ❖ The Tamil Nadu State Disaster Management Authority prepared the Heat Wave Action Plan in 2019, and in 2023.

WHAT MAKES FOR A HEATWAVE?

Places with normal maximum temperature	Heatwave if temperature higher by	Severe heatwave if temperature higher by
40 degree Celsius or less	5-6 degree Celsius	7 degree Celsius
More than 40 degree Celsius	3-4 degree Celsius	More than 5 degree Celsius
For any place	Maximum temperature remains above 45 degree Celsius for two consecutive days	

These criteria have to be met in at least two stations of a meteorological sub-division for at least two consecutive days. Source: Parliament question and IMD

Kalaichemmal awards 2024



- ❖ The Tamil Nadu govt announced the Kalaichemmal awards for three painters and three sculptors for their contributions to traditional and contemporary painting and sculpture.
- ❖ These awards are presented by the department of art and sculpture.
- ❖ A Manivelu has been selected for the award in the traditional art category.
- ❖ L Balachandran and K Kanniappan have been selected for the award in the traditional sculpture category.
- ❖ K Muralidharan and A Selvaraj selected for the award in the category of modern art. R Raghavan will get the award in the modern sculpture category.

Butterfly migration in 2024

- ❖ Tamil Nadu has witnessed large-scale migration of butterflies belonging to the Danainae sub-family from the Eastern Ghats and plains towards the Western Ghats during September.
- ❖ They migrate from the Eastern Ghats and plains towards various nearest hill ranges of the Western Ghats before the start of northeast monsoon.
- ❖ During April and May, these butterflies, generally called ‘tigers and crows’ migrate from the Western Ghat hill ranges towards the Eastern Ghats and plains of Tamil Nadu.
- ❖ This is happened before the onset of the southwest monsoon.



Advisory on the term ‘Kuravan’

- ❖ The Tamil Nadu State Commission for the SC&ST has issued an advisory against using the term ‘Kuravan/Kurathi Attam’ in cultural festivals.
- ❖ It has advised against using ‘Kura’ as a prefix or suffix, and ‘Kuravan/Kurathi Attam’, as they were being used to disrespect those tribal communities. ‘
- ❖ ‘Kuravan’ is a part of the Scheduled Castes in Tamil Nadu, and ‘Kuravar’ and ‘Malaikkuravar’, the Scheduled Tribes.
- ❖ The Commission also recommended the Tamil Nadu government to ban songs that use the term ‘Kuravan’.

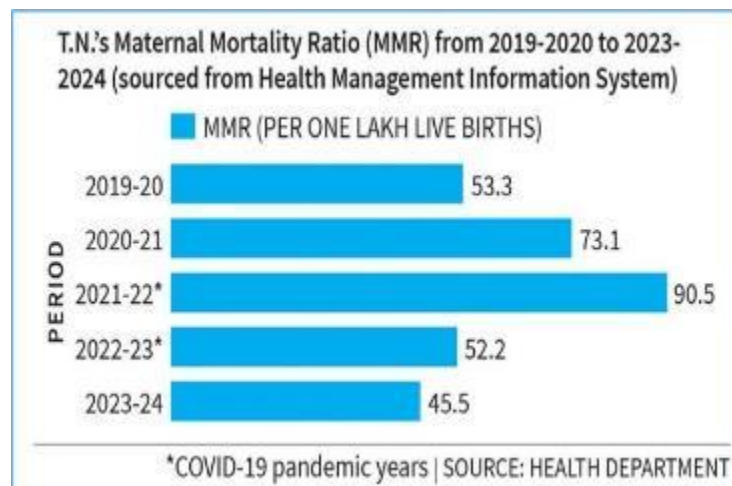
Herpetofauna survey – MTR 2024

- ❖ A recent herpetofauna survey, conducted in the buffer forests of the Mudumalai Tiger Reserve (MTR), discovered a new species.
- ❖ It also resulted in the identification of 33 reptile species and 36 amphibian species,
- ❖ The survey revealed four potential new species:
 - Two geckos (one from the *Cnemaspis* genus and another from *Hemidactylus*),

- A skink and
- A frog from the *Sphaerotheca* genus.
- ❖ The total number of identified species now stands at 55 reptile species and 39 amphibian species, with approximately 40% being endemic to the Western Ghats.
- ❖ Of these species, 16 are classified as threatened, and three are considered near-threatened according to the IUCN.



New Task Force to Reduce MMR



- ❖ Tamil Nadu has constituted a State-level task force to reduce maternal deaths.
- ❖ The aim is to bring down the Maternal Mortality Ratio (MMR) to less than 10 per one lakh live births in the next two years.
- ❖ The present MMR is 45.5 per one lakh live births.
- ❖ It will comprise experts, and representatives from the Indian Medical Association, the WHO and UNICEF.

Pig Breeding Policy 2024



- ❖ Tamil Nadu has unveiled a 'pig breeding policy' aimed at enhancing pig rearing in the state to ensure nutritional security.
- ❖ The policy includes infrastructure development, such as
 - Establishment of a bacon factory,
 - Promoting value addition of pork products for higher farmer profitability,
 - Development of a cooperative-based market chain, and
 - Implementing quarantine facilities for imported animals.
- ❖ The govt would provide subsidies, tax holidays, and financial support to boost the pig farming sector.
- ❖ The policy also mandates a systematic process for identifying animals using 12-digit UID ear tags as prescribed by the Union govt, with registration on the 'Information Network for Animal Productivity and Health (INAPH)'.

CyStar initiative



- ❖ IIT Madras has established the Centre for Cybersecurity, Trust, and Reliability (CyStar) to bolster India's cybersecurity capabilities.
- ❖ It will focus on both fundamental and applied research, addressing the growing cybersecurity needs of critical sectors such as finance, healthcare, automotive, and electronics.
- ❖ CyStar will develop a comprehensive, multi-faceted strategy to address the emerging cybersecurity challenges driven by artificial intelligence and the post-quantum era.

Statues of freedom fighters 2024



- ❖ Tamil Nadu Chief Minister through video conferencing, has unveiled a statue of various freedom fighters.
- ❖ Venni Kaladi statue was unveiled in Tenkasi district.
- ❖ Another statue of Veteran Kuyili was unveiled in Sivagangai district.
- ❖ A Statue of Thali Palayakar Malayandi Vengidupathi Ethalapar Nayakar, and a memorial hall was unveiled in Tiruppur district.

HIV/AIDS status in Tamil Nadu - 2024

- ❖ The prevalence of HIV/AIDS in Tamil Nadu stands at 0.16%.
- ❖ A total of 16,80,083 persons were living with HIV/AIDS in India.
- ❖ In Tamil Nadu, a total of 1,32,383 persons living with HIV/AIDS were under antiretroviral therapy.
- ❖ From 0.38% in 2010, the prevalence of HIV/AIDS, among pregnant women, has dipped to 0.16% due to awareness and support from the public.
- ❖ The prevalence of HIV/AIDS among persons aged 15 to 49 years has dropped from 0.35% in 2010 to 0.20% in 2023.



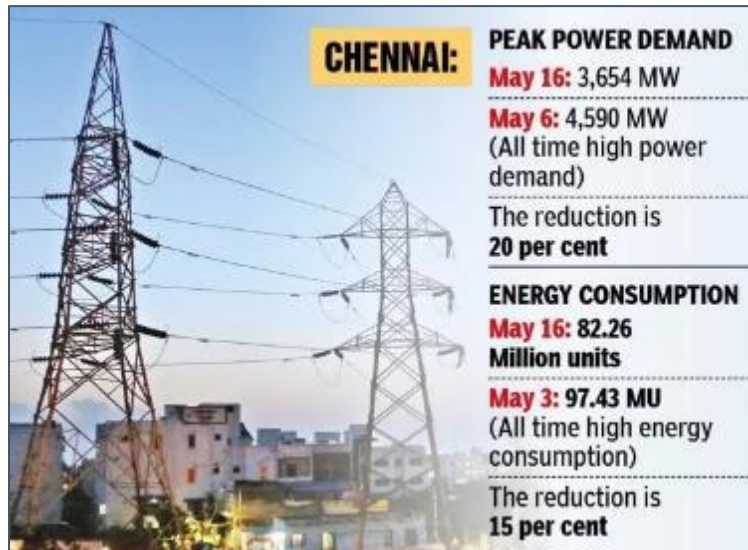
New GI tag applications - 2024

- ❖ The Tamil Nadu Food Processing and Agri Export Promotion Corporation (TNAPEX) has filed an application GI tag for three food products.
 - The Ramanathapuram panangkarkandu
 - Kovilpatti seeval, and
 - Ramanathapuram pattarai karuvadu.
- ❖ The NABARD Madurai Agri Business Incubation Forum (MABIF) was the facilitator.
- ❖ The Ramanathapuram panangkarkandu (crystal palm sugar) has been produced in this region for over 300 years.
- ❖ The pattarai karuvadu (dried fish) is a traditional dry fish preparation method that involves burying fish in mud after smearing them with turmeric powder.
- ❖ Kovilpatti seeval is a traditional deep-fried snack known for its crispy texture and unique flavour.

Power demand in first half 2024-25

- ❖ Tamil Nadu's power demand increased 6.2% to 68,967 million units (MU) in the first half of the financial year 2024-25.
- ❖ It was 64,958 MU in the same period last year.
- ❖ During the April-September period in 2024, the State saw a peak power demand of 20,784 MW as against 19,045 MW in the comparable period last year.
- ❖ The State has the highest number of factories, accounting for 15.66% of the total number of factories in India (2,53,334).

- ❖ During summer this year, the State's power demand hit a new record, touching an all-time-high of 20,830 MW on May 2.
- ❖ The daily consumption hit a new high of 454.32 MU on April 30.
- ❖ Tamil Nadu's total installed power capacity was 41,126.68 MW, as on September 30, 2024.



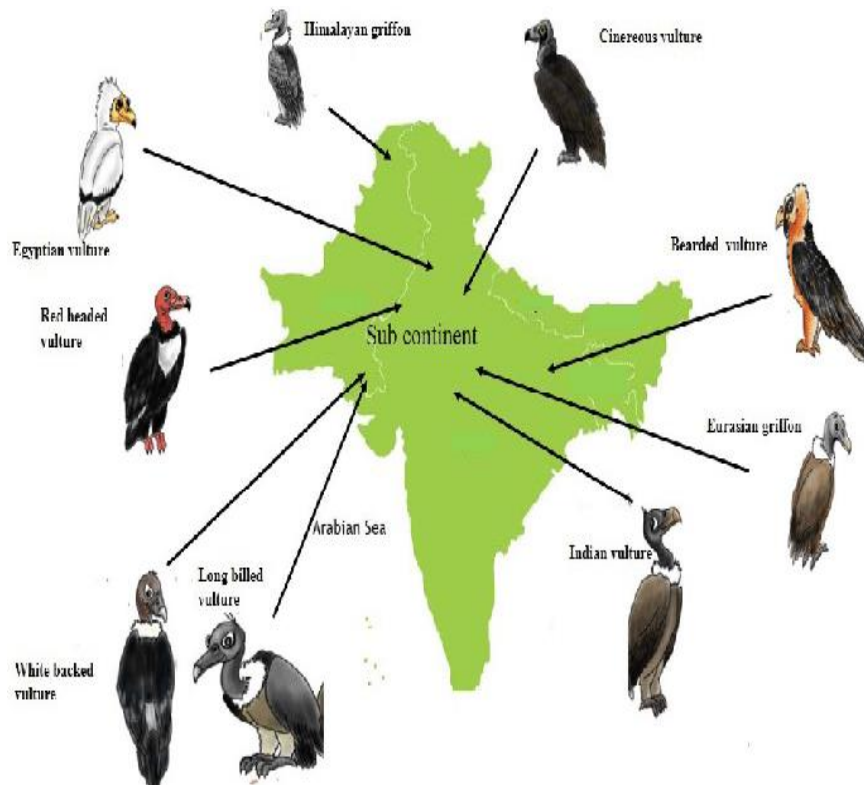
Expert for wildlife forensics



- ❖ The Advanced Institute of Wildlife Conservation (AIWC) in Vandalur has become the first institution from southern India to be officially recognised as a government scientific expert.
- ❖ This institution was set up by the Tamil Nadu Forest Department in 2017.
- ❖ With this tag, the institute can support the Tamil Nadu Forest Department and assist the forest and wildlife departments of neighbouring States with forensic analysis, enhancing wildlife law enforcement in the region.

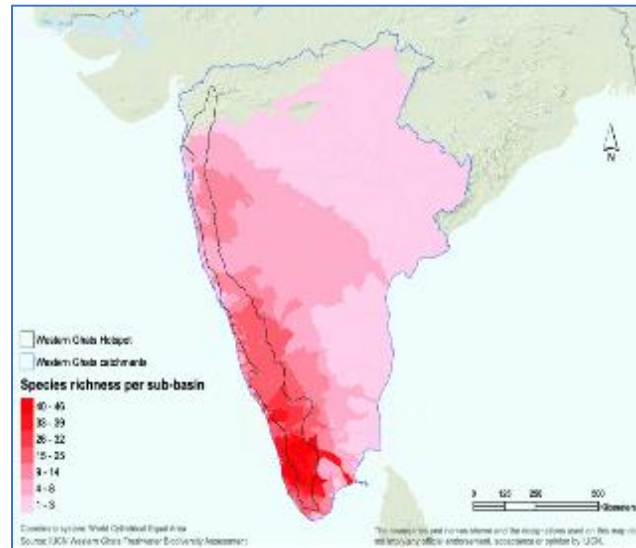
- ❖ So far, four organisations in India were equipped for analysis of biological specimens:
 - The Wildlife Institute of India (WII),
 - The Zoological Survey of India,
 - The BOTANICAL Survey of India, and
 - The Indian Council of Forestry Research and Education.

Long-billed vulture's nesting 2024



- ❖ The population of the critically endangered long-billed vulture (*Gyps indicus*) has seen a steady increase between 2015 and 2021.
- ❖ The species are exhibiting a 74% breeding success rate in the Mudumalai Tiger Reserve (MTR).
- ❖ Out of 31 nesting pairs of vultures recorded between the same period, there were 23 successful fledglings.
- ❖ The long-billed vulture is also known as the Indian vulture.
- ❖ It has witnessed an increase from 13 recorded individuals in 2016 to almost 28 reported individuals in 2021.
- ❖ This is an increase of almost 115% in the population in a span of five years.

Richness of threatened species 2024

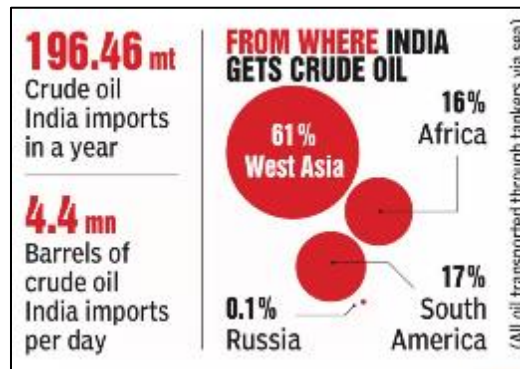


- ❖ Biologists created a GIS-based database of 512 species of fauna for the study — ‘Village Level Distribution Mapping of Threatened Fauna of the Western Ghats’.
- ❖ With 98 species, Tamil Nadu’s Valparai is at the top of the list of 7,630 villages in the Western Ghats in terms richness of threatened species.
- ❖ The list included 133 species of fishes, 81 species of birds, 91 species of reptiles, 79 species of amphibians, 47 species of insects, 37 species of mammals and etc.
- ❖ Out of the 512 species, 27 were Critically Endangered, 131 Endangered, 117 Vulnerable, and 88 Near Threatened species, and the rest of the species were of Least Concern, Data Deficient, or Not Evaluated.
- ❖ Valparai, a hill station in Coimbatore district, topped the list with 98 species.
- ❖ It is followed by Kannan Devan Hills in Kerala (83), Greater Bombay (69), Kuttampuzha (64), Pariyaram (61), and Kumily (57) in Kerala.
- ❖ State-wise, Kerala topped the list with 354 species of threatened fauna, followed by Tamil Nadu (274), Karnataka (237), Maharashtra (171), Goa (104), and Gujarat (37).

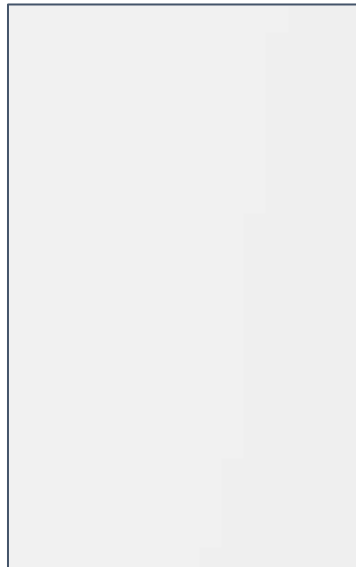
Tamil Nadu’s Oil Spill Contingency Plan 2024

- ❖ The Tamil Nadu government has finalised a contingency plan to mitigate such disasters.
- ❖ Four coastal districts are being identified as ‘very high’ risk for oil spills.
- ❖ This plan outlines the necessary steps and procedures for restoring an oil-contaminated habitat or shoreline to its original state without causing any adverse impacts on natural resources and the environment.

- ❖ It is intended for responding to marine oil spills of any type that occur within 12 nautical miles (24 km) off the State's coastline.
- ❖ It also includes riverine systems extending 40 km inland or to the point where tidal effects are noticeable, whichever distance is greater.
- ❖ As per the plan, coastal ecosystems including the Gulf of Mannar, Ennore, and Pichavaram Mangroves are prioritized.



Copper plates from Vijayanagara Kingdom



- ❖ A set of copper plate inscriptions with two leaves have been discovered at the Sri Singeeswarar temple at Mappedu village in Tiruvallur district.
- ❖ It is dating back to the 16th Century CE.
- ❖ The inscription was written in Sanskrit and Nandinagari script.
- ❖ It was engraved in 1513 during the reign of King Krishandevaraya.
- ❖ The plates recorded the gift of a village Vasalabattaka, renamed Krishnarayapura, to several Brahmins by the king.

- ❖ The hamper from the Tamil Nadu Civil Supplies Corporation is aimed at catering to the needs of a family for a month.
- ❖ The 'Amudham Plus' provisions hamper is expected to benefit citizens, especially during the Deepavali festival season.



அமுதம் பிளஸ்
15 மளிகைப் பொருள்கள் தொகுப்பு
ரூ.499

கஞ்சன் மூலம் : 50 கிராம்

கஞ்சன் + க.உ. பருப்பு	: 125 கிராம்	மூலி	: 500 கிராம்
சீரல்	: 100 கிராம்	சப்பு	: 1 கிலோ
பெந்தியம்	: 100 கிராம்	கனகத்தூள் பருப்பு	: 500
சோம்பு	: 50 கிராம்	க.உ.உ. பருப்பு	: 200
கிணறு	: 50 கிராம்	மாரிப்பருப்பு	: 200
கிணறு	: 250 கிராம்	வறுகடலை	: 200
தூய்மை	: 500 கிராம்	பெருங்காய்த்தூள்	: 15 கிராம்

தமிழ்நாடு நுகர்பொருள் வானியல் கழகத்தின்
அமுதம் மக்கள் அங்காடிகள் மூலம் ரூ.499/-க்கு
15 மளிகைப் பொருள்கள் அடங்கிய அமுதம் பிளஸ் என்ற
தொகுப்பு அறிமுகப்படுத்தப்பட்டுள்ளது.

Bioluminescent Waves in Chennai

- ❖ Chennai's East Coast Road beach blazed with the rare bioluminescent waves recently.
- ❖ Bioluminescence is a natural phenomenon produced by certain marine organisms; primarily microscopic plankton called dinoflagellates.
- ❖ These tiny creatures emit light through a chemical reaction within their bodies when agitated by wave action or other disturbances in the water.
- ❖ The result is a display of blue-green light that appears to make the waves glow.
- ❖ Marine organisms use bioluminescence for various purposes, including defense against predators, attracting prey, and communication.

Report of Vadakkupattu excavation



FOUR CIVILIZATIONS

Early and later Pallava period (from 1,200 years to 1,800 years ago) Vishnu, Shivalinga sculptures	Sangam era (2,000 years ago) Roman amphora sherds, glass beads, rouletted ware, gold ornaments, terracotta toys, beads, pieces of bangles, pot sherds and coins	Mesolithic period (12,000 years ago) Stone tools including hand axes, scrapers, cleaver, choppers and stone fragments
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RICH HAUL: The excavation site at Vadakkupattu

- ❖ A 700-page detailed final report on the two-phased excavations at Vadakkupattu village in Kancheepuram district has been submitted to Director General, ASI.
- ❖ The aim was to know the complete history and information of the lower Palar River Valley palaeolithic site.
- ❖ The first phase of excavation began in July 2022, wherein nine trenches were dug up.
- ❖ In May 2023, the ASI carried out excavations at 12 more trenches.
- ❖ The excavated materials revealed that the site belonged to the Middle Paleolithic Age, and flourished during the early historic and historic (Pallava) periods.
- ❖ One of the remarkable antiquities found during the excavation was the potsherds with Tamil Brahmi script called 'Matti'.

Pink Auto rickshaws

- ❖ The Tamil Nadu government partially funded 'pink autorickshaws' that will be operated by women for women in Chennai.
- ❖ It aims to ensure the safe travel of women and children.
- ❖ The government will provide 1 lakh each as a grant to 250 women residing in Chennai to buy CNG/hybrid autorickshaws.
- ❖ Women in the age group of 25-45 can apply for the scheme, and priority would be given to widows and destitute women.
- ❖ The applicants should be residents of Chennai, should have passed the SSLC examination and possess a driving licence.



Private radio FM channels

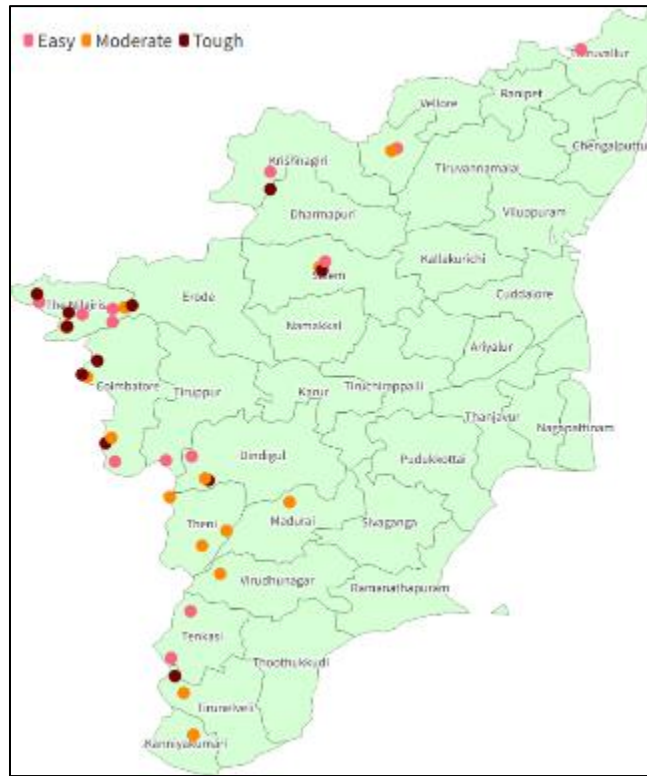
- ❖ Eleven towns in Tamil Nadu are set to get three private radio FM channels each.
- ❖ The Government of India (GoI) is gearing up for an e-auction to allot channels to places that have not been covered so far.
- ❖ Coonoor, Dindigul, Karaikudi, Karur, Nagercoil, Neyveli, Pudukkottai, Raja palayam, Thanjavur, Tiruvannamalai and Vaniyambadi are in the list of the 234 towns in the notice.
- ❖ The GoI has decided to conduct 'ascending e-auctions' to allot 730 channels to 234 uncovered places under the third batch of FM Phase-III radio channels.

Windergy India 2024

- ❖ The 'Windergy India 2024' conference was recently held in Chennai.
- ❖ The State aims to add 30 gigawatts (GW) of renewable energy capacity in the next six years.
- ❖ The State have a total renewable energy capacity of 24 GW.
- ❖ It has set a target of 50% of energy consumption coming from renewable energy sources by 2030.
- ❖ Tamil Nadu has a wind installed capacity of 10.5 GW and is a pioneer in wind energy.

40 Trekking trails

- ❖ The Tamil Nadu Forest Department has put together a comprehensive list of 40 trails.
- ❖ It also launched a portal under the 'Trek Tamil Nadu' project featuring 40 trails.
- ❖ The portal www.trektamilnadu.com facilitates online bookings.
- ❖ All those above the age of 18 are permitted to book the treks.
- ❖ All those below the age of 18 can trek with the consent letter of the parents / guardian.
- ❖ Kids below the age of 10 (allowed only for the easy treks) needs accompaniment of parent or guardian.
- ❖ These 40 curated trails are spread over 14 districts across Tamil Nadu, including the popular destinations such as the Nilgiris, Kodaikanal and Kanniyakumari.
- ❖ The treks are in compliance of the Tamil Nadu Forest and Wildlife (Regulation of Trekking) Rules, 2018.



CM Trophy campaign 2024

தமிழ்நாடு முதலமைச்சர் கோப்பை மாநில அளவிலான விளையாட்டுப் போட்டிகள் 2024					
MEDAL TALLY					
AS ON : 24.10.24					
RANK	DISTRICT	GOLD	SILVER	BRONZE	TOTAL
1	Chennai	105	80	69	254
2	Chengalpattu	31	26	36	93
3	Coimbatore	23	40	39	102
4	Salem	21	12	23	56
5	Erode	17	13	16	46

- ❖ Chennai topped by winning 105 gold, 80 silver and 69 gold.
- ❖ Chengalpattu took the second spot in the medals tally with 31 gold medals with 26 silver and 36 bronze medals.

- ❖ Coimbatore ended with 23 gold, 40 silver and 39 bronze medals.
- ❖ Salem was the biggest mover on the medals tally from the last edition as they jumped to fourth spot from 19th in 2023, winning 21 gold, 12 silver and 23 bronze.
- ❖ The 2024 CM Trophy is one of the largest grassroots initiatives in the country and attracted over 33,000 participants from 38 districts.
- ❖ This was the first time that all the 38 participating districts found a spot on the medals tally with Nilgiris taking the last spot.

Measures for farmers welfare in Tamilnadu

- ❖ A total sum of ₹91.07 crore has been released to support over 1.19 lakh farmers, whose crops were affected by the Northeast monsoon since 2021.
- ❖ Crop insurance and compensation claims of ₹5,148 crore have been settled to 29.34 lakh farmers since 2021.
- ❖ The State has released a total sum of ₹624.04 crore as fair and remunerative price and special incentive to sugarcane farmers.
- ❖ The cultivation of sugarcane has been increased from 95,000 hectare to 1.54 lakh hectare.
- ❖ Sugar mills have been provided loans to the tune of ₹600 crore.
- ❖ Subsidies have been provided for about ₹335 crore to purchase the agricultural machinery and equipment.
- ❖ A total of 14 new Uzhavar Sandhais have been set up.
- ❖ Decomposing machines have been installed at a total cost of ₹2.75 crore in 25 Uzhavar Sandhais to handle the waste generated.



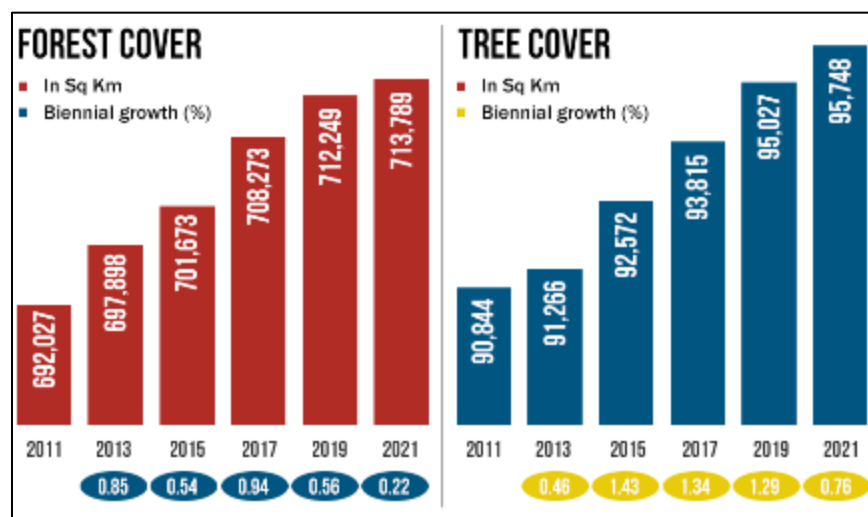
விவசாயிகளுக்கு ரூ.5148 கோடி பரிசீலனை செய்யப்பட்டு இழப்பீட்டுத் தொகை

- கரும்பு விவசாயம் ரூ.2750 லட்சம், பருத்தி ரூ.3134 லட்சம்
- ரூ.611 கோடியில் கனவலர் ஆவனத்துக்கு கிராம ஒழுங்கினைந்த வேளாண் வளர்ச்சித் திட்டம்
- ரூ.335 கோடி மானியத்தில் விவசாய இயந்திரங்கள்
- ரூ.48 கோடியில் முநன் முறையாக ஆயிரத்திற்கு விவசாயிகளுக்கு 100 சதவீத மானியம்
- ரூ.25 கோடியில் கனவலர் நூற்றாண்டு பூங்கா

NATIONAL

India State of Forest Report (ISFR)

- ❖ The India State of Forest Report (ISFR), due for release in 2023, has been delayed by over a year.
- ❖ The report, which is released every two years, is produced by the Forest Survey of India (FSI).
- ❖ It has been published since 1991 and provides a comprehensive overview of the state of India's forests.
- ❖ This delay marks the second occasion when the government has missed the report's publication deadline — the last instance occurred in 2007.
- ❖ The last report, published in 2021, recorded the country's total forest cover at 713,789 square kilometres or 21.71 per cent.
- ❖ It was a marginal increase of 1,540 square kilometres compared to the 2019 ISFR publication.
- ❖ From 2013 to 2023, 95 per cent of deforestation occurred in natural forests.³
- ❖ As per MoEFCC, India had lost 173,396 hectares (1,733 square kilometres) of forest for development works.
- ❖ It also claimed that compensatory afforestation had recovered 21,761 square kilometres of forest area between 2013 and 2023.
- ❖ In Odisha, the unclassified forests increased from 17 square kilometres to 16,282 square kilometres between 1999 and 2015.
- ❖ But it was dropped to 22 square kilometres in the 2017 report.



Wildlife Habitats Development Scheme 2024

- ❖ The Union Cabinet has approved the Integrated Development of Wildlife Habitats scheme for the 15th Finance Commission cycle for an overall outlay of ₹2,602.98 crore.
- ❖ The centrally sponsored scheme includes critical components such as Project Tiger, Project Elephant and Development of Wildlife Habitat.
- ❖ The scheme envisages to boost technological interventions in different thematic areas over the current and next financial year in our tiger and wildlife bearing forests.


S. No.	Name of Scheme	Central Share	State Share	Total
1	Project Tiger	1575.00	955.00	2530.00
2	Project Elephant	182.58	54.00	236.58
3	Development of Wildlife Habitat	845.4	273.00	1118.40
* All figures in Rs. Crores Total:		2602.98	1282.00	3885.00

PARAM Rudra Supercomputers

SUPER PERFORMER

- > New supercomputer at SNBNCBS | **830** teraFLOPS
- > Supercomputer at IISc, Bengaluru | **3.3** petaFLOPS
- > Argonne National Laboratory, US | **585** petaFLOPS
- > Oakridge National Laboratory, US | **1,194** petaFLOPS

(1 petaFLOP = **1,000** teraFLOP)



The PARAM Rudra Supercomputer

- ❖ Three PARAM Rudra supercomputers, Indigenously Developed under the National Supercomputing Mission were launched recently.
- ❖ Along with this, a ₹850 crore High-Performance Computing (HPC) system, designed for weather and climate research, was also launched at the event.
- ❖ The three supercomputers have been built at a cost of ₹130 crore and have been stationed in Pune, Delhi, and Kolkata.
- ❖ They will aid scientific research in fields such as astronomy, medicine, and high-energy physics.

- ❖ The most powerful of these is the one installed at Delhi which has 3 petaflop capacity.
- ❖ Pune has got one petaflop supercomputer, while the one at Kolkata has a capacity of 838 terraflops.
- ❖ Others in the range include, PARAM 8000, PARAM Siddhi AI and PARAM Utkarsh.

Free visa for friends of diaspora

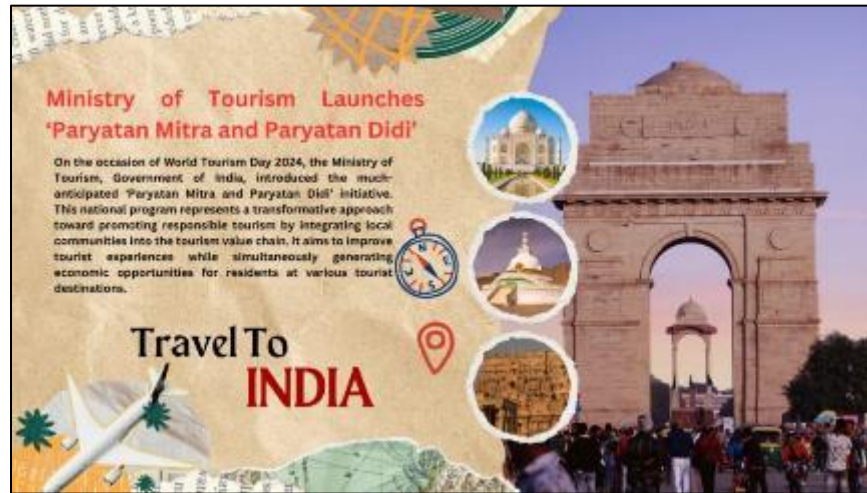
- ❖ In a first-of-its-kind initiative, India will allow “friends” of diaspora members to get free visas.
- ❖ Up to five foreign nationals nominated by the OCI (Overseas Citizen of India) card holders on a special website will be eligible for the gratis e-visa.
- ❖ The initiative is to be launched as part of a “Chalo India” campaign.
- ❖ OCI cardholders will need to register on the special website, which goes live in a few weeks, and enter the details of their nominated friends.
- ❖ They will then be assigned a unique code after verification.
- ❖ The designated friends can then use the special code to avail of a free visa.
- ❖ There are about four million OCI cardholders, as per the government records.
- ❖ They can invite as many friends as possible and will also earn rewards for each foreign visitor they successfully attract to India.



Paryatan Mitra & Paryatan Didi

- ❖ Ministry of Tourism has launched a national responsible tourism initiative titled Paryatan Mitra and Paryatan Didi.
- ❖ It aims to elevate the overall experience for tourists in destinations, by having them meet ‘tourist-friendly’ people who are Ambassadors and Storytellers for their destination.

- ❖ In pilot mode, around 3,000 people have been trained in the 6 pilot destinations on the importance of creating a positive experience for tourists.



Constitution amendment bills for ONOE

VOTE FOR CHANGE

Kovind panel's recommendations

■ Implement simultaneous polls in two phases	■ 1st phase: LS and Assembly elections simultaneously	■ 2nd phase: Local body elections within 100 days of general elections.	■ Common electoral roll for all elections
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Amendments needed

■ First constitution amendment bill for amendments/insertions in Articles 82(A); duration of LS under 83(2), 83(3) 83(4); duration of state assemblies under 172(3), 172(4), 172(5), 327		
■ First constitution amendment bill will not require ratification of states	■ Second amendment related to electoral rolls (Article 325) and for municipalities/ panchayats (Article 324A)	■ Also, amendments to J&K Reorganisation Act, GNCTD Act, Govt of UT Act
■ Second amendment will require states to ratify		

- ❖ The government is likely to bring three bills, including two to amend the Constitution, to put in place its plan to hold simultaneous elections.
- ❖ The proposed Bill would seek to amend Article 82A by adding sub-clause (1) relating to the 'appointed date'.
- ❖ It will also seek to insert sub-clause (2) to Article 82A relating to the end of terms of the Lok Sabha and state assemblies together.

- ❖ The Bill also proposes to amend Article 83(2) and insert new sub-clauses (3) and (4) relating to the duration and dissolution of the Lok Sabha.
- ❖ It also has provisions related to the dissolution of the legislative assemblies and amending Article 327 to insert the term 'simultaneous elections'.
- ❖ The second Bill will create provisions to hold simultaneous elections to municipalities and panchayats, along with elections to Lok Sabha and state legislative assemblies by inserting a new Article 324A.
- ❖ This Bill is required ratification by at least 50% of the states.
- ❖ The third Bill will be an ordinary one to amend provisions in three laws dealing with Union Territories with legislative assemblies — Puducherry, Delhi and Jammu and Kashmir.
- ❖ It aims to align the terms of these Houses with other legislative assemblies and the Lok Sabha as proposed in the first Constitutional Amendment Bill.
- ❖ The statutes it proposes to amend are the Government of National Capital Territory of Delhi Act-1991, the Government of Union Territories Act-1963 and the Jammu and Kashmir Reorganisation Act-2019.
- ❖ To pass the Constitutional Amendment Bills, a special majority of not less than two-thirds of the House will be required.
- ❖ So, the government needs the support of 362 members, but it has only 292 members in the House.

Fact Check Unit

FCU AN ARBITER IN ITS OWN CAUSE: JUDGE	
<p>➤ Rules introduced by amending IT Act permits Fact Check Unit (FCU) to flag as 'false, fake, or misleading' content on social media/online about business of govt</p> <p>➤ In this case, as central govt itself is aggrieved by 'fake, false and misleading' news, FCU will be an arbiter in govt's own cause, judge observes</p>	<p>Timeline Apr 10, 2023 Standup comic Kunal Kamra files petition challenging FCU</p> <p>Jan 31, 2024 Split verdict by Bombay HC 2-judge bench. Justice Gautam Patel strikes it down, Justice Neela Gokhale upholds it</p> <p>Feb Justice A S Chandurkar listed as third judge. Declines to stay FCU rule</p> <p>Mar 21 SC stays FCU rule</p> <p>Sept 20 HC holds FCU rule to be unconstitutional and against fundamental rights of freedom of speech, equality, and trade</p>
<p>“ Since the amended Rule attempts to identify 'information' (on) business of the central govt as fake or false or misleading by the FCU, it is necessary the said expressions are either defined or explained to give an idea of what could be termed to be fake or false or misleading</p>	

- ❖ The Bombay High Court has formally struck down the amended Information Technology Rules, 2023.
- ❖ This amendment allowed the Centre to set up a fact check unit (FCU) to identify fake, false and misleading information about the government and its establishments on social media.
- ❖ As per the court, these Amendment Rules, 2023, violated “Article 14 (right to equality), 19 (freedom of speech and expression) and 19(1)(g) (freedom and right to profession) of the Constitution”.

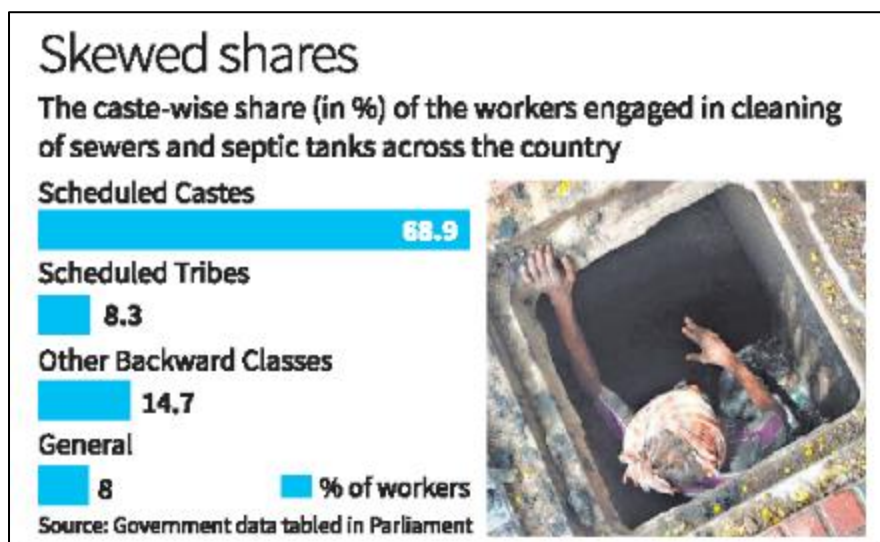
SBI ERD report 2024

Age-wise Distribution				
	1991	2001	2011	2024 P
Population by broad age- group (in crore)				
18 years and above	44.7	56.5	76.3	99.0
0-14	31.2	36.4	37.4	34.0
15-59	46.5	58.6	73.5	91.0
60+	6.1	7.9	10.2	15.0
Share (in %)				
0-14	37.2	35.3	30.9	24.3
15-59	55.4	56.9	60.7	65.0
60+	7.3	7.7	8.4	10.7
Median age (years)	24.3	28.2	24.9	29.0
Source: SBI Research, Census reports, NHP				

- ❖ SBI’s economic research department (ERD) released a new report, “Precursor to Census 2024: The Fine Prints of a Rapidly Changing Nation.”
- ❖ The average annual exponential growth of India is expected to decline from 2.20 per cent in 1971 to 1 per cent in 2024.
- ❖ The national population will be in the range of 138-142 crore in 2024.
- ❖ The median age of India is expected to increase from 24 years in 2021 to 28-29 years in 2023/24.
- ❖ The working age population (15-59) is likely to increase to 65.2 per cent in the 2031 census.
- ❖ The elderly population will cross 15 crores (Female: 7.7 crore; Male: 7.3 crore), with a growth of 4.6 crore during 2011-2024.
- ❖ Southern States, chiefly Tamil Nadu, Andhra Pradesh, and Telangana, in incremental population growth is set to decline (vis-à-vis 2011).

- ❖ Northern States, led by UP and Bihar (with a 33 per cent share in incremental growth), will drive the growth.
- ❖ The northern and eastern regions together are expected to have a 52 per cent share of the entire population (51 per cent in 2011).
- ❖ Apart from the Union Territories, Goa and Kerala are highly urbanised.
- ❖ Among the major states, Tamil Nadu continues to be the most urbanised State, with 54 per cent of the population living in urban areas, followed by Maharashtra (48.8 per cent).
- ❖ Himachal Pradesh (10.3 per cent), followed by Bihar (12.4 per cent), Assam (15.7 per cent), and Orissa (19.0%) form the bottom end of the spectrum.

Manual Scavenging Survey



- ❖ 91.9% of the 38,000 workers profiled so far belong to Scheduled Caste (SC), Scheduled Tribe (ST), or other backward class (OBC) communities.
- ❖ Of the profiled workers, 68.9% were SC, 14.7% were OBC, 8.3% were ST, and 8% were from the general category.
- ❖ Between 2019 and 2023, at least 377 people across the country have died from hazardous cleaning of sewers and septic tanks.
- ❖ The profiling of sewer and septic tank workers (SSWs) is being carried out by the Ministry of Social Justice and Empowerment as part of its NAMASTE programme.
- ❖ This scheme aims to mechanise all sewer work and prevent deaths due to hazardous cleaning work.
- ❖ In 2023-24, this scheme was brought in to replace the Self-Employment Scheme for Rehabilitation of Manual Scavengers (SRMS).

- ❖ Twelve States and UTs have completed the profiling process, while the exercise is still underway in 17 States.
- ❖ Tamil Nadu and Odisha are running their own programmes for SSWs, and are not reporting data to the Centre under this programme.
- ❖ Of the identified manual scavengers of 43,797, 97.2% of them were from the SC communities.
- ❖ The share of STs, OBCs, and others were each around 1%.

EMPS 2024

- ❖ The PM E-DRIVE scheme launched for the promotion of electric vehicles (EVs) and the development of charging infrastructure and manufacturing capabilities.
- ❖ The scheme will run from October 1 to March 31, 2026, and aims to accelerate the country's shift towards electric mobility.
- ❖ The PM E-DRIVE will absorb the ongoing Electric Mobility Promotion Scheme (EMPS) 2024, merging its budget and vehicle targets into the new framework.



Dharti Aaba Janjatiya Gram Utkarsh Abhiyan

- ❖ The Union govt launched the Dharti Aaba Janjatiya Gram Utkarsh Abhiyan.
- ❖ It aims to transform the socio-economic landscape of around 63,000 villages, benefiting over 5 crore tribal residents across 549 districts and 2,740 blocks in 30 States and Union Territories.
- ❖ The initiative focuses on attaining saturation of critical gaps in social infrastructure, health, education, livelihood, through 25 interventions implemented by 17 different ministries and departments.

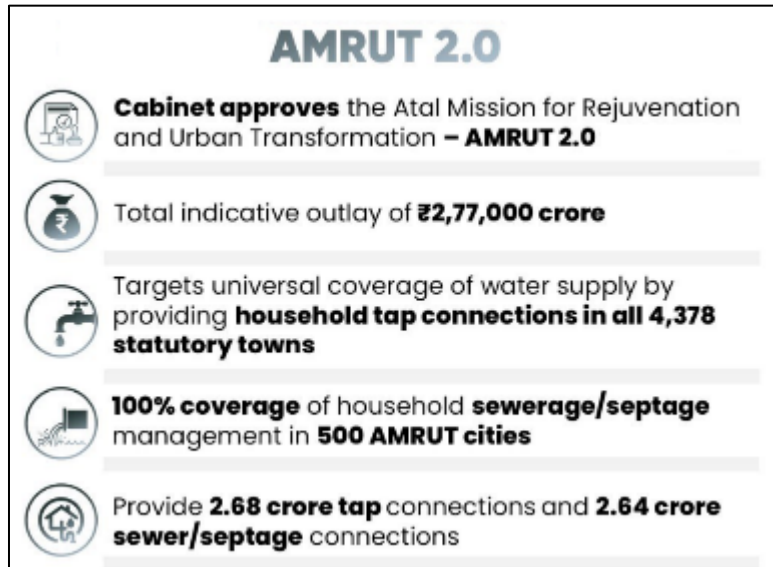


National Health Accounts estimates 2020-21 and 2021-22

Indicator	2021-22	2020-21	2019-20	2018-19	2017-18
Total health expenditure (THE) as percentage of GDP	3.8	3.7	3.3	3.2	3.3
Government health expenditure as proportion of THE	48	42.8	41.4	40.6	40.8
Govt health expenditure as proportion of GDP	1.84	1.6	1.35	1.28	1.35
Out-of-pocket expenditure as proportion of THE	39.4	44.4	47.1	48.2	48.8
Out of pocket expenditure as proportion of GDP	1.51	1.66	1.54	1.52	1.62
Private health insurance expenditure as percentage of THE	7.4	7.3	7	6.6	5.8

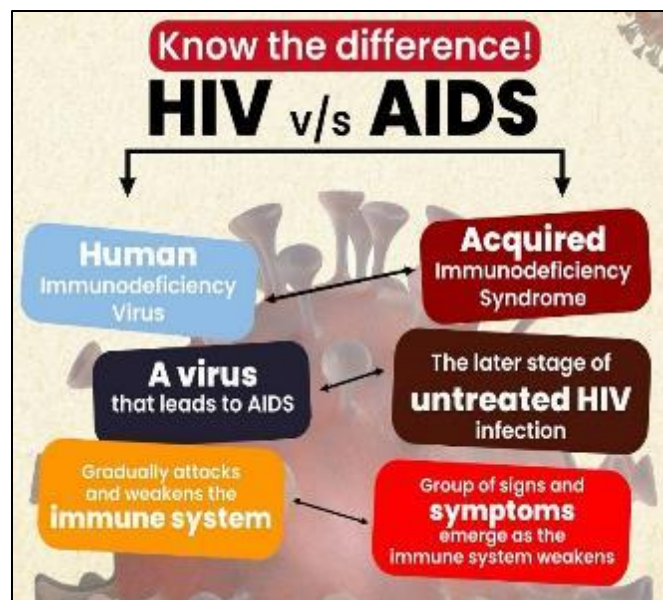
- ❖ The National Health Accounts Estimates for India 2020-21 and 2021-22 released by the Health Ministry.
- ❖ India has seen a decline in out-of-pocket expenditure out of total health expenditure from 64.2% in 2013-14 to 39.4% in 2021-22.
- ❖ The government health expenditure's share in the country's total GDP increased from 1.13% (2014-15) to 1.84% (2021-22).
- ❖ Also, the share of government expenditure in total health expenditure increased from 29.0% (2014-15) to 48.0% (2021-22).
- ❖ Social Security Expenditure's share in Total Health Expenditure increased from 5.7% in 2014-15 to 8.7% in 2021-22.

Jal Hi AMRIT Program



- ❖ 'Jal hi Amrit' initiative was launched under AMRUT 2.0 to promote efficient water management
- ❖ This initiative incentivises states and UTs to manage sewage treatment plants efficiently, ensuring the production of good-quality, recyclable treated water.
- ❖ AMRUT 2.0 Launched in 2021 to provide universal coverage of water supply through functional taps to all households in all statutory towns.

HIV infections in India 2024



- ❖ India's annual new HIV infections have fallen 44% between 2010 and 2023, better than the global average.
- ❖ India has made notable progress in reducing annual AIDS-related deaths by nearly 80% between 2010 and 2023.
- ❖ Last year, there were 68,000 new infections in India, around 185 people were infected every day.

New Classical Languages 2024

Criteria for Classical Language Status

- The language must have texts or recorded history over 1500-2000 years.
- It should have ancient literature valued across generations.
- The literary tradition must be original.
- The classical form should be distinct from modern variants.

Benefits

- National awards, University Chairs, and Promotion Centers for Classical Languages.
- Employment in academics, research, archiving, and digitization of ancient texts.
- Opportunities in translation, publishing, and digital media for preserving classical heritage.

- ❖ The Union Cabinet approved giving the status of 'classical language' to five more languages - Marathi, Bengali, Pali, Prakrit and Assamese.
- ❖ With this cabinet decision, the number of languages that have the status will nearly double from six to 11.
- ❖ The languages that had the tag earlier were Tamil, Sanskrit, Telugu, Kannada, Malayalam and Odia.
- ❖ Tamil was granted the status in 2004 and the last language to get it was Odia, in 2014.
- ❖ The new classical languages will also have the national awards, Chairs in universities, and centres for promotion set up for them in due course.

Religious Freedom in India 2024

- ❖ The United States Commission on International Religious Freedom (USCIRF) recently released a report.
- ❖ The USCIRF recommended that the U.S. Department of State designate India as a "Country of Particular Concern" for engaging in systematic, ongoing and egregious violations of religious freedom.
- ❖ Throughout 2024, individuals have been killed, beaten, and lynched by vigilante groups, religious leaders have been arbitrarily arrested, and homes and places of worship have been demolished.

PM Internship Scheme 2024

Key Highlights		ELIGIBILITY	
BENEFITS FOR INTERNS/OTHER FEATURES ₹60,000 a year, and a one-time grant of ₹6,000     Exposure to real biz environments Insurance coverage at govt cost Internship in one's own district/state		Unemployed youth aged 21-24 Reservation to apply No degree from IITs and IIMs, NLU, IISER, NIDs and IIITs No degree like CA, CMA, CS, MBBS, BDS, MBA & master's or higher degree	
A single portal for both companies and interns Grievance redressal mechanism Tele help line 1800-116-090		Parents, spouse not earning above ₹8 lakh/year & not govt employees Not taking skill training under govt schemes	

- ❖ The Prime Minister's Internship Scheme was launched on October 3.
- ❖ The PM Internship Scheme aims to provide internship opportunities to one crore youth in the top 500 companies over the next five years.
- ❖ It will enhance youth employability in India by offering them hands-on exposure to real-world business environments.
- ❖ The scheme represents a transformative opportunity to bridge the skills gap and drive sustainable growth in India.
- ❖ The scheme is to provide on-job training to youth and an exposure to real-life work environment.
- ❖ A monthly stipend of ₹4,500 will be provided to the interns from the central government via DBT (Direct Benefit transfer), with an additional ₹500 offset provided by the company's CSR fund.
- ❖ The Candidates, aged between 21 and 24 years who are not engaged in full-time employment, are eligible for the one-year internship programme.

ANNA DARPAN Initiative



- ❖ The Food Corporation of India (FCI) is making big changes with a digital transformation plan.
- ❖ This plan is focused on improving the way FCI manages the supply chain with a new system called ANNA DARPAN.
- ❖ ANNA DARPAN is a new digital platform that will replace FCI's old system, the Depot Online System.
- ❖ It uses advanced technology to make managing food supply chains (like mandis, mills, and depots) smoother and more efficient.

Pradhan Mantri Rashtriya Krishi Vikas Yojana 2024

- ❖ The Union Cabinet decided to merge all Central schemes in the agriculture sector into following two new schemes.
 - Pradhan Mantri Rashtriya Krishi Vikas Yojana (PM-RKVY) and
 - Krishonnati Yojana (KY).
- ❖ The schemes will have a Central share of ₹ 69,088.98 crore and the States will have to add the remaining ₹32,232.63 crore.
- ❖ PM-RKVY is aimed at promoting sustainable agriculture.
- ❖ KY will address food security and agricultural self-sufficiency.
- ❖ The schemes will be implemented through State governments.

PM Rashtriya Krishi Vikas Yojana (PM-RKVY) and Krishonnati Yojana (KY)



- Cabinet approves rationalization of all Centrally Sponsored Schemes (CSS) operating under Ministry of Agriculture and Farmer's into **two-umbrella Schemes**
- **PM-RKVY** will promote sustainable agriculture, while **KY** will address **food security & agricultural self-sufficiency**
- Total proposed expenditure is **Rs.1,01,321.61 crore**
- States given flexibility to reallocate funds from one component to another based on their specific requirement

National Mission on Edible Oils 2024



NATIONAL MISSION ON EDIBLE OILS – OILSEEDS (NMEO-OILSEEDS)

- Mission will be implemented over a **seven-year period**, from **2024-25 to 2030-31**
- Total financial outlay of **₹ 10,103 crore**
- It aims to increase primary oilseed production from **39 million tonnes** (2022-23) to **69.7 million tonnes** by 2030-31
- It will introduce **SATHI Portal** enabling States to coordinate with stakeholders for timely availability of quality seeds
- It seeks to expand oilseed cultivation by an additional **40 lakh hectares**

- ❖ The Union Cabinet has approved the National Mission on Edible Oils - Oilseeds (NMEO-Oilseeds).



- ❖ It aims to boosting domestic oilseed production and achieving self-reliance in edible oils.
- ❖ The Mission will be implemented over a seven-year period, from 2024-25 to 2030-31.
- ❖ The newly approved NMEO-Oilseeds will focus on enhancing the production of key primary oilseed crops such as Rapeseed-Mustard, Groundnut, Soybean, Sunflower, and Sesamum.
- ❖ The mission aims to increase primary oilseed production from 39 million tonnes (2022-23) to 69.7 million tonnes by 2030-31.

SARTHIE 1.0

- ❖ The Department of Social Justice and Empowerment and the National Legal Services Authority (NALSA) launched the SARTHIE 1.0.
- ❖ It will bridge the awareness gap and provide legal assistance to ensure the effective implementation of social welfare programmes.
- ❖ It aims to empower disadvantaged communities, including the SCs, STs, OBCs, Senior Citizens, Transgender Persons, Victims of Alcoholism and more.
- ❖ The NALSA constituted under the Legal Services Authorities Act of 1987.
- ❖ It has a mandate to provide legal aid to disadvantaged groups and spread legal literacy.

Modified Eco-mark Scheme

- ❖ The Ministry of Environment, Forest and Climate Change has notified the Ecomark Rules recently.
- ❖ It replaces the Ecomark scheme of 1991.
- ❖ The scheme will encourage the demand for environment-friendly products, promote lower energy consumption, resource efficiency and circular economy.

National Agriculture Code

- ❖ The Bureau of Indian Standards (BIS) has begun the process of formulating a National Agriculture Code (NAC).
- ❖ This is same as the existing National Building Code and National Electrical Code.
- ❖ In agriculture, it has already set standards for machinery (tractors, harvesters, etc.) and various inputs (fertilisers, pesticides, etc.)
- ❖ But there is no standard for agriculture practices like preparation of fields, micro irrigation and water use.

- ❖ The new NAC will cover all agriculture processes and post-harvest operations, such as crop selection, land preparation, sowing/transplanting, irrigation /drainage, soil health management, plant health management, harvesting / threshing, primary processing, post-harvest, sustainability, and record the maintenance.
- ❖ It will also include the standards for input management, like use of chemical fertilisers, pesticides, and weedicides, as well as standards for crop storage and traceability.

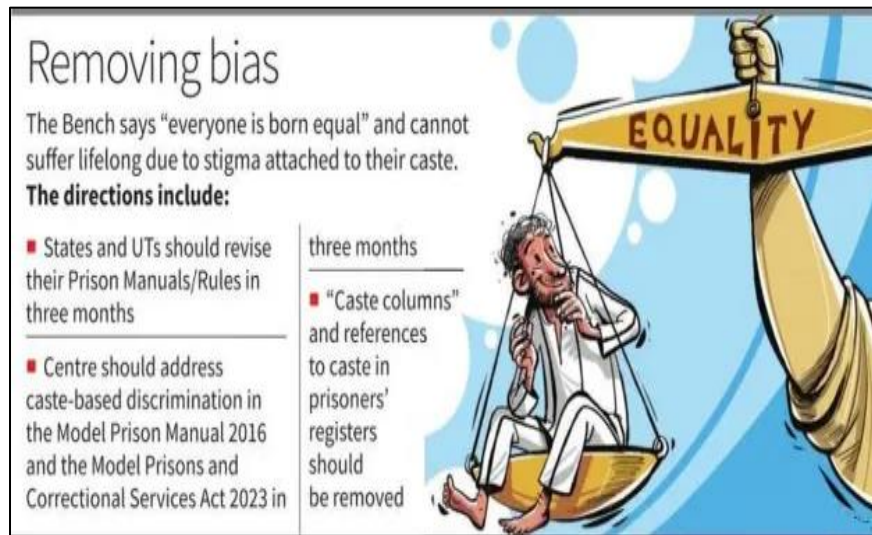


Antimicrobial Resistance and India

- ❖ The Indian Council of Medical Research's (ICMR) Antimicrobial Resistance Research and Surveillance Network has published its annual report for 2023.
- ❖ 55% of the antibiotics were prescribed not for the treatment of an infection, but to prevent one.
- ❖ It is estimated that bacterial AMR was directly responsible for 1.27 million global deaths in 2019 and contributed to 4.95 million deaths.
- ❖ The Lancet warns that AMR pathogens could kill over 39 million people by 2050.

MOST COMMON PATHOGENS FOUND IN INDIA			
Type of facility	Most commonly isolated pathogen	What the pathogen does	Resistance
ICU	<i>Acinobacter baumannii</i>	It can cause pneumonia, infections of the blood, urinary tract, and on wounds. It is becoming an important hospital-derived infection.	Continues to have 88% resistance to third-line, strong antibiotics like carbapenem
Wards & OPD	<i>E. coli</i>	May cause diarrhoea, UTI, pneumonia, and sepsis	Continues to show increased resistance to most classes of antibiotics, including carbapenem for which it went up from 18.6% in 2017 to 37.3% in 2023

Supreme Court on Casteism in Prison



- ❖ The Supreme Court declared that caste-based division of labour in prisons is “unconstitutional”.
- ❖ It highlighted the provisions in prison manuals in States such as Uttar Pradesh, West Bengal, Odisha, Maharashtra, Tamil Nadu, and Kerala that legitimised caste inequalities.
- ❖ The Rajasthan Prison Rules, 1951, allocated latrine duties to the “Mehtar” caste, a SC community and Brahmins or “sufficiently high caste Hindu prisoners” were assigned to the kitchens.
- ❖ Segregating prisoners on the basis of caste would reinforce caste differences or animosity that ought to be prevented in the first place.
- ❖ The differentiating between inmates based on “habit,” “custom,” “superior mode of living,” and “natural tendency to escape” offends principles of substantive equality.
- ❖ All States and Union Territories were directed to amend their prison manuals and rules within three months to abolish such discriminatory practices.
- ❖ The court also mandated the removal of the “caste column” and any references to caste in the registers of undertrials and convicts maintained in prisons.
- ❖ The court also ordered that necessary reforms be implemented in both the 2016 manual and the 2023 Act within three months.

Ni-kshay Poshan Yojana for TB

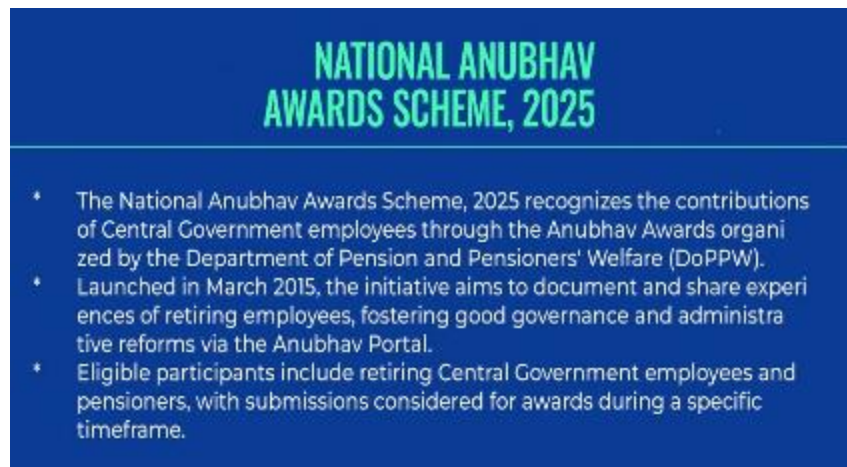
- ❖ The centre doubled the monthly nutrition support under Ni-kshay Poshan Yojana (NPY) for tuberculosis (TB) patients under treatment from ₹500 to ₹1,000.

- ❖ Additionally, all household contacts of TB patients will be covered under the Pradhan Mantri TB Mukht Bharat Abhiyaan (PMTBMBA).
- ❖ All TB patients will now receive nutritional support of ₹3,000 to ₹6,000 under NPY.
- ❖ Elimination of tuberculosis is one of the SDG to be achieved by 2030 by the world, India has set the target of 2025.



National Anubhav Awards Scheme - 2025

- ❖ An Annual Awards Scheme was devised in 2015 to incentivize and encourage the submission of the experiences through write ups.
- ❖ Till date, 10,886 write-ups have been published and 78 outstanding write ups have been conferred with 59 Anubhav Awards and 19 Jury Certificates.
- ❖ For the first time, apart from the employees of Central Government, employees of Central PSUs will also be eligible for submitting their write ups for 2025.





Trachoma Free India

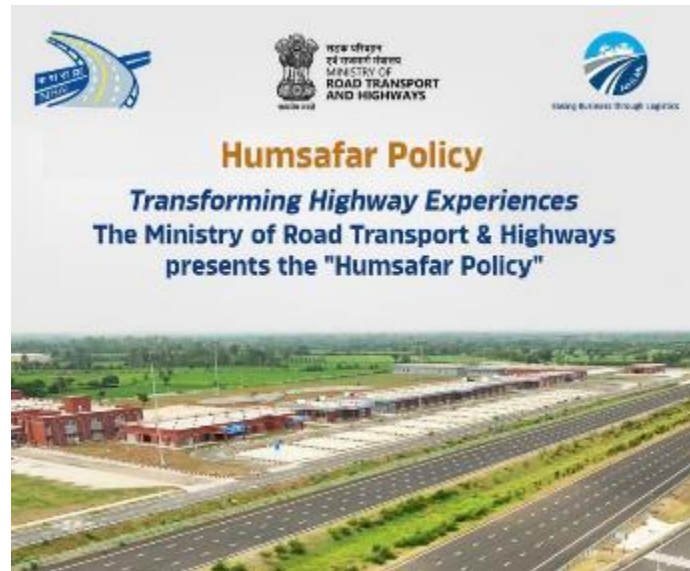
- ❖ India has eliminated trachoma as a public health problem, becoming the third country in the South-East Asia region to reach this milestone.
- ❖ Trachoma is a highly contagious bacterial eye infection caused by Chlamydia Trachomatis.
- ❖ It was once a leading cause of blindness in India, particularly in underprivileged communities living in poor environmental conditions.
- ❖ India's works against trachoma began in 1963 with the launch of the National Trachoma Control Program.
- ❖ In 1971, blindness due to Trachoma stood at 5%, but now that figure dropped to less than 1%.
- ❖ According to the WHO, around 150 million people worldwide are affected by the trachoma.

National Maritime Heritage Complex Development

- ❖ The Union Cabinet approved the development of the National Maritime Heritage Complex (NMHC) at Lothal in Gujarat.
- ❖ The Cabinet has also accorded in-principal approval for Phases 1B and 2 of the projects.
- ❖ Phase 1A will have the NMHC museum with six galleries, including an Indian Navy and Coast Guard gallery envisaged to be one of the largest in the country.
- ❖ Phase 1B will see NMHC museum getting eight more galleries, and the Light House Museum which is planned to be world's tallest.

Humsafar Policy

- ❖ Union Minister of Road Transport & Highways has unveiled the Humsafar Policy.
- ❖ It is a major initiative aimed at improving the overall infrastructure along India's national highways.
- ❖ This policy focusses on providing essential amenities and enhancing the travel experience for commuters.
- ❖ It is also ensuring that highways are more user-friendly and accessible to all.
- ❖ Under the Humsafar Policy, several essential facilities will be introduced or upgraded across national highways.



Rice fortification supply extension

WHAT IS FORTIFIED RICE?

Fortification is the practice of deliberately increasing the content of an essential micronutrient, i.e. vitamins and minerals (including trace elements) in food to improve its nutritional quality and provide a public health benefit with minimal risk to health



<p>➤ The fortification factor does not last for more than 45 days, so it isn't advisable to store fortified rice for long</p>	<p>➤ According to National Family Health Survey, 78.7% children and 75% in the district are anaemic and suffer from malnutrition</p>	<p>➤ In the first phase, fortified rice will be distributed in Badangi, Bobbili, Ramabhadrapuram and Terlam mandals</p>
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- ❖ The Union cabinet approved the extension of the free fortified rice scheme from July 2024 to December 2028.
- ❖ The aim of this is to “address anaemia and micro-nutrients deficiency”.
- ❖ The Fortification defines as “deliberately increasing the content of essential micronutrients in a food so as to improve the nutritional quality of food and to provide public health benefit with minimal risk to health”.
- ❖ One kg of fortified rice will contain iron (28 mg-42.5 mg), folic acid (75-125 microgram), and vitamin B-12 (0.75-1.25 microgram).

Oral cancer in India

**INDIA HAS THE HIGHEST
NUMBER OF ORAL CANCER
CASES IN SOUTH ASIA**

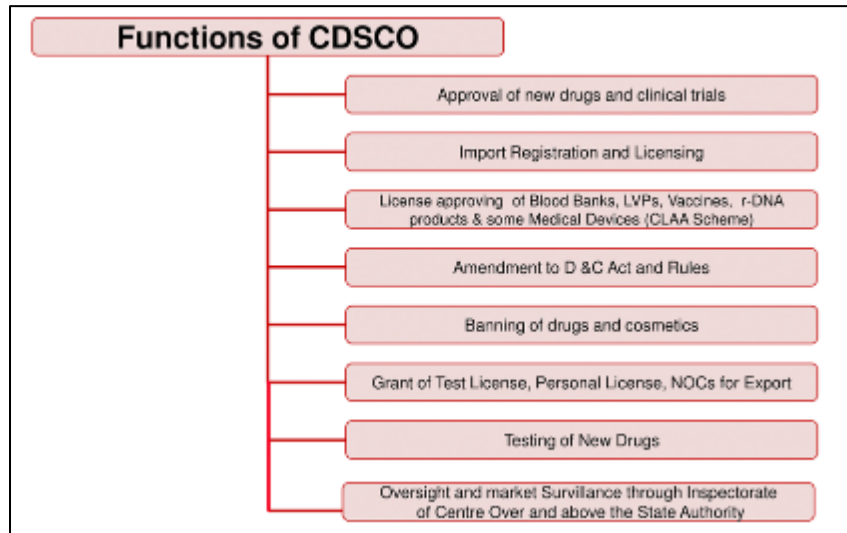
**IT'S DUE TO INCREASED USE OF
SMOKELESS TOBACCO PRODUCTS
(GUTKA, TOBACCO KHAINI, ETC)**

**INDIA REPORTED 83,400 OF THE TOTAL
1,20,200 ORAL CANCER CASES GLOBALLY IN 2022**

- ❖ India has the largest number of oral cancer cases caused by smokeless tobacco (chewed, sucked on or sniffed) and areca nut (also called betel nut) use in South Asia.
- ❖ It was hosting up 83,400 of the 120,200 cases globally in 2022.
- ❖ Smokeless tobacco accounts for over 30 per cent of all oral cancer cases globally.
- ❖ The contributing regions of South-Central Asia (a total of 105,500 cases) are, with 83,400 - India, 9,700 - Bangladesh, 8,900 - Pakistan and in Sri Lanka 1,300).
- ❖ It is followed by South-East Asia (a total of 3,900 cases, with 1,600 in Myanmar, 990 in Indonesia, and 785 in Thailand).
- ❖ The East Asia hosts a total of 3,300 cases, with 3,200 in China.

India's Vaccine Regulatory System

- ❖ Drug regulator CDSCO and the National Regulatory Authority of India have met the standards set up by the WHO for a functional vaccine regulatory system.
- ❖ Safety, efficacy, and quality were the three basic parameters of assessment of vaccines.
- ❖ India has been declared 'functional' against all the core regulatory functions of the WHO Global Benchmarking Tool Version VI.
- ❖ The WHO has established global standards and benchmarks for assurance of vaccine quality through the
 - Development of tools and guidelines,
 - Benchmarking of the National Regulatory Authorities (NRA) and
 - Pre-qualification programme of vaccines



10-point plan to strengthen India-ASEAN relations

- ❖ The 21st ASEAN-India Summit was held in Vientiane, Laos.
- ❖ The theme of the vent was 'Enhancing Connectivity and Resilience'
- ❖ During the event India announced a 10-point plan to mark a decade of India's Act East Policy.



e-Migrate Portal v2.0

- ❖ India launched the updated e-Migrate portal and mobile app version 2.0.
- ❖ It is marking a step towards safer, transparent, and inclusive labour mobility for Indian workers going abroad.
- ❖ It aligns with the United Nations' Sustainable Development Goal 10, promoting orderly and responsible migration.

National Electricity Plan For 500 GW

**NATIONAL ELECTRICITY PLAN
LAUNCHED FOR TRANSMITTING OF 500
GW OF RENEWABLE ENERGY INSTALLED
CAPACITY BY 2030**

A National Electricity Plan (Transmission) has been launched by Cabinet Minister for Power and Housing & Urban Affairs, Manohar Lal. CEA with the aim of transmitting of 500 GW of Renewable Energy installed capacity by the year 2030 and over 600 GW of Renewable Energy installed capacity by the year 2032, prepared the detailed Nation Electricity Plan (Transmission) in consultation with various Stakeholders.



- ❖ India has unveiled its National Electricity Plan (Transmission) aiming to achieve 500 gigawatts (GW) of renewable energy capacity by 2030 and over 600 GW by 2032.
- ❖ The National Electricity Plan seeks to support India's goal of net-zero emissions by 2070
- ❖ It projects the addition of over 1,91,000 circuit kilometers (ckm) of transmission lines and 1,270 GVA of transformation capacity in the next decade.
- ❖ It also includes the provisions for integrating 47 GW of battery energy storage systems and 31 GW of pumped storage plants, crucial for managing renewable energy's intermittent nature.
- ❖ As of October 2024, India's renewable energy-based electricity generation capacity stands at 201.45 GW.
- ❖ It will be accounting for 46.3 percent of the country's total installed capacity.

Shakthi SAT Mission 2024

- ❖ Aerospace startup Space Kidz India has launched "Shakthi SAT".
- ❖ It is a global mission to train about 12,000 girls across 108 countries on space technology.
- ❖ It is aiming for a satellite launch under ISRO's Chandrayaan-4 mission.

- ❖ The mission includes 120 hours of online training for high school girl students (aged 14-18).
- ❖ It will teach them about various aspects of space technology, payload development, and spacecraft systems.

Greenwashing Guidelines

- ❖ The Guidelines for Prevention and Regulation of Greenwashing or Misleading Environment Claims were issued by the Central Consumer Protection Authority (CCPA).
- ❖ Its guidelines are limited to curbing greenwashing in advertisements of products or services.
- ❖ The new norms would complement the existing Guidelines for Prevention of Misleading Advertisements and Endorsement for Misleading Advertisements, framed in 2022.
- ❖ Greenwashing refers to the growing tendency of companies, organisations or even countries to make dubious or unverifiable claims about their activities, products or services being environment-friendly or climate-friendly.
- ❖ Generic terms like “clean”, “green”, “eco-friendly”, “good for planet”, “cruelty-free”, “carbon neutral”, “natural”, “organic”, “sustainable”, or similar other descriptions for a product would be allowed only if the company is able to substantiate these with evidence.

Clear Definitions: This provide clear definitions of terms related to greenwashing and environmental claims, ensuring that both businesses and consumers have a common understanding.
Transparency Requirements: Manufacturers and service providers are required to substantiate their environmental claims with credible evidence. This includes providing detailed information on the methodology and data used to support such claims.
Prohibition of Misleading Terms: The use of vague or misleading terms such as "eco-friendly," "green," and "sustainable" without proper substantiation is sought to be prohibited.
Third-Party Certifications: Third-Party Certifications are also accepted in substantiation of environmental claims.
Adequate Disclosures: The companies are required to provide clear and accessible disclosures of material information.

Minimum Support Prices hike 2025-26

- ❖ The Union government has announced minimum support prices (MSP) for six rabi crops for the 2025-26 rabi marketing season (RMS).
- ❖ Wheat, the country's second-largest crop, sees an increase of ₹150 per quintal, or 6.59 per cent, over its current MSP.
- ❖ The new MSPs for 2025-26 will be ₹2,425 per quintal for wheat, ₹1,980 for barley, ₹5,650 for gram, ₹6,700 for lentils, ₹5,950 for rapeseed and mustard, and ₹5,940 for safflower.

The Cabinet increased the minimum support prices for rabi crops

Crop	MSP for rabi 2025-26*	MSP for rabi 2024-25*	Increase in MSP
Wheat	₹2,425	₹2,275	₹150
Barley	₹1,980	₹1,850	₹130
Gram	₹5,650	₹5,440	₹210
Lentil (masoor)	₹6,700	₹6,425	₹275
Rapeseed & mustard	₹5,950	₹5,650	₹300
Safflower	₹5,940	₹5,800	₹140

(*per quintal)

Doctrine of Lis Pendens - Supreme Court

<p>DOCTRINE OF LIS PENDENS</p> <p>'Lis' means action or Litigation (suit) and 'Pendens' means pending. Lis Pendens means 'pending litigation' or 'during the pendency of a suit'.</p> <p>Section 52 of Transfer of Property Act, 1882 is based on the doctrine of Lis Pendens</p> <p>This doctrine is based upon the maxim "ut lite pendente nihil innovator", means during the "pendency of litigation, nothing new should be introduced"</p>

- ❖ The Supreme Court held that once a transaction is found to be hit by the doctrine of lis pendens, then the defences of being a bona fide purchaser and lack of notice regarding the sale agreement are not available.
- ❖ Lis pendens in common parlance means "a pending legal action".
- ❖ The doctrine of Lis pendens finds its place in Section 52 of Transfer of Property Act.

- ❖ It provides that if there is any transfer of any immovable property pending litigation, the same shall not affect the rights of the parties in respect to the immovable property.
- ❖ But, the outcome of the litigation would be binding upon such a purchaser, who has purchased the property during the pending litigation.

Cancer cases by 2045

	Rank	Cancer site	No of deaths	%
Brazil	1	Lung	38,292	12.5
	2	Colorectum	28,884	9.2
	3	Breast	22,189	13.9
	4	Prostate	19,958	13.5
	5	Stomach	18,138	5.9
Russian Federation	1	Lung	51,887	18.6
	2	Colorectum	41,447	13.3
	3	Stomach	27,306	9.2
	4	Breast	22,259	13.7
	5	Pancreas	20,672	7.2
India	1	Breast	98,337	13.7
	2	Lip, oral cavity	79,979	5.6
	3	Cervix uteri	79,906	11.2
	4	Lung	75,031	5.3
	5	Oesophagus	66,410	4.7

- ❖ Cancer cases and deaths in India are projected to surge between 2022 and 2045.
- ❖ 12.8% increase in cancer incidence in India in 2025 compared to 2020 and that cancer incidence is continuing to stand up.
- ❖ Among men in India, oral cancer, especially lip and mouth cancers, is the most common.
- ❖ Breast cancer is the leading cancer among women, and cervical cancer is also a major concern.
- ❖ Meanwhile, lung cancer is the most common type among women in China.
- ❖ BRICS nations are responsible for 42% of global cancer-related deaths.
- ❖ China bore the highest total productivity loss, estimated at \$28 billion.
- ❖ South Africa faced the highest cost per cancer death at \$101,000.

India – US Defense deal 2024

- ❖ India and the U.S concluded a \$3.5 bn deal for the procurement of 31 MQ-9B armed High Altitude Long Endurance (HALE) Remotely Piloted Aircraft Systems (RPAS).



- ❖ The deal also includes 170 AGM-114R Hellfire missiles; 16 M36E9 Hellfire captive air training missiles; 310 GBU-39B/B laser Small Diameter Bombs (SDB); and etc.
- ❖ Hellfire missile is one of the most popular short-range air-to-ground (sometimes air-to-air) laser-guided, subsonic tactical missiles.
- ❖ The AGM-114R multipurpose missile is the latest in the Hellfire II missile range (7-11km).
- ❖ The MQ-9B 'hunter-killer' drones are the high-altitude long-endurance drones.
- ❖ They are capable of remaining airborne for over 35 hours and can carry four Hellfire missiles and around 450 kgs of bombs.

Next Chief Justice of India 2024

- ❖ Chief Justice of India D.Y. Chandrachud has recommended the Justice Sanjiv Khanna to the government for appointment as the 51st Chief Justice of India.
- ❖ Current CJI is scheduled to retire on November 10.
- ❖ Justice Khanna did not serve as the chief justice of any high court before his appointment as a judge in the Supreme Court in January 2019.
- ❖ He is due to retire on May 13, 2025.

Samarth Scheme extension 2024

- ❖ The Government extends the “Samarth” (Scheme for Capacity Building in Textiles Sector) scheme till March 2026.
- ❖ It is focusing on the job creation in organized textile industries while excluding spinning and weaving.
- ❖ The program also emphasizes the upskilling of existing workers and supports traditional textile sectors such as handloom and handicraft.

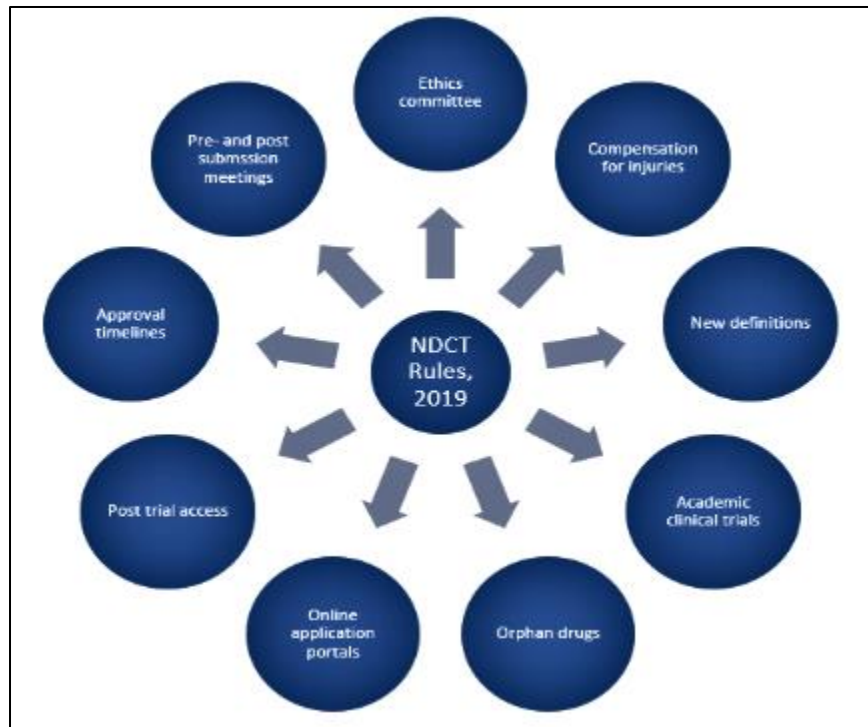
8 years of UDAN

- ❖ The UDAN scheme was introduced on October 21, 2016.
- ❖ UDAN (Ude Desh ka Aam Nagrik) is aimed at enhancing regional air connectivity and making flying more affordable.
- ❖ As many as 601 routes and 71 airports have been operationalised under the UDAN scheme.
- ❖ A total of 86 aerodromes, comprising 71 airports, 13 heliports, and 2 water aerodromes have been operationalised.

- ❖ The number of operational airports in the country has doubled from 74 in 2014 to 157 in 2024.



New Drugs and Clinical Trial (NDCT) Rules, 2019



- ❖ The Drugs Technical Advisory Board (DTAB) has recommended the inclusion of all antibiotics in the definition of new drugs in the New Drugs and Clinical Trial (NDCT) Rules, 2019.
- ❖ It aims to curbing the growing anti-microbial resistance which is now recognised as a public health threat globally.

- ❖ The board is also looking at amending the labelling requirements under the Drugs Rules, 1945 and adding a blue strip or box for antimicrobial products.
- ❖ It has recommended that no antimicrobials should be sold by the traders to the non-pharmaceutical industries who do not hold requisite licences.
- ❖ DTAB is the highest statutory decision-making body on technical matters related to drugs in the country.

e-Shram – One Stop Solution

- ❖ Union Ministry of Labour & Employment launched eShram One Stop Solution in New Delhi.
- ❖ The primary purpose of the portal is to simplify the registration process for unorganised workers and facilitate their access to government welfare schemes.
- ❖ It will provide seamless access of the different Social Security Schemes to the unorganised workers registered on eShram.



Section 6A of the Citizenship Act of 1955

- ❖ A Constitution Bench of the Supreme Court has upheld the constitutionality of Section 6A of the Citizenship Act, 1955.
- ❖ It permits immigrants from Bangladesh residing in Assam to secure the Indian citizenship.
- ❖ The principle of fraternity cannot be selectively applied to one section living in Assam while another lot are labelled "illegal immigrants".
- ❖ The immigrants who entered Assam on or after March 25 of 1971 were liable to be detected, detained and deported.
- ❖ Section 6A traces its roots to the political solution of Assam Accord of 1985.
- ❖ It mandates that immigrants who entered Assam from Bangladesh prior to January 1, 1966 would be deemed to be Indian citizens.

- ❖ Those who entered into the State between January 1, 1966 and March 25, 1971 would be conferred citizenship based on the fulfilment of specific procedures and conditions.
- ❖ The Section however barred citizenship to those who entered Assam after March 25, 1971.
- ❖ The Pakistani Army had launched Operation Searchlight to curb the Bengali nationalist movement in East Pakistan on March 26, 1971.

ASSAM ACCORD CLAUSE 5 & CITIZENSHIP

IN 1979, All Assam Students Union (AASU) began an agitation demanding the identification and deportation of "illegal foreigners", predominantly from Bangladesh. The agitation went on for six years, culminating with the historic Assam Accord between the Central and state governments, and the leaders of the Assam Movement.

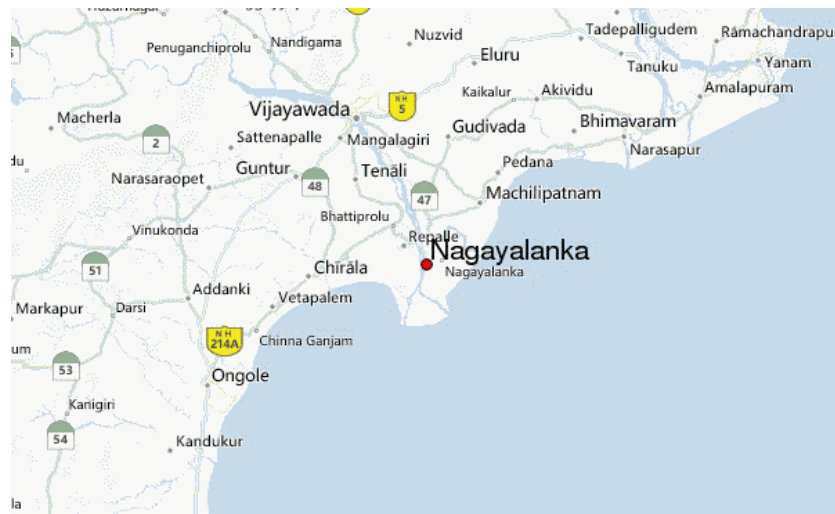
CLAUSE 5 of the Accord, which discussed the "Foreigners Issue", set January 1, 1966 as the "base date and year" for the "purposes of detection and deletion [from electoral rolls] of foreigners". Those who arrived after this date but up to March 24, 1971, would "have their names deleted

from electoral rolls" for 10 years, after which their names would be restored.

IN 1985, in order to give effect to the Assam Accord, Section 6A was introduced in The Citizenship Act, 1955. The petitioners argued that this section was arbitrary and discriminatory, as it applied only to Assam.

THE CAA, 2019, introduced another group-specific section, Section 6B, in The Citizenship Act, which set December 31, 2014 as the cutoff date for Hindu, Christian, Sikh, Parsi, Buddhist, and Jain migrants from the Muslim majority countries of Pakistan, Bangladesh, Afghanistan.

New missile testing range – Nagayalanka



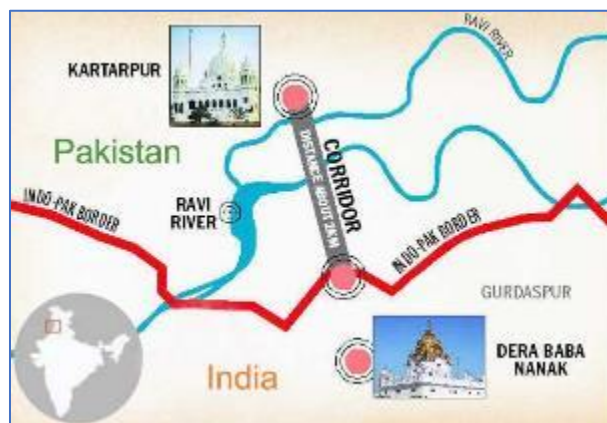
- ❖ The Cabinet Committee on Security approved the establishment of a new missile testing range in the Nagayalanka area of Andhra Pradesh's Krishna district.
- ❖ This will allow the defence researchers in the country to test a large number of tactical missile systems.
- ❖ The new facility will support testing of surface-to-air missiles, anti-tank missiles, and other projects under DRDO.

SARTHI System

- ❖ The Solar Assisted Reefer Transportation with Hybrid Controls and Intelligence (SARTHI) system was introduced recently.
- ❖ It has introduced by the National Institute of Food Technology Entrepreneurship and Management, Kundli (NIFTEM-K).
- ❖ It is an innovative solution to reduce post-harvest losses in perishable food transportation.
- ❖ It features dual compartments designed to store fruits and vegetables at different temperatures, addressing their unique storage needs.
- ❖ This design helps to extend shelf life and reduces losses due to chilling injury or moisture loss.

Kartarpur Corridor Agreement 2024

- ❖ India and Pakistan agreed through diplomatic channels to extend the validity of the agreement on Kartarpur Sahib corridor for another five years.
- ❖ The agreement was signed on October 24, 2019 for a period of five years.
- ❖ It aims to facilitate the visit of pilgrims from India to Gurdwara Darbar Sahib Kartarpur in Narowal, Pakistan, through the Kartarpur Sahib corridor.
- ❖ Extension of validity of the agreement will ensure uninterrupted operation of the corridor for use by pilgrims from India to visit the holy gurdwara in Pakistan.



Bharat Chana Dal Phase II

- ❖ The Centre expanded its subsidised pulses program, introducing chana whole and masur dal under the 'Bharat' brand.
- ❖ The initiative aims to provide these pulses at the discounted rates through the cooperative networks, ensuring affordability for the public.
- ❖ The Bharat brand provides staples such as rice, flour, and pulses at subsidised rates.
- ❖ It was launched as a part of the government's broader aim to make essential goods more affordable for middle-class consumers.
- ❖ Phase I of the brand was rolled out in October 2023 and Phase II was announced earlier this month.



Rights of Persons with disabilities rules 2024 (Amendment)

- ❖ The government has enforced new amendments to the Rights of Persons with Disabilities (RPwD) rules.
- ❖ It aims to streamline the application process for disability certificates and Unique Disability Identity (UDID) Cards.
- ❖ It will improve accessibility and provide more efficient services for persons with disabilities.
- ❖ Now, individuals with specified disabilities can apply for disability certificates and UDID cards through the UDID Portal.
- ❖ The amendments also introduce the color-coded UDID cards, signifying different levels of disability:

- White for disabilities below 40 per cent,
- Yellow for 40-79 per cent and
- Blue for those with 80 per cent or higher disability.
- ❖ 4% reservation in government jobs is available for people with disabilities.
- ❖ But the people with blood disorders like thalassemia, haemophilia, and sickle cell disease are not eligible for job reservations under the PwD category.



Bhu-Aadhaar

Land Aadhaar

Also known as the Unique Land Parcel Identification Number (ULPIN) or Bhu-Aadhaar, a 14-digit alphanumeric ID for land parcels in India.

Usage of Land Aadhaar

Streamlining real estate transactions, assisting in resolving property tax issues, and enhancing disaster planning and response efforts.

Importance of Land Aadhaar

ULPIN serves as a crucial tool for land administration, property management, and real estate transactions.

Unique ID

ULPIN is designed to simplify the identification and tracking of land parcels, while improving transparency, efficiency, and accuracy in land-related processes.

Implementation of ULPIN

ULPIN has been implemented in 29 states across India, including Tamil Nadu.

- ❖ Bhu-Aadhaar or ULPIN was launched in 2021 as a part of the land records modernisation program.



- ❖ Around 30 percent of the rural land parcels in the country have been given a Unique Land Parcel Identification Number (ULPIN) or Bhu-Aadhaar.
- ❖ This is an initiative to give a 14-digit alpha-numeric identity to each land parcel.
- ❖ ULPIN was launched in 2021 as part of the Centre's Digital India Land Records Modernisation Programme (DILRMP).
- ❖ It aims to streamline and bring uniformity to the process adopted by states in assigning unique identification numbers to land parcels.
- ❖ Gujarat, Goa, Madhya Pradesh, Andhra Pradesh, and Uttar Pradesh have made significant progress.
- ❖ In Gujarat, which has over 1.2 crore land parcels, the data show, the ULPIN has been generated for 1.19 crore land parcels.

1st Mid-Career Training Program

- ❖ The National Centre for Good Governance (NCGG) has successfully concluded its first Mid-Career Training Program for civil servants from the BIMSTEC nations.
- ❖ The two-week program brought together 36 senior officials, including Deputy Commissioners, Assistant Divisional Secretaries, Commissioners, and Deputy Directors, from Sri Lanka, Myanmar, Nepal, and Bhutan representing the key ministries.
- ❖ The program aimed to foster the regional cooperation and enhance governance capabilities.

PM-YASASVI Scheme

- ❖ The Ministry of Social Justice and Empowerment has implemented the PM Young Achievers Scholarship Award Scheme for Vibrant India (PM-YASASVI).
- ❖ This comprehensive umbrella scheme is aimed at uplifting students from OBC, EBC, and De-notified Tribes (DNT) by providing them with access to quality education during their formative years.
- ❖ This scheme consolidates and enhances several earlier initiatives, including the Dr. Ambedkar Post-Matric Scholarship Scheme for EBCs and the Dr. Ambedkar Pre-Matric and Post-Matric Scholarship Scheme for DNTs.
- ❖ By integrating these schemes, it ensures a more streamlined and impactful approach to supporting the educational needs of socially and economically disadvantaged students.

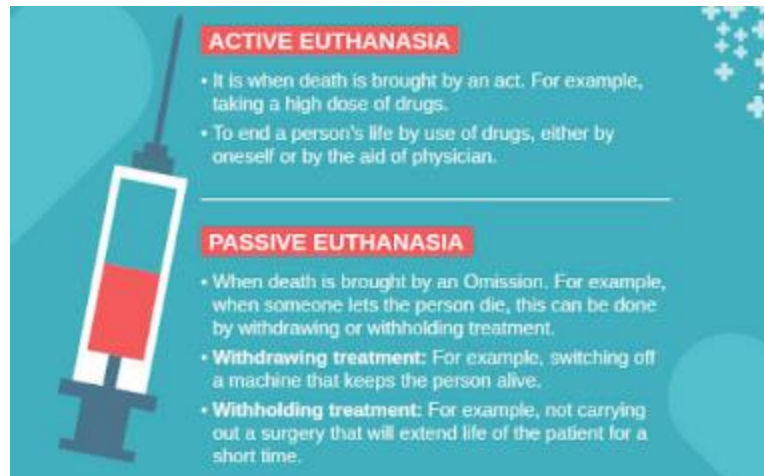


Localized Weather Forecasting



- ❖ Five-day weather forecasts, updated every hour, are now available at the level of gram panchayats.
- ❖ It is the first major step towards localised forecasting across the country.
- ❖ It aimed at “empowering rural communities and enhancing disaster preparedness at the grassroots, and will benefit farmers and villagers across the country.
- ❖ Hourly forecasts will be available on the e-GramSwaraj and Gram Manchitra portals, and the Meri Panchayat app.
- ❖ e-GramSwaraj is already operational.

New draft guidelines on passive euthanasia 2024



- ❖ Union Health Ministry comes up with new draft guidelines on passive euthanasia.
- ❖ The Doctors should take a "considered decision" on withdrawal of life support in terminally ill patients on the basis of certain conditions including a documented informed refusal by the patient or their kin.
- ❖ The guidelines laid out four conditions for the passive euthanasia to take a "considered decision in a patient's best interests, to stop or discontinue ongoing life support."
 - The individual has been declared to have had a brainstem death
 - There is medical prognostication and a considered opinion that the patient's disease condition is advanced and not likely to benefit from aggressive therapeutic interventions,
 - A patient/surrogate documented informed refusal, following prognostic awareness, to continue life support
 - Compliance with procedures prescribed by the Supreme Court.
- ❖ A Terminal illness in the draft guidelines has been defined as an irreversible or incurable condition from which death is inevitable in the foreseeable future.
- ❖ Severe traumatic brain injury which shows no recovery after 72 hours or more is also included.
- ❖ For a patient without capacity, foregoing of Life Support proposals should be made by a consensus among a group of at least three physicians who form the Primary Medical Board (PMB).
- ❖ A Secondary Medical Board of three physicians with one appointee by the Chief Medical Officer of the district must validate the decision by the PMB.

INTERNATIONAL

Same-sex marriage – Thailand

- ❖ Thailand's king has signed a landmark marriage equality bill into law.
- ❖ This is making the kingdom the first country in Southeast Asia to recognise same-sex marriages.
- ❖ LGBTQ+ couples will be able to register their marriage in January next year.

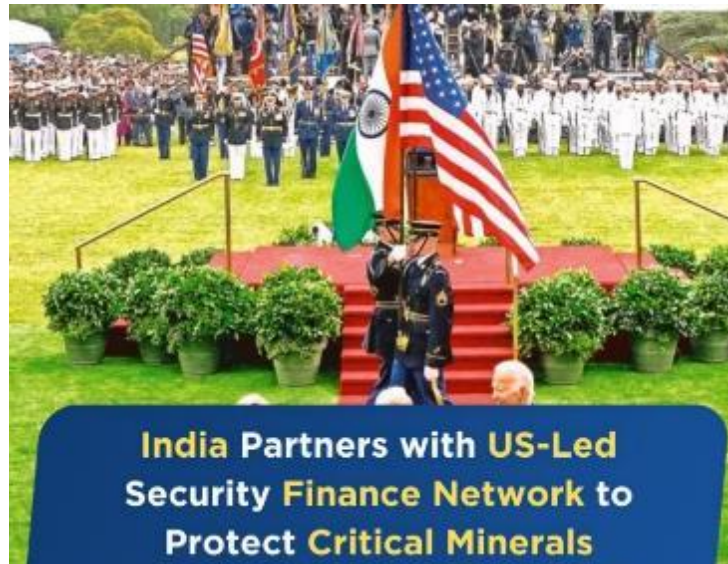


Pact for the future

- ❖ The United Nations General Assembly (UNGA) has adopted an ambitious pact- "Pact for the Future".
- ❖ It aims to make the organisation more relevant and effective on the global stage in the 21st century.
- ❖ It will promote global peace, sustainability, and inclusivity for future generations.
- ❖ Countries like Russia, Iran, the North Korea, and Syria proposed changes to the Pact.



Minerals Security Finance Network



- ❖ India has joined the US-led minerals security finance network.
- ❖ It aims to “strengthen cooperation and promote information exchange and co-financing” among participating institutions from the Indo-Pacific region and Europe.
- ❖ The network is the latest initiative from the Minerals Security Partnership (MSP), a framework established by the US in 2022.
- ❖ India was inducted to the MSP in June 2023.
- ❖ The MSP grouping is focused on the supply chains of minerals such as cobalt, nickel, lithium and also the 17 “rare earth” minerals.

Steering Committee of the GlobE Network

- ❖ India has secured a position on the 15-member Steering Committee of the GlobE Network, an international anti-corruption body.
- ❖ The Ministry of Home Affairs serves as India's Central Authority for the GlobE Network.
- ❖ The Central Bureau of Investigation (CBI) and the Enforcement Directorate (ED) acting as member authorities.
- ❖ The GlobE Network originated as an initiative from the G-20, supported by India in 2020.
- ❖ The GlobE Network was officially launched on 3 June 2021.
- ❖ The network has 121 member countries and 219 member authorities.



Joint ministerial meeting of L.69 and C-10 groupings

- ❖ India participated in the first-ever Joint Ministerial Meeting of the L.69 and C-10 groupings of nations on the sidelines of the 79th session of UNGA.
- ❖ The Committee of Ten (C10) is a group of African countries that is part of the African Union (AU).
- ❖ It is dedicated to advancing Education, Science, and Technology.
- ❖ The L69 grouping consists of 32 developing nations (including India) from Asia, Africa, Latin America, the Caribbean, and the Pacific (Small Island Developing States).
- ❖ It stands for expansion in both the permanent and non-permanent categories of membership of UNSC.
- ❖ It derives its name from the draft document number “L.69”, tabled in 2007-08.
- ❖ This led to the initiation of the Intergovernmental Negotiation (IGN) process.

DF-41 missile

- ❖ China successfully test-fired an intercontinental ballistic missile- D-41, into the Pacific Ocean.
- ❖ It has an operational range of up to 12,000–15,000km, capable of reaching the US mainland.
- ❖ An ICBM typically has a range greater than 5,500km and is designed to carry nuclear warheads.
- ❖ In May 1980, a DF-5 -China's first ICBM flew more than 9,000 kilometres.

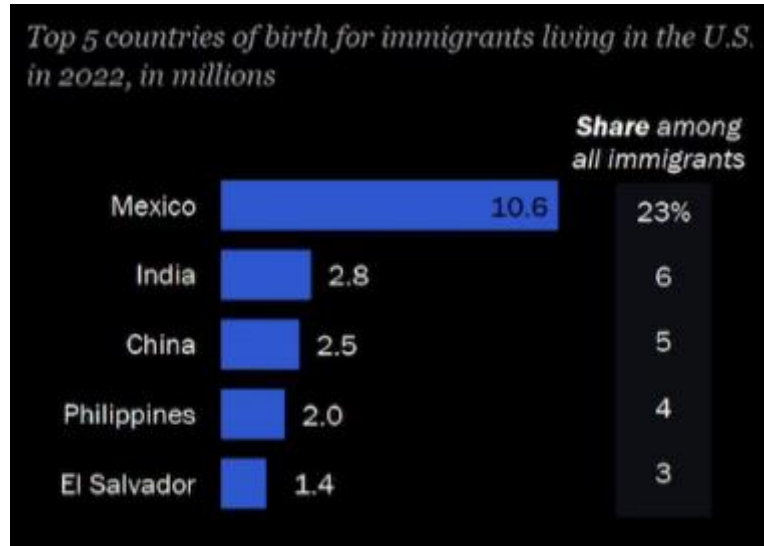
Biodiversity Beyond National Jurisdiction

- ❖ India has signed an international agreement called the Biodiversity Beyond National Jurisdiction (BBNJ) Agreement, or the "Treaty of the High Seas".
- ❖ The goal of the BBNJ Agreement is to protect marine life in areas of the ocean that are not owned by any one country.
- ❖ These areas start 370 kilometres from any country's coastline and cover two-thirds of the world's oceans.

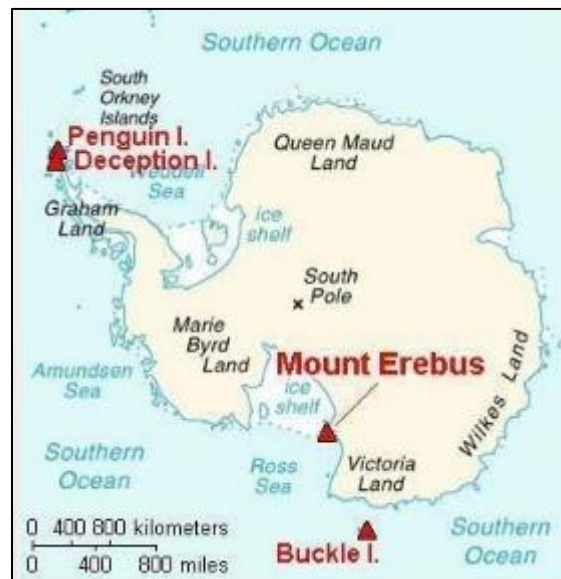
Top Immigrants source of USA

- ❖ The United States of America is home to nearly one-fifth of world's international migrants.
- ❖ The foreign-born population in the US reached a record 47.8 million in 2023, increasing by 1.6 million from the previous year.

- ❖ Mexico, China, and India are among the top birthplaces for immigrants residing in the US.
- ❖ Mexico remains the largest single country of origin, with 10.6 million Mexicans living in the US, immigrants from India make up 6%, followed by China with 5%.



Mount Erebus 2024

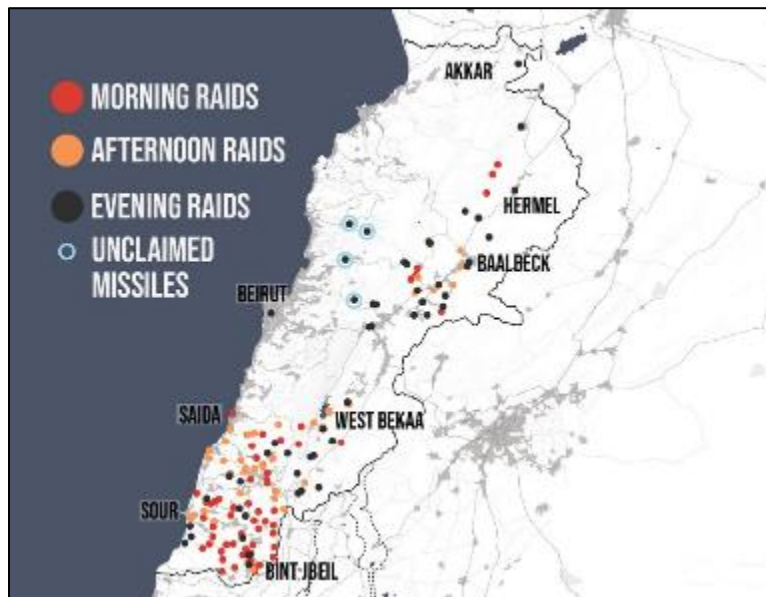


- ❖ Mount Erebus is the southernmost active volcano on Earth that towers 12,448 feet into the air.
- ❖ However, it is a geological wonder that regularly emits gas, steam, and molten rocks that are called volcanic bombs.
- ❖ The volcano regularly emits micro-crystals of gold.

- ❖ This volcano emits around 80 grams of gold, which amounts to about \$6,000 every day.
- ❖ Sir James Clark Ross, a British explorer, discovered the volcano in 1841 in his expedition to Antarctica.

Operation Northern Arrows

- ❖ Israel Defense Forces (IDF) have launched targeted, limited ground operations against Hezbollah in southern Lebanon under Operation Northern Arrows.
- ❖ The IDF aims to neutralize some of the immediate dangers that Hezbollah presents to Israeli towns and cities.
- ❖ It is conducted in parallel with combat in Gaza and other areas.



Return of Chagos Archipelago

- ❖ The United Kingdom ceded sovereignty of the strategically important Chagos Islands to Mauritius.
- ❖ The UK has long controlled Chagos and the Diego Garcia military base located there, jointly operating it with the United States.
- ❖ The Chagos archipelago, comprising 58 islands, lies roughly 500 km to the south of the Maldives archipelago in the Indian Ocean.
- ❖ In 1814, France ceded the islands to the British.
- ❖ In 1965, the UK constituted the British Indian Ocean Territory (BIOT), of which the Chagos Islands were a central part.

- ❖ A few other BIOT islands were later ceded to the Seychelles in 1976 after it gained independence from Britain.
- ❖ Chagos was attached to Mauritius, another British colony in the Indian Ocean, for administrative purposes.
- ❖ But when Mauritius gained the independence in 1968, Chagos remained with Britain.

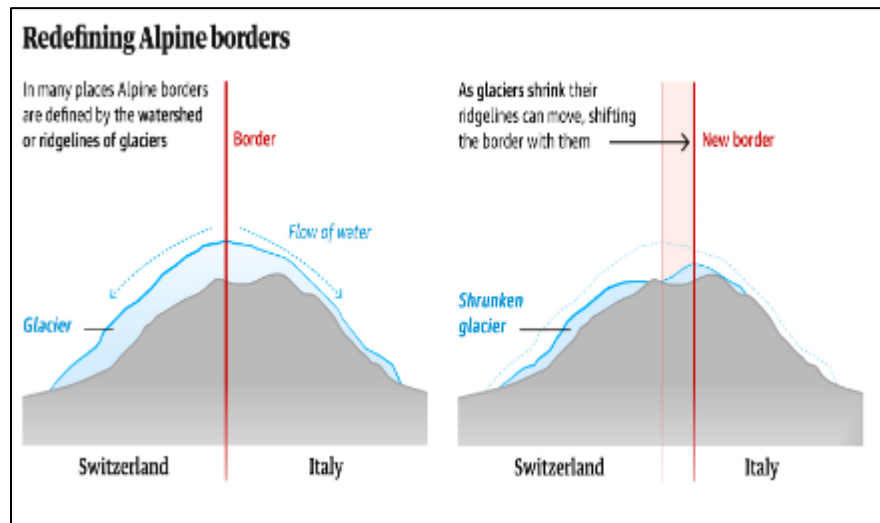


International Medical Device Regulators Forum

- ❖ India has become an affiliate member of the International Medical Device Regulators Forum (IMDRF).
- ❖ The IMDRF is a group of global medical device regulators, was established in 2011.
- ❖ It aims to speed up the adoption of international medical device regulatory harmonisation and convergence.
- ❖ Its members include national regulatory authorities of the U.S., Australia, Canada, the European Union, Japan, the United Kingdom, Brazil, Russia, China, South Korea, Singapore and the WHO.

Redrawing of Alpine Borders

- ❖ Switzerland and Italy redrew their shared border in the Alps last week, forced by melting glaciers.
- ❖ In 2023, Italy and Switzerland had set up a commission to study climate impacts on glaciers and their subsequent effect on the border.
- ❖ Switzerland and Italy have agreed to changes along the landmarks of Plateau Rosa, the Carrel refuge, and the Gobba di Rollin.
- ❖ This is where the Zermatt region of Switzerland meets the Aosta valley of Italy.
- ❖ The region is home to several ski resorts that fuel the economy of both countries.



First Mpox diagnostic test

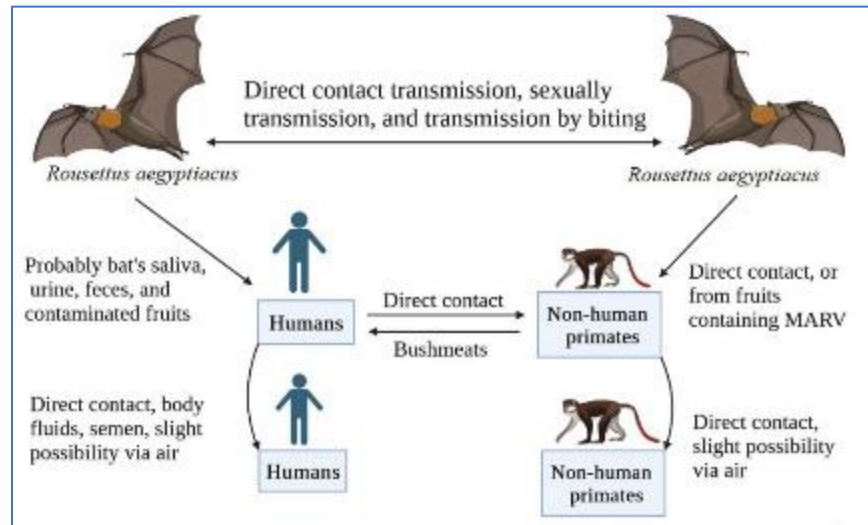
- ❖ WHO has listed the first Mpox in vitro diagnostic under its Emergency Use Listing procedure.
- ❖ The Alinity m MPXV assay is a real-time PCR test that enables detection of monkeypox virus (clade I/II) DNA from human skin lesion swabs.
- ❖ Currently, 35 laboratories across India are equipped to test suspected cases of Mpox.
- ❖ In 2024, over 30,000 suspected cases were reported across the African region.



Marburg Virus - Rwanda

- ❖ Rwanda peaked a new case of sickness caused by Marburg virus – one of the deadliest pathogens known.
- ❖ The Marburg virus disease (MRV) name derives from the disease was first reported in western countries.

- ❖ It was tracing back to lab outbreaks in Germany and the former Yugoslavia in 1967.
- ❖ Marburg virus can spread very quickly in the body, infecting and destroying cells in the blood, liver and skin.
- ❖ Current statistics indicate an 88% mortality rate among those infected with MRV.
- ❖ Marburg virus is 'zoonotic', which means it is able to jump from an animal host reservoir to humans through prolonged exposure.



Farewell to Horse Race - Singapore

- ❖ Singapore bade farewell to a 182-year-old British-era tradition of horse racing recently.
- ❖ The Singapore Turf Club (STC) hosts horse racing since 1842.
- ❖ The Horse racing was introduced to Singapore over 182 years ago by Scottish merchant William Henry Macleod Read.
- ❖ He had founded the Singapore Sporting Club which was later renamed to STC in 1924.

Bilateral investment treaty (BIT) 2024

- ❖ The Bilateral Investment Treaty (BIT) signed between India and the UAE has been enforced from August 31 this year.
- ❖ It gives continuity of investment protection to investors of both the countries.
- ❖ UAE is the seventh largest with a share of 3% in the total Foreign Direct Investment (FDI) received in India.

- ❖ The earlier Bilateral Investment Promotion and Protection Agreement (BIPPA) treaty between India and UAE was signed in December 2013 and expired on 12th September, 2024.



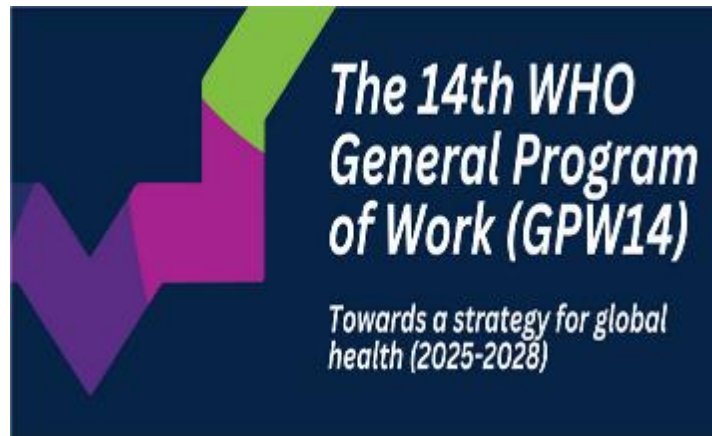
China's 'Anaconda Strategy'

- ❖ Taiwan recently claimed that the People's Liberation Army (PLA) is using an 'anaconda strategy' to squeeze the island nation.
- ❖ "Slowly, but surely" China is enhancing its military presence around Taiwan.
- ❖ The 'Anaconda Plan' refers to a military strategy proposed by Union General Winfield Scott during the early stages of the American Civil War.
- ❖ The primary objective of this strategy was to suffocate the Confederacy economically and militarily, similar to how an anaconda snake coils around and asphyxiates its prey.
- ❖ There has been a steady increase in the number of ships China operates around Taiwan, from 142 at the beginning of the year to 282 in August.



WHO core program for 2025-2028

- ❖ India has now committed to give more than \$300 million for the organisation's core program of work from 2025 to 2028.
- ❖ The biggest sum of \$250 million will be spent on the Centre of Excellence for Traditional Medicine.
- ❖ India has committed the largest amount of funds so far in southeast Asia.
- ❖ So far, WHO has received contribution pledges for over \$2.2 billion towards a \$7.1 billion funding gap.



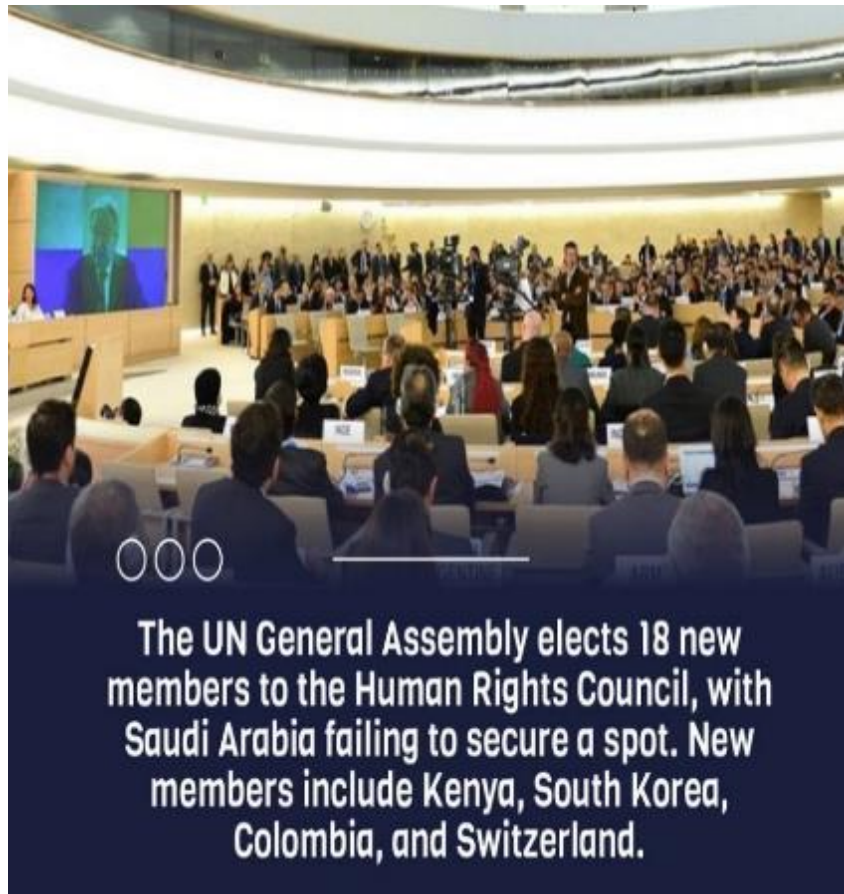
Global Digital Compact 2024

- ❖ The 'Global Digital Compact' (GDC) was adopted in the recently concluded UN 'Summit of the Future'.
- ❖ It is not a binding law but a diplomatic instrument with a set of shared goals for governments, institutions, firms, and other stakeholders to bear in mind.
- ❖ The GDC is a collaborative project with the objective of ensuring human oversight of technologies in ways that advance sustainable development.
- ❖ To address the digital divide, the GDC proposes "digital public goods" that will include open-source software, open data, and open AI models, plus adherence to privacy and best practices.
- ❖ Earlier, the UN helped pilot and legitimise two other compacts.

Members to Human Rights Council

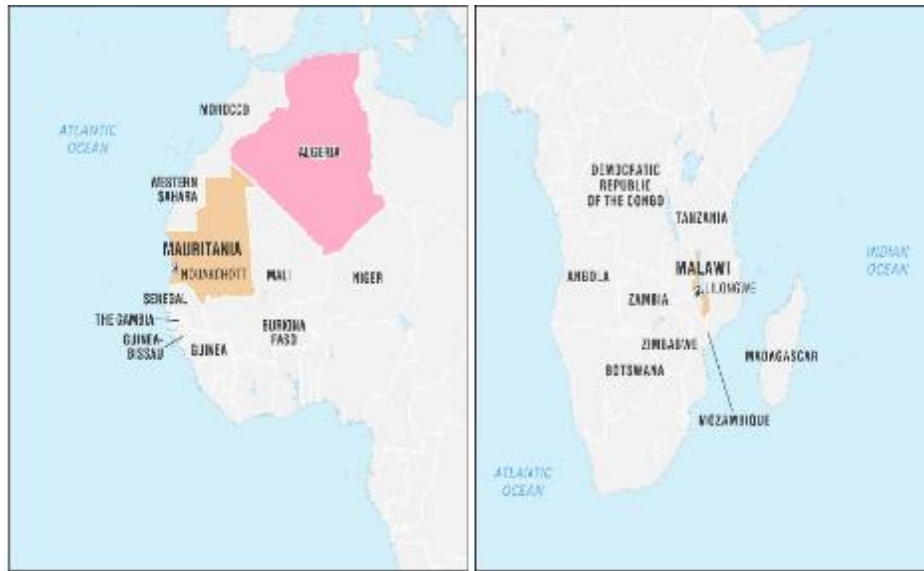
- ❖ The UN General Assembly elected 18 members to the 47-member Human Rights Council for the 2025-2027 term.
- ❖ The 18 countries, including Benin, Bolivia, Colombia, Cyprus, Qatar, and Thailand, were elected by a secret ballot.

- ❖ The elected members will serve three-year terms beginning on January 1 next year.
- ❖ The Geneva-based Human Rights Council is an intergovernmental body within the United Nations system.
- ❖ It is responsible for promoting and protecting human rights around the world.
- ❖ Saudi Arabia failed to win a seat in the Council, with finishing in sixth place.













President Murmu's African Visit

- ❖ President Droupadi Murmu is traveling to Algeria, Mauritania and Malawi.
- ❖ This is the first-ever visit by an Indian head of state to the three African countries.
- ❖ During the visit to the Sidi Abdellah Science and Technology Pole, a hub of universities, she received an honorary doctorate.
- ❖ She has also inaugurated an India Corner at Hamma Garden at Jardin d'essai, Algeria.
- ❖ Murmu's visit coincides with the 60th anniversary of diplomatic relations between India and Malawi.



44th and 45th ASEAN Summits

- ❖ The 44th and 45th Association of Southeast Asian Nations (ASEAN) Summits and related summits kicked off in Vientiane, Laos.
- ❖ Malaysia has chaired ASEAN throughout 2025, under the theme “Inclusivity and Sustainability.”
- ❖ 27th ASEAN-China Summit, the 27th ASEAN Plus Three Summit (ASEAN-China, Japan, and the Republic of Korea), and the 19th East Asia Summit also held.
- ❖ The First ASEAN Summit was held in Bali, Indonesia in 1976.

ASEAN Member States				
				
Brunei Darussalam Commencement Date: 7 January 1984	Cambodia Commencement Date: 30 April 1999	Indonesia Commencement Date: 8 August 1967	Lao PDR Commencement Date: 23 July 1997	Thailand Commencement Date: 8 August 1967
				
Malaysia Commencement Date: 8 August 1967	Myanmar Commencement Date: 23 July 1997	Philippines Commencement Date: 8 August 1967	Singapore Commencement Date: 8 August 1967	Viet Nam Commencement Date: 26 July 1995

Gender-Responsive Climate Policies



- ❖ There has been a rise in gender-responsive climate policies and actions globally.
- ❖ Around 81 per cent of the Parties to the Paris Agreement referred to gender in their Nationally Determined Contributions (NDC).
- ❖ Till that date, the total number of NDCs of 195 Parties was 168.
- ❖ 62.3 per cent described efforts to strengthen institutional mechanisms for mainstreaming gender considerations across climate action.
- ❖ Some 11.5 per cent described initiatives aimed at increasing the gender balanced groups engaged to support monitoring and evaluation of adaptation action.
- ❖ Around 55.7 per cent affirmed their commitment to gender equality.
- ❖ Women farmers currently account for 45-80 per cent of all food production in developing countries depending on the region.
- ❖ About two-thirds of the female labour force in developing countries and more than 90 per cent in many African countries are engaged in agricultural work.

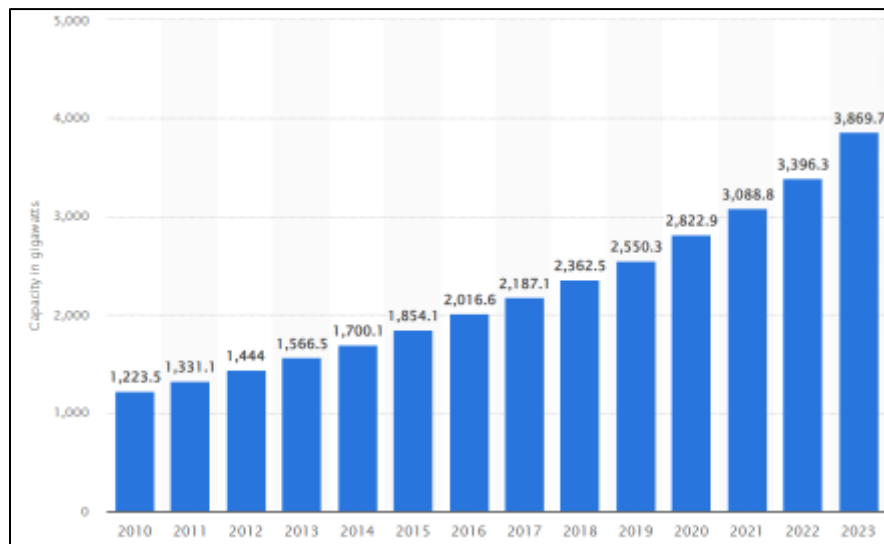
India – Canada Diplomatic crisis 2024



- ❖ Khalistani extremist Hardeep Singh Nijjar, who India designated as a terrorist, is shot dead in British Columbia of Canada in 2023.

- ❖ Canada accused Indian intelligence for this incident.
- ❖ Canada have withdrawn 41 diplomats from India amid the ongoing dispute.
- ❖ Recently, Canada announced the expulsion of six Indian diplomats, including the high commissioner.
- ❖ This led to India announcing the expulsion of six members of the Canadian high commission in Delhi.

Record Solar Power Capacity of the World in 2023



- ❖ In 2023, global renewable energy capacity reached 3.9 terawatts (TW), up from 3.86 TW in 2022.
- ❖ However, this falls short of the required compound annual growth rate of 16.4%, leaving a gap of 1.5 TW by 2030 if the current pace persists.
- ❖ A record 473 gigawatts (GW) of renewable power capacity was added globally in 2023.
- ❖ Solar PV continues to dominate, with 346.9 GW added in 2023, marking a 73% increase from 2022.

Suppliers of restricted technology

- ❖ India has surged to become the second-biggest supplier of restricted critical technologies to Russia.
- ❖ Indian exports of restricted items such as microchips, circuits and machine tools surpassed \$60 million in both April and May and leaped to \$95 million in July.

- ❖ India's role in the shipment of such goods has presented a further challenge because US and EU policymakers.

India Is Now Russia's No. 2 Supplier of Restricted Technology

- Microchips, circuits, machine tools power Putin's war
- Officials say raising the issue has brought little response

UK Naga Skull Auction Controversy



- ❖ A UK auction house has removed the 'Naga Human Skull' from its listings for a live online sale.
- ❖ Critics called for the return of the 200-year-old skull, which was listed for auction in Britain along with at least 25 other remains.
- ❖ The Naga skull, which features attached animal horns, was described as particularly appealing to collectors interested in anthropology and tribal cultures.
- ❖ The opening bid was set at about ₹23 lakh, with an estimated final price of up to around ₹43 lakh.
- ❖ The Pitt Rivers Museum in Oxford holds around 6,500 Naga artefacts collected during the British colonial period.

Nile River Basin Cooperative Framework Agreement



- ❖ The multinational agreement is regulating the use of the Nile River's waters has officially entered into force, despite strong opposition from Egypt.
- ❖ The Nile Basin Initiative is a partnership of 10 riparian countries headquartered in Entebbe, Uganda.
- ❖ The Nile is spanning 11 countries but only five countries signed and ratified the treaty.
- ❖ Egypt and Sudan have yet to sign the agreement.
- ❖ They both have long been embroiled in a dispute with Ethiopia over the Grand Ethiopian Renaissance Dam (GERD).
- ❖ The GERD, a massive hydropower project on the Blue Nile, is providing electricity to Ethiopia's 120 million citizens.
- ❖ Egypt views the dam as an existential threat, as the Nile supplies 97 percent of its water needs.
- ❖ The Nile Basin Initiative includes Burundi, the Democratic Republic of Congo, Egypt, Ethiopia, Kenya, Rwanda, South Sudan, Sudan, Tanzania, and Uganda, while Eritrea participates as an observer.

SCO Summit 2024 - Pakistan

- ❖ Islamabad hosted the Shanghai Cooperation Organisation (SCO) Summit 2024.
- ❖ The summit aims to address critical issues such as regional security, economic cooperation, and combating terrorism.
- ❖ India's External Affairs Minister, alongside Prime Ministers from China, Russia, Kazakhstan, Kyrgyzstan, Belarus, Tajikistan, Uzbekistan, and Iran's First Vice-President participated in the event.
- ❖ This is the first high-level visit by an Indian official to Pakistan in nearly nine years.
- ❖ SCO is a permanent intergovernmental international body founded on June 15, 2001, in Shanghai, China.
- ❖ The organisation expanded to nine member countries with the inclusion of India and Pakistan in 2017.



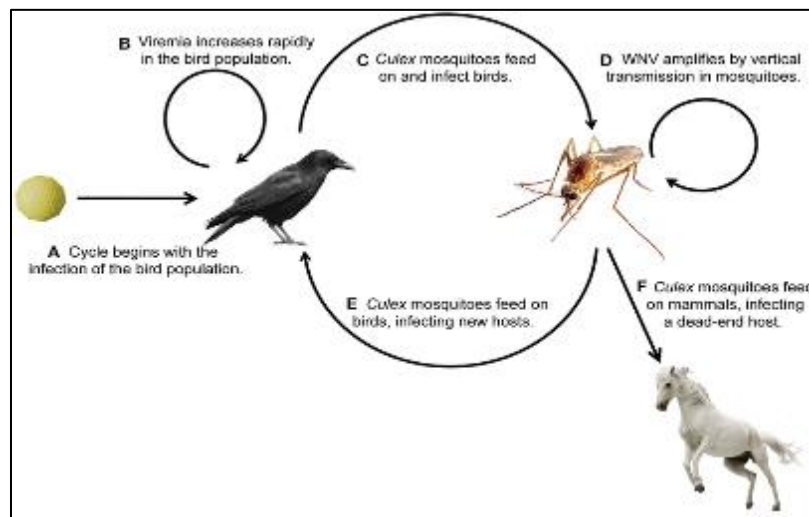
Mount Adams eruption - USA

- ❖ The Mount Adams, Washington's largest volcano, has recently shown a surge in seismic activity after remaining largely dormant for thousands of years.
- ❖ Mount Adams has produced four lava flows within the last 12,000 years.
- ❖ The biggest concern is the possibility of lahars—mudflows composed of rock, ash, and ice.
- ❖ Notably, past lahars from Mount Adams reached considerable distances about 6,000 and 300 years ago.

- ❖ Due to the potential risks of these mudflows, Mount Adams is classified as a “high-threat” volcano.



West Nile virus in Ukraine



- ❖ Ukraine reported a severe outbreak of West Nile virus (WNV).
- ❖ WNV is common in regions such as Africa, the Middle East, North America, and West Asia.
- ❖ It typically spikes between the summer and autumn months of June and September.
- ❖ The virus is transmitted to humans through the bite of an infected mosquito, which usually contracts the virus from migratory birds or horses.

- ❖ The virus was first identified in Uganda's West Nile region in 1937.
- ❖ There is currently no specific treatment or vaccine for WNV.

FATF Grey List Rules

- ❖ The Financial Action Task Force (FATF) made major changes to the criteria to focus on those nations posing greater risks to the international financial system.
- ❖ The FATF identifies jurisdictions with strategic deficiencies in their system for fighting money laundering, terrorist financing and proliferation financing.
- ❖ Under the revised criteria, jurisdictions will be prioritised for active review if they meet the referral criteria and are:
 - An FATF Member;
 - A country on the World Bank High-Income Countries list (excluding those with a financial sector of two or fewer banks); or
 - A country that has financial sector assets above USD 10 billion (measured by broad money).
- ❖ Around 21 nations are in FATF grey list now.

FATF GREY LIST	FATF BLACK LIST
<ul style="list-style-type: none"> - Named as "Jurisdictions Under Increased Monitoring" - Countries having strategic deficiencies in their anti-money laundering (AML) and counter-terrorism financing (CTF) regimes but have committed to addressing these weaknesses - Serves as a signal to the international community that a country is taking steps to improve its AML/CTF efforts but requires enhanced scrutiny and support - Being grey-listed can have significant economic repercussions, including decreased investor confidence, higher transaction costs, and potential difficulties in accessing international financial markets. 	<ul style="list-style-type: none"> - Named as "High-Risk Jurisdictions subject to a Call for Action" - Countries with significant strategic deficiencies in their AML/CTF regimes that have failed to make sufficient progress in addressing these issues - Aims to warn the global financial community about the risks associated with these jurisdictions and to encourage countries to take robust measures against them - Countries on the Black List face severe economic sanctions, loss of international financial credibility, and potential isolation from the global financial system.

Click-to-Cancel Rule



- ❖ The United States' Federal Trade Commission (FTC) will soon implement a "click-to-cancel" rule.
- ❖ It will make it significantly easier for consumers to cancel their subscriptions and memberships.
- ❖ Requiring multiple taps or hiding the setting under multiple pages of settings will be prohibited.
- ❖ It will also make companies liable to face civil penalties for complicating the cancellation process.
- ❖ 2022 Research found that 42% of consumers had forgotten they were paying for services they did not use.
- ❖ That Customers generally underestimated the monthly cost of their subscriptions by an average of \$133.

World's freest economy 2024

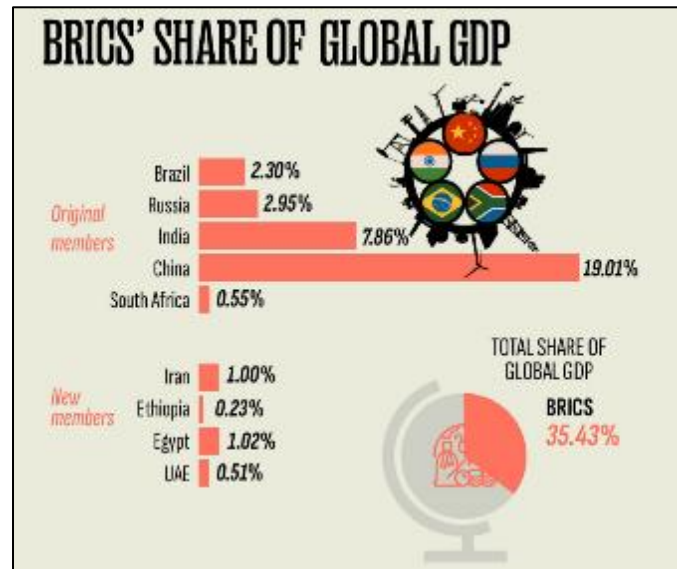
- ❖ The 2024 "Economic Freedom of the World" report was compiled by the Fraser Institute.
- ❖ Hong Kong regains title as world's freest economy from Singapore.
- ❖ Coming in at No. 3 was Switzerland, followed by New Zealand and the US.
- ❖ At 165th place, Venezuela ranked last with a score of 3.02.
- ❖ The rankings of other major economies include Japan at No 11, Britain at No 12, Taiwan at No 19, India at No 84 and mainland China at 104.

Rome Declaration

- ❖ The High-level Rome Water Dialogue took place on the sidelines of FAO's annual World Food Forum (WFF) at FAO headquarters in Rome.

- ❖ FAO members and partners of the Global Framework on Water Scarcity in Agriculture (WASAG) has adopted the Rome Declaration on Water Scarcity in Agriculture.
- ❖ It is aimed at addressing water scarcity, increasingly exacerbated by the climate crisis, particularly in the agriculture sector.
- ❖ The WASAG initiative was launched at the United Nations Climate Conference in Marrakesh in 2016 to support countries in addressing water scarcity challenges.
- ❖ By 2050, more than half the global population will live in areas at risk of water scarcity at least one month a year and agriculture.

16th BRICS Summit

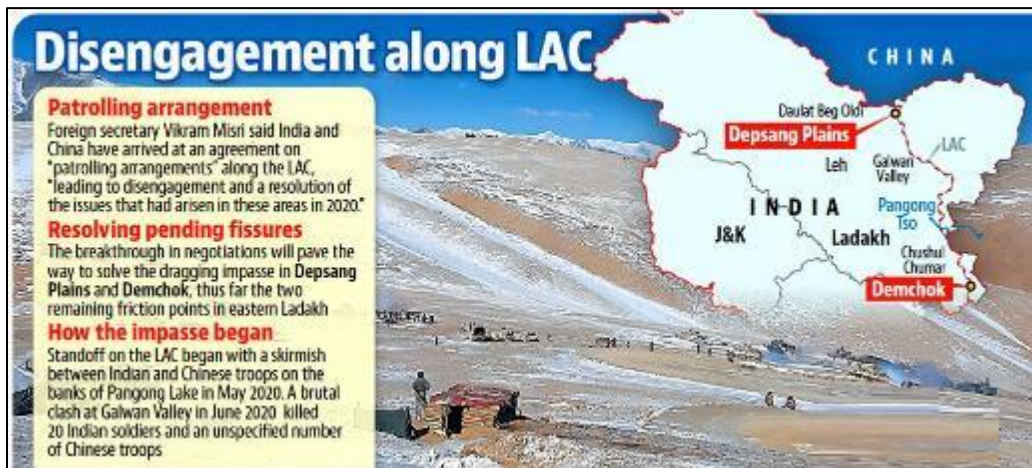


- ❖ 16th BRICS Summit was held in Kazan, Russia.
- ❖ India had bilateral meeting with President Xi Jinping on the sidelines of the BRICS summit after 5 years.
- ❖ UN Secretary General Antonio Guterres also attended the BRICS summit.
- ❖ This Summit concluded with the adoption of the Kazan Declaration.
- ❖ The first Bric summit was held in Russia's Yekaterinburg in 2009.
- ❖ South Africa was accepted as a full member at the Bric foreign ministers' meeting in New York in September 2010.
- ❖ The New Development Bank (NDB) was establishment in 2014, with a capital of \$100 billion.
- ❖ In 2024, the group further grew with the addition of new members: Egypt, Ethiopia, Iran, Saudi Arabia, and the United Arab Emirates.

- ❖ This is the first summit of the group following its expansion.
- ❖ Now, over 30 countries have expressed the desire to join Brics.

India and China on LAC agreement

- ❖ India and China have reached an agreement on the “patrolling arrangements” and the resolution of the military stand-off at the Line of Actual Control (LAC).
- ❖ The disengagement agreement came after 17 rounds of working mechanism meetings and 21 rounds of military dialogue.
- ❖ The new agreement will facilitate Indian troops to resume patrolling up to their old patrolling points in Depsang and Demchok
- ❖ Disputes have already been settled in Gogra-Hot Springs, Pangong Lake, and Galwan Valley.
- ❖ India and China share a 3,488 km long border.
- ❖ While China claims about 90,000 sq km of India's territory, including in Arunachal Pradesh.
- ❖ India has maintained that 38,000 sq km of land in the disputed Aksai Chin region is the part of Ladakh.

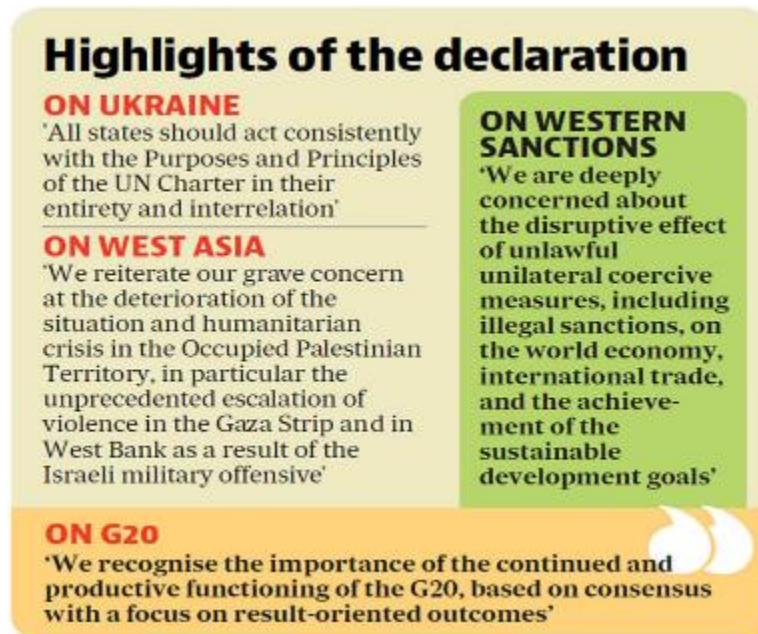


Hand-in-Hand Initiative

- ❖ The Hand-in-Hand Investment Forum 2024 was held in Rome during the World Food Forum.
- ❖ There are now 72 countries that have joined the Hand-in-Hand Initiative.
- ❖ The Hand-in-Hand Initiative has so far catalysed more than \$3 billion in the prioritized agrifood investments.

- ❖ HIH Initiative, launched in 2019, is a flagship of FAO and one of its core priority programme areas.
- ❖ It supports the implementation of the nationally led ambitious programmes to accelerate the agrifood systems transformations by eradicating poverty (SDG1), ending hunger and malnutrition (SDG2), and reducing inequalities (SDG10).

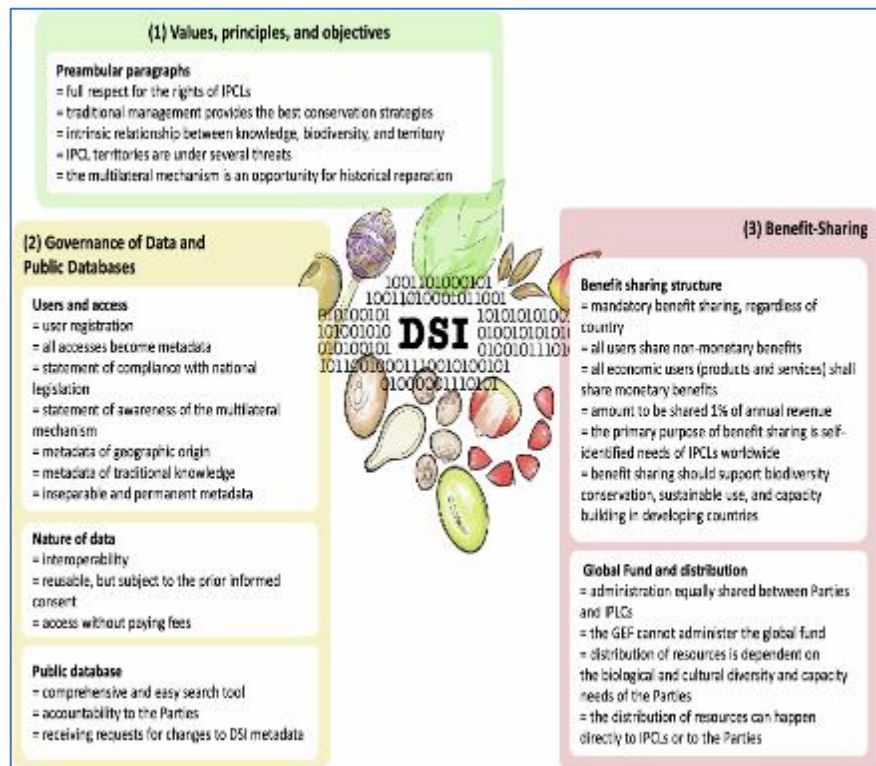
Kazan Declaration



- ❖ The 16th BRICS Summit concluded with the adoption of the Kazan Declaration.
- ❖ It is a comprehensive document outlining key areas of cooperation and the bloc's unified stance on global issues.
- ❖ The theme of the Declaration is "Strengthening Multilateralism for Just Global Development and Security".
- ❖ The declaration emphasises the need for peaceful resolution through diplomacy.
- ❖ The summit underscored the importance of the G20 in global decision-making.
- ❖ The BRICS nations has reiterated their pledge to improve global governance by advocating for a more agile, responsive, and representative multilateral system.
- ❖ BRICS Interbank Cooperation Mechanism (ICM) is focussing on facilitating and expanding innovative financial practices.
- ❖ The declaration has welcomed the use of local currencies in BRICS financial transactions and supported the exploration of an independent cross-border settlement infrastructure.

- ❖ Establishing a BRICS Grain Exchange and studying the feasibility of a BRICS Cross-Border Payment System and BRICS (Re)Insurance Company.
- ❖ India's initiative to create an International Big Cats Alliance received recognition.
- ❖ It supports the initiatives of the BRICS R&D Vaccine Center, further development of the BRICS Integrated Early Warning System for preventing mass infectious diseases risks and the operations of the BRICS TB Research Network.

Global Deal on Genetic Information Use



- ❖ At the U.N. COP16 nature summit, member countries will negotiate a deal for the use of genetic information from nature, known as digital sequence information (DSI).
- ❖ The DSI refers to the digital representation of genetic codes extracted from living organisms.
- ❖ These genetic sequences are digitized and often uploaded to the public databases where they are stored for any researcher to use.
- ❖ The COP16 talks will focus on how this digital information is used and do not touch on the actual samples and specimens.
- ❖ The charge of between 0.1% to 1% on annual revenues in key sectors using DSI could generate between \$1 billion and \$10 billion annually.

ECONOMY

Minimum wage rates for workers 2024

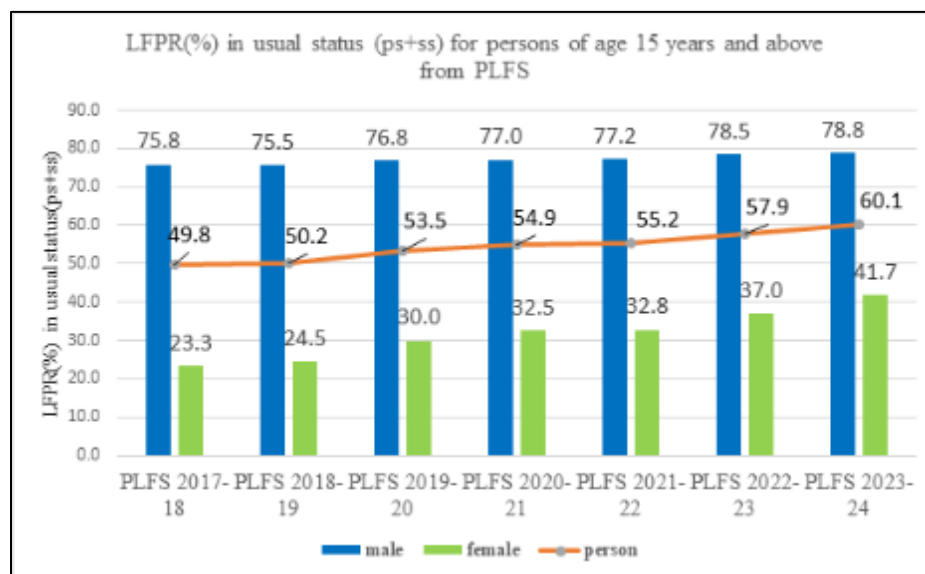
- ❖ The Union government announced a hike in minimum wage rates for workers up to ₹1,035 a day by revising variable dearness allowance.
- ❖ After revision, minimum wage rates in the area 'A' for workers in construction, sweeping, cleaning, loading & unloading for unskilled work will be ₹783 a day (₹20,358 per month).
- ❖ For semi-skilled workers, the minimum wage rate will be ₹868 a day (₹22,568 per month).
- ❖ For skilled, clerical and watch & wards without arms at ₹954 a day (₹24,804 per month).
- ❖ The minimum wage rate for highly skilled and watch & ward with arms will be ₹1,035 a day (₹26,910 per month).
- ❖ The new wage rates will take effect from October 1, 2024.
- ❖ Last revision was done in April 2024.

Increment in the Minimum Rate of Wages the employees in Construction & Maintenance Sectors			
Category Of Worker	Rate of wages Including Variable Dearness Allowance (V.D.A) per day (In Rupees)		
	Area 'A'	Area 'B'	Area 'C'
Unskilled	783	655	526
Semi-Skilled/ Unskilled Supervisory	868	739	614
Skilled/Clerical	954	868	739
Highly Skilled	1035	954	868

7th annual Periodic Labour Force Survey (PLFS)

- ❖ The National Statistics Office (NSO), released the results of the Periodic Labour Force Survey (PLFS) 2023-24.
- ❖ The unemployment rate for 2023-24 remained unchanged at 3.2%, the same as in 2022-23.
- ❖ Since 2017-18, the unemployment rate has not shown a year-on-year decline.

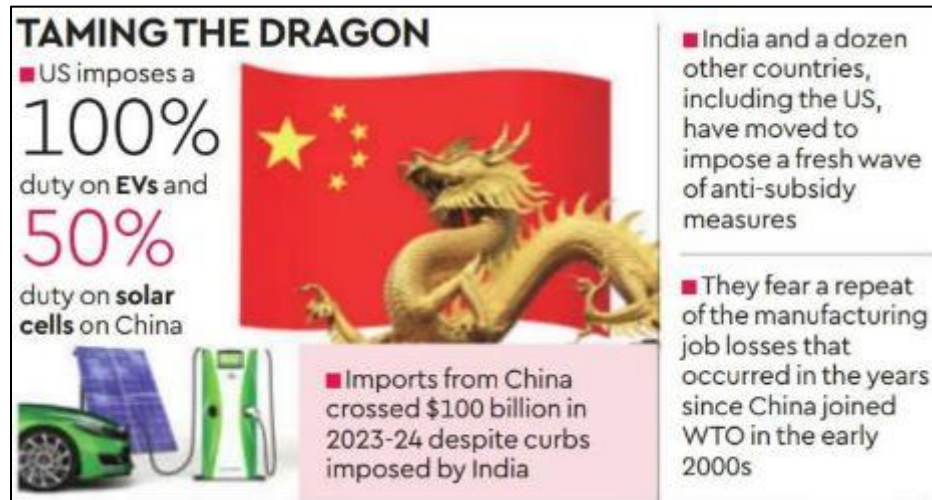
- ❖ The Labour Force Participation Rate (LFPR) increased to 60.1% in 2023-24 from 57.9% in 2022-23 at national level.
- ❖ The rural LFPR rose to 63.7%, while the urban LFPR increased to 52%.
- ❖ Increasing Trend in Worker Population Ratio (WPR) was 58.2% in the year 2023-2024.
- ❖ The same for male and female was 76.3% and 40.3% respectively.
- ❖ The unemployment rate in rural areas showed a little increase, rising to 2.5% in 2023-24 from 2.4% in 2022-23.
- ❖ But the urban unemployment rate improved to 5.1% from 5.4%.
- ❖ The unemployment rate for women rose to 3.2% from 2.9% in 2022-23.
- ❖ For men, the unemployment rate is decreased to 3.2% from 3.3%.
- ❖ The share of people engaged in self-employment, including small businesses increased to 58.4% from 57.3% in 2022-23.



China Shock 2.0

- ❖ A 100 per cent duty on electric vehicles imposed by the US on imports from China.
- ❖ The US tariff hikes also include a 50 per cent duty on solar cells and 25 per cent on steel, aluminium, EV batteries and some minerals.
- ❖ China's surpluses stem from industrial policies aimed at bolstering exports amid weak domestic demand, prompting fears of a potential "China shock 2.0".
- ❖ India's imports from China grew at a much faster pace than from the rest of the world.

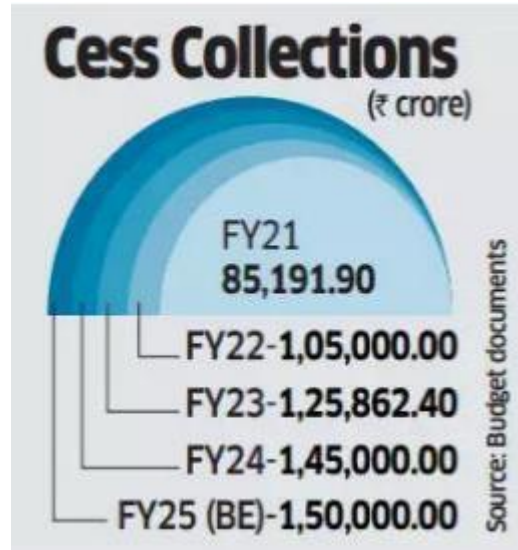
- ❖ Goods imports from China surged from \$10.87 billion in 2005-06 to \$61.71 billion in 2015-16.
- ❖ Despite many economic restrictions on Chinese businesses, imports from China surpassed a record \$100 billion in 2023-24.
- ❖ China's exports surged significantly in the post Covid period compared with the pre-pandemic period.
- ❖ According to IMF calculations, China's share of global exports increased by 1.5 percentage points
- ❖ Bill Clinton, the then US President supported China's accession to the WTO.
- ❖ This led to inexpensive Chinese goods, backed by abundant labour, flooded global markets, resulting in manufacturing job losses internationally.
- ❖ Thus, China's entry into the WTO came to be known as the "China shock".



GST compensation Cess 2024

- ❖ The Goods and Services Tax (GST) Council has set up a 10-member GoM, chaired by Minister of State for Finance Pankaj Chaudhary.
- ❖ It is tasked to decide on the taxation of luxury, sin and demerit goods once the compensation Cess ends in March 2026.
- ❖ In the GST regime, compensation cess at varied rates is levied on luxury, sin and demerit goods over and above the 28% tax.
- ❖ The proceeds from the cess were originally planned for five years after GST roll-out or till June 2022.
- ❖ This cess is used to compensate States for revenue loss incurred by them post the introduction of GST.




- ❖ In 2022, the Council decided to extend the levy till March 2026.
- ❖ Currently, GST is a four-tier tax structure with slabs at 5, 12, 18, and 28%.
- ❖ However, as per GST law, tax of up to 40% can be imposed on goods and services.



RBI Monetary Policy Committee 2024

- ❖ The Reserve Bank of India has reconstituted the Monetary Policy Committee (MPC) as per section 45ZB of the Reserve Bank of India Act, 1934.
- ❖ As per the provisions of the RBI Act, the Monetary Policy Committee (MPC) consists of six members: three Members from RBI and three are appointed by the Central Government.
- ❖ The 3 Members appointed by the Central Government shall hold office for a period of four years.

FRESH FACES IN POLICY PANEL

<p>Ram Singh</p>  <p>DIRECTOR OF THE DELHI SCHOOL OF ECONOMICS</p>	<p>Saugata Bhattacharya</p>  <p>SENIOR FELLOW AT THE CENTER FOR POLICY RESEARCH</p>	<p>Nagesh Kumar</p>  <p>DIRECTOR AND CHIEF EXECUTIVE OF THE INSTITUTE FOR STUDIES IN INDUSTRIAL DEVELOPMENT</p>
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- The MPC was set up for **reviewing the monetary policy** from time to time as well as **fixing the benchmark interest rate**
- RBI's MPC consists of **six members**, three of whom are hired from outside the central bank for four-year terms
- The other three ex-officio members are governor **Shaktikanta Das**, deputy governor **Michael Patra** and executive director **Rajiv Ranjan**

Withdrawal of 2,000 Rs Notes

- ❖ The Reserve Bank of India said that, about 98 per cent of the ₹ 2,000 denomination notes have been returned.
- ❖ The total value of notes of the denomination has reduced to ₹ 7,117 crore from ₹ 3.56 lakh crore on May 19, 2023.
- ❖ 98 per cent of the ₹ 2000 banknotes in circulation as of May 19, 2023.
- ❖ On May 19, 2023, the RBI announced a surprise decision to withdraw the ₹ 2,000 currency notes.
- ❖ The denomination was introduced after the demonetisation of November 2016.



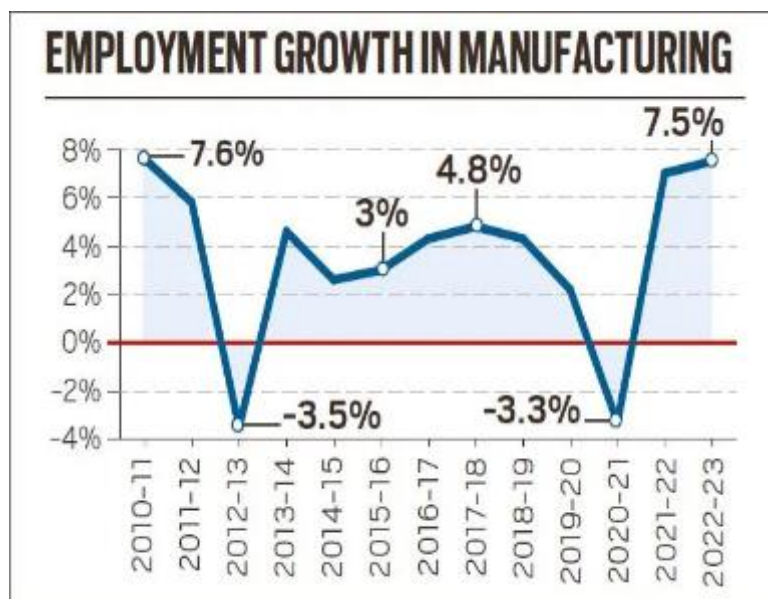
700 billion USD forex reserves

- ❖ India's forex reserves have crossed the \$700 billion mark for the first time.
- ❖ With this milestone, India becomes the fourth economy in the world to surpass \$700 billion in foreign reserves, joining China, Japan, and Switzerland.
- ❖ The increase of \$12.6 billion is also the largest weekly addition since July 14, 2023.
- ❖ India's reserves first crossed \$100 billion in December 2003, taking more than three years to add the next \$100 billion.

- ❖ The third \$100 billion (from \$200 billion to \$300 billion) was achieved in less than one year, with reserves surpassing \$300 billion on February 29, 2008.
- ❖ The increase from \$200 billion to \$300 billion was the fastest, occurring in about ten months.
- ❖ After peaking at \$642 billion in September 2021, the reserves dropped to \$525 billion within the following year, primarily due to revaluation losses.



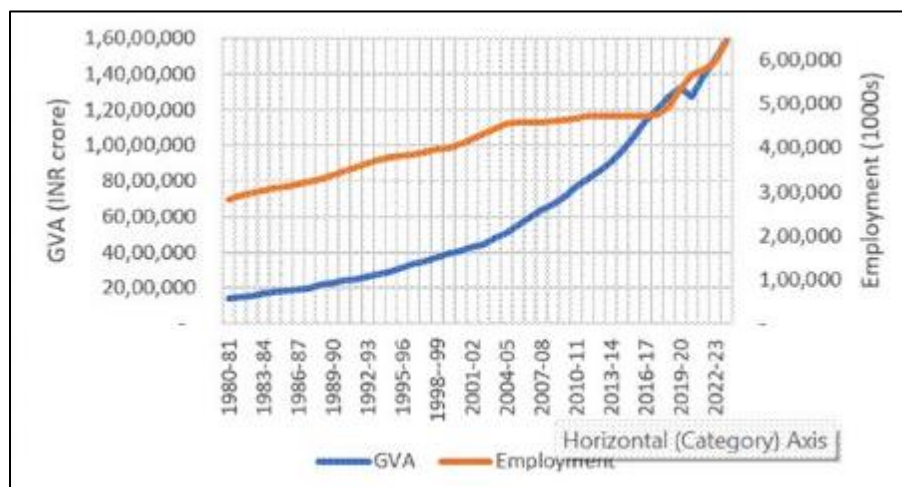
Annual Survey of Industries for 2022-23



- ❖ The total number of employees in manufacturing industries increased by 7.5 per cent to 1.84 crore in 2022-23 from 1.72 crore in 2021-22.
- ❖ This is the highest rate of increase in employment in manufacturing industries in the last 12 years.

- ❖ The highest employment was recorded in factories producing food products, followed by textiles, basic metals, wearing apparel and motor vehicles, trailers and semi-trailers.
- ❖ The total number of factories increased from 2.49 lakh in 2021-22 to 2.53 lakh in 2022-23.
- ❖ The number of workers employed in the informal sector in 2022-23 had dropped by 16.45 lakh or about 1.5 per cent to 10.96 crore compared to 11.13 crore in 2015-16.
- ❖ In terms of GVA, Maharashtra ranked first in 2022-23 followed by Gujarat, Tamil Nadu, Karnataka and Uttar Pradesh.

India's Employment Growth (2016-2023)



- ❖ The employment in India increased by 36 per cent (17 million jobs) between 2016-17 and 2022-23.
- ❖ During the same period, the gross domestic product (GDP) grew at an average rate of over 6.5 per cent.
- ❖ As per the PLFS data from 2017 to 2023 the Worker Population Ratio (WPR) has increased by 9 percentage points or almost 26 per cent during this period.

India's First Blue Loan

- ❖ The International Finance Corporation (IFC), has partnered with Axis Bank to provide a \$500 million loan aimed at scaling up green finance and developing the blue finance market in India.
- ❖ This marks IFC's first blue investment in the country and the largest green financing by the institution.

- ❖ Blue loans are designated for projects in areas like water and wastewater management, marine plastic reduction, sustainable tourism, and the offshore renewable energy.



Limits on UPI 123 & UPI Lite

- ❖ RBI has announced an increase in transaction limits on UPI123 and UPI Lite.
- ❖ Currently, the per-transaction limit in UPI123Pay is capped at ₹5,000.
- ❖ RBI has decided to enhance the per-transaction limit to ₹10,000.
- ❖ Currently, UPI Lite has a limit of ₹500 per transaction and an overall ₹2,000 per UPI Lite wallet.
- ❖ It was hiked to a per-transaction limit of ₹1,000 and an overall wallet limit of ₹5,000.



All India Rural Financial Inclusion Survey 2021-22

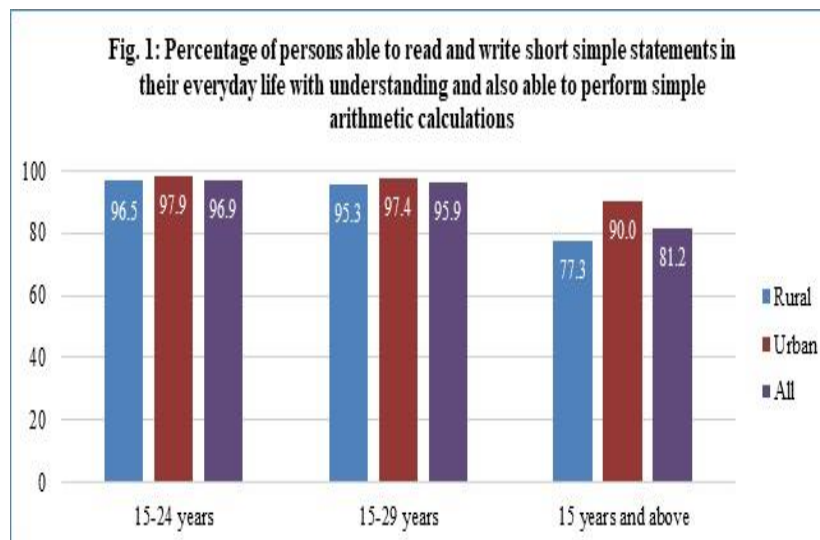
- ❖ This was the latest survey by the National Bank for Agriculture and Rural Development (NABARD).
- ❖ This is NABARD's second survey conducted since 2016-17.
- ❖ The average landholding for farming among farmers in the country decreased from 1.08 hectares in 2016-17 to just 0.74 hectares in 2021-22.

- ❖ This was marking a reduction of about one-third (31 per cent).
- ❖ The average monthly household income of farmers increased from Rs 8,059 in 2016-17 to Rs 12,698 in 2021-22.
- ❖ It was reflecting a 57.6 per cent rise.
- ❖ The rural families spent an average of Rs 6,646 per month in 2016-17, now spend Rs 11,262.
- ❖ It was representing a 69.4 per cent increase in monthly expenses since 2016-17.
- ❖ The number of families taking loans in rural areas has risen from 47.4 per cent to 52 per cent.
- ❖ 23.5 per cent of families have at least one member receiving a pension, up from 18.9 per cent.
- ❖ 80.3 per cent of families are now having at least one insured member, compared to just 25.5 per cent in 2016-17.
- ❖ 51.3 per cent of families reported better financial information, up from 33.9 per cent.
- ❖ The financial savings among rural families rose from Rs 9,104 to Rs 13,209.
- ❖ Around 66 per cent of rural families saved in 2021-22, compared to 50.6 per cent in 2016-17.

AVERAGE MONTHLY HOUSEHOLD INCOME* BY SOURCE OF INCOME IN THE AGRICULTURAL YEAR 2021-22 (₹)			
	Agricultural Households	Non-Agricultural Households	All Households
All Sources Combined	13,661 (100)	11,438 (100)	12,698 (100)
Cultivation	4,476 (33)	-39 (0)	2,521 (20)
Livestock Rearing	1,677 (12)	-8 (0)	947 (7)
Other Enterprises	2,010 (15)	1,809 (16)	1,923 (15)
Wage Labour	2,238 (16)	2,927 (26)	2,536 (20)
Govt./ Pvt. Service	3,150 (23)	6,599 (57)	4,643 (37)
Other Sources	110 (1)	150 (1)	127 (1)

Annual modular survey

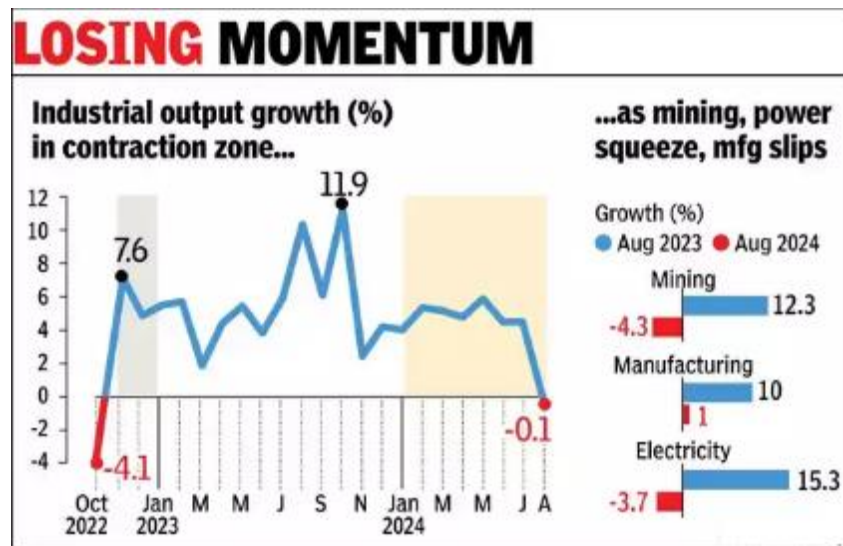
- ❖ The statistics ministry has released a detailed annual modular survey (July 2022-June 2023).
- ❖ The average out-of-pocket medical expenditure per household on hospitalisation during the past 365 days in rural and urban areas has been estimated at Rs 4,129 and Rs 5,290.
- ❖ The average out-of-pocket medical expenses per household for non-hospitalization treatments in the past 30 days were Rs 539 in rural areas and Rs 606 in urban areas.
- ❖ Approximately 96.9% of those in the 15-24 years age group were able to read and write simple statements and able to perform simple arithmetic calculations.
- ❖ In the same age group, the figure was around 97.8% for males and 95.9% for females.
- ❖ 23.3% of those in the 15-24 age group were not in education, employment or training.
- ❖ 95.1% of households had a telephone or mobile connection while 9.9% had computers.
- ❖ About 95.7% of those in 15-24 years age bracket in rural areas can use mobile phones, in urban areas it was 97%.



Industrial output contracts

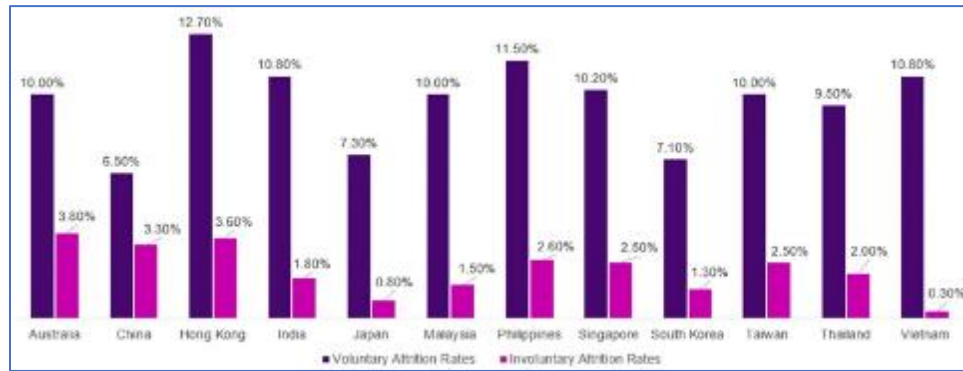
- ❖ India's factory output, as measured by the Index of Industrial Production (IIP), contracted by 0.1 per cent in August for the first time after a gap of 21 months.
- ❖ This data was released by the National Statistical Office (NSO).

- ❖ The overall industrial output had grown by 4.7 per cent in July and 10.9 per cent in August 2023.
- ❖ Mining output has recorded a contraction of 4.3 per cent in August as against a growth of 3.8 per cent in July and 12.3 per cent in the year-ago period.
- ❖ Electricity output also posted a contraction of 3.7 per cent in August compared with 7.9 per cent in July and 15.3 per cent in the year-ago period.
- ❖ Sectorally, as per the IIP data, 11 out of the 23 sectors in the manufacturing registered contraction in August 2024.



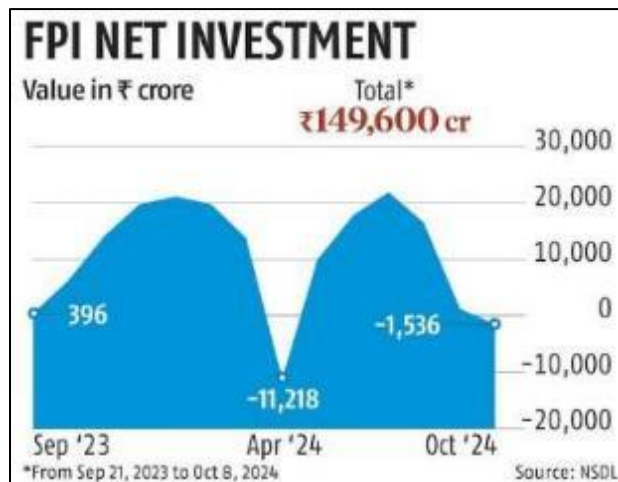
Salary Increase in 2025

- ❖ The median salary increase in India is forecasted to rise by 9.5 per cent in 2025, similar to the 2024 actual salary increase of 9.5%.
- ❖ India continues to be the highest across the region.
- ❖ The others like Vietnam (7.6%), Indonesia (6.5%), the Philippines (5.6%), China (5%) and Thailand (5%) are also projected to maintain a strong salary increase for next year.
- ❖ Almost 28% of companies plan to add headcount in the next 12 months.
- ❖ While 68% companies will maintain their headcount in 2025 as compared to the previous year.
- ❖ The voluntary attrition rates in India have reduced slightly from 11% in 2023 to 10.8% in 2024.



FTSE Russell EMGB index

- ❖ The Fully Accessible Route (FAR) - eligible Indian government bonds will be included in FTSE Emerging Markets Government Bond Index (EMGBI) starting September 2025.
- ❖ Also, the Indian bonds will be included in the regional FTSE Asian Government Bond Index (AGBI) and the FTSE Asian-Pacific Government Bond Index (APGBI).
- ❖ This would be the third global bond index to include Indian bonds after JP Morgan Chase & Co and Bloomberg.
- ❖ All Indian government bonds that are eligible under the FAR programme and meet other index inclusion rules will be added to the index.
- ❖ It is including securities with an original tenor of 14 years and 30-years issued prior to 29 July 2024.



India's Direct Tax Collections – FY 2023/24

- ❖ The Financial Year (FY) 2023-24 has seen a significant increase in the Direct Tax collections, with provisional figures showing net collections at ₹19.58 lakh crore.

- ❖ This represents a 17.70% increase from the ₹16.64 lakh crore collected in FY 2022-23.
- ❖ The Union Budget had initially estimated Direct Tax revenue for FY 2023-24 at ₹18.23 lakh crore.
- ❖ However, this was later revised to ₹19.45 lakh crore.
- ❖ The provisional Direct Tax collections have exceeded these Revised Estimates by 0.67%, and the original Budget Estimates by 7.40%.
- ❖ Before adjusting for refunds, the Gross collection of Direct Taxes for FY 2023-24 stands at ₹23.37 lakh crore.
- ❖ It is marking an 18.48% growth from the ₹19.72 lakh crore collected in FY 2022-23.
- ❖ The Gross Personal Income Tax collection (including STT) for FY 2023-24 is ₹12.01 lakh crore.
- ❖ This is a 24.26% increase from the previous year's ₹9.67 lakh crore.

Fiscal year	Direct tax to GDP ratio		Cost of direct tax collection	
	Tax-GDP ratio (in %)	Collection (in Rs cr)	Expenditure (in Rs cr)	Cost of collection (in %)
2014-15	5.55%	6,95,792	4,101	0.59%
2015-16	5.47%	7,41,945	4,593	0.61%
2016-17	5.53%	8,49,713	5,578	0.66%
2017-18	5.86%	10,02,738	6,087	0.61%
2018-19	6.02%	11,37,718	7,074	0.62%
2019-20	5.23%	10,50,681	6,952	0.66%
2020-21	4.78%	9,47,176	7,223	0.76%
2021-22	5.97%	14,12,422	7,479	0.53%
2022-23	6.11%	16,63,686	8,452	0.51%
2023-24	6.64%	19,60,166	8,634	0.44%

INR denominated Line of Credit

- ❖ India has extended a new Line of Credit worth Rs 487.60 crore to the Government of Mauritius.
- ❖ This marks the first-ever rupee-denominated Line of Credit extended by India to any country.

- ❖ This is provided for project financing under the Indian Development and Economic Assistance Scheme (IDEAS).
- ❖ The IDEAS initiative supports the developmental projects in partner countries through concessional loans.
- ❖ The project will be financed by the State Bank of India on concessional terms.



Guidelines for import of seaweeds 2024

- ❖ The Centre notified the 'Guidelines for Import of Live Seaweeds into India'.
- ❖ It aims to facilitate the import of high-quality seed materials or germplasm to help the coastal societies to find better livelihood opportunities.
- ❖ As per the new guidelines, to import live seaweed, the importers will have to submit a detailed application to the Department of Fisheries.
- ❖ It will be reviewed by the National Committee on Introduction of Exotic Aquatic Species into Indian Waters.
- ❖ Upon approval, the Department will issue an import permit within four weeks, facilitating the import of high-quality seaweed germplasm.



SCIENCE AND TECHNOLOGY

IISc Neuromorphic Computing

- ❖ Scientists at the IISc, Bengaluru developed a technology that could change the data processing methods.
- ❖ They have developed a type of semiconductor device called Memristor by using a metal-organic film rather than conventional silicon-based technology.
- ❖ This material enables the Memristor to mimic the way the biological brain processes information using networks of neurons and synapses.
- ❖ The Memristor, when integrated with a conventional digital computer, enhances its energy and speed performance by hundreds of times.
- ❖ Neuromorphic computing is a field in which computers are designed and modelled to mimic the structure and function of the human brain.

Shahed-136B drone

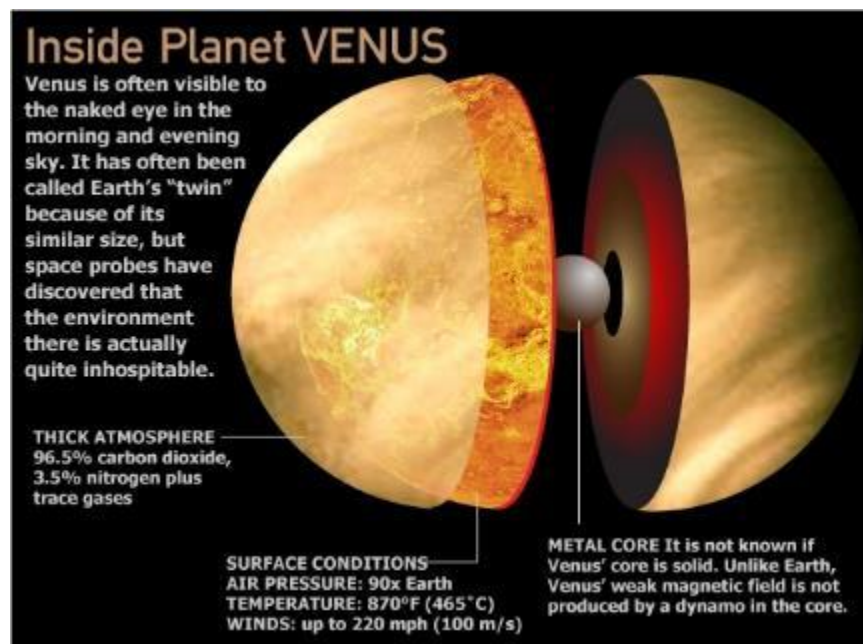
- ❖ Iran for the first time has showcased the Shahed 136B drone and Jihad ballistic missile.
- ❖ The Shahed-136B is the new one-way attack drone which is also known as a 'kamikaze' drone.
- ❖ With a new feature, it has an operational range of more than 4,000 kilometres (2,500 miles).
- ❖ "Jihad" is the single-stage liquid-fuel ballistic missile with a high-explosive detachable warhead has a range of 1,000 km.



India's First Mission to Venus

- ❖ The Union Cabinet recently approved India's first mission to Venus that ISRO aims to launch in March 2028.

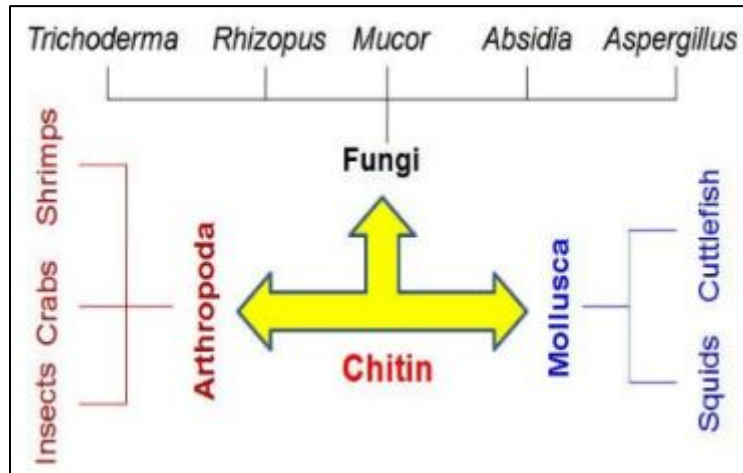
- ❖ This will be the country's second interplanetary mission after the Mars Orbiter Mission launched in 2013.
- ❖ It aims to examine the surface and sub-surface of Venus, its atmosphere, its ionosphere, and its interaction with the Sun.
- ❖ Venus is often called Earth's twin because it is similar in mass, density, and size.
- ❖ Therefore, studying Venus may offer scientists clues about the evolution of Earth.
- ❖ Notably, Venus is thought to have had water at some point in its history but has now become a dry and dusty planet.
- ❖ It has an extremely high surface temperature of around 462 degrees Celsius, even hotter than Mercury.
- ❖ The atmospheric pressure on Venus is much higher than on Earth.
- ❖ 96.5% of the atmosphere of Venus is made up of carbon dioxide and there are sulphuric acid clouds on the planet.
- ❖ Venus rotates very slowly on its axis as compared to Earth and one rotation of Venus lasts around 243 Earth days.



New Drug delivery method

- ❖ The Scientists have used a chitin synthesis fungicide, Nikkomycin, produced by the bacterial *Streptomyces* spp. to develop Nikkomycin loaded polymeric nanoparticles.
- ❖ Chitin is the chief component of fungal cell walls and is absent in the human body.

- ❖ The drug loaded nanoparticles were found to disrupt the growth of *Aspergillus* spp and found effective against fungal infection known as Aspergillosis.
- ❖ The nano formulation developed was found to be free of cytotoxic and hemolytic effects.
- ❖ The use of polymeric nanoparticles is the most advanced method of drug delivery.



Spiral galaxy - Caldwell 45



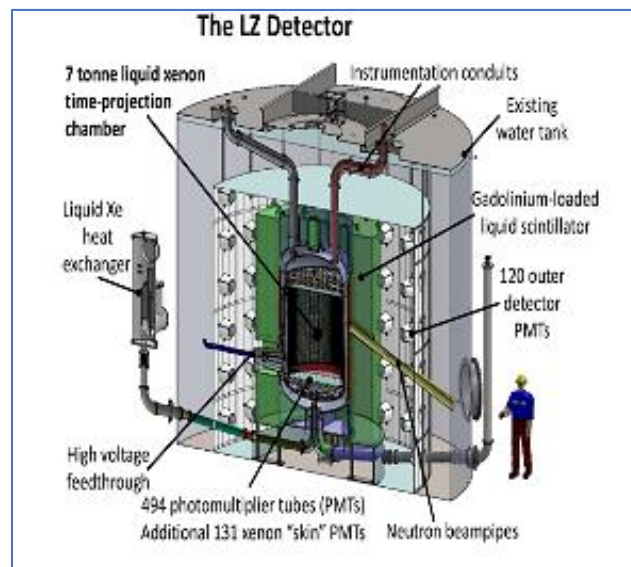
- ❖ NASA's Hubble Space Telescope has shared a video of a Spiral galaxy known as Caldwell 45, or NGC 5248.
- ❖ The spiral galaxy is located 59 million light-years away from Earth.
- ❖ It is home to starburst regions – places where stars form at a much higher rate than usual.

MAPCIS Crater



- ❖ Australian researchers have uncovered evidence of a massive impact crater of Earth's geological history.
- ❖ The newly discovered structure, named MAPCIS (Massive Australian Precambrian-Cambrian Impact Structure).
- ❖ It spans around 600 kilometers across central Australia.
- ❖ The impact may have occurred at the end of the Ediacaran period, within the Neoproterozoic Era, roughly 538.8 million to 1 billion years ago.

Neutrino Fog

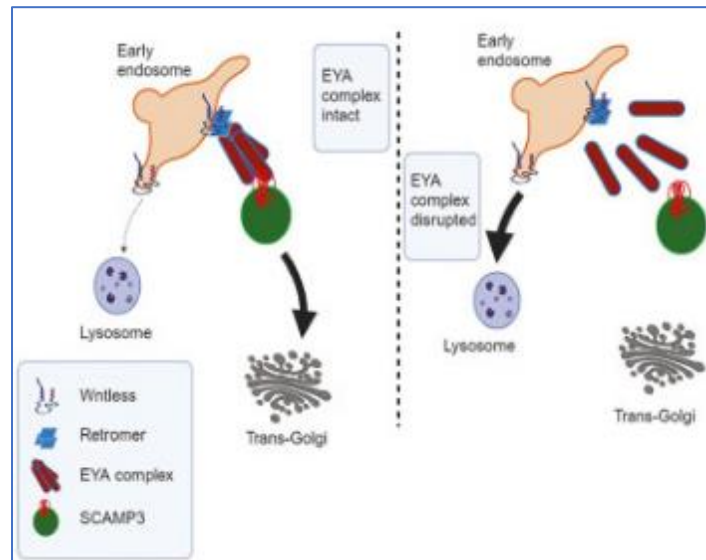


- ❖ The LUX-ZEPLIN (LZ) experiment revealed that as we continue to push the boundaries of dark matter detection, the issue of neutrino fog becomes increasingly significant.
- ❖ The LUX-ZEPLIN (LZ) experiment is a cutting-edge dark matter detection project in South Dakota, USA.

- ❖ Neutrinos, often referred to as “ghost particles,” are the subatomic particles with nearly zero mass and no electric charge.
- ❖ Neutrino Fog are the interference caused by neutrinos in dark matter detection experiments.

New Mechanism for Protein Regulation in Cells

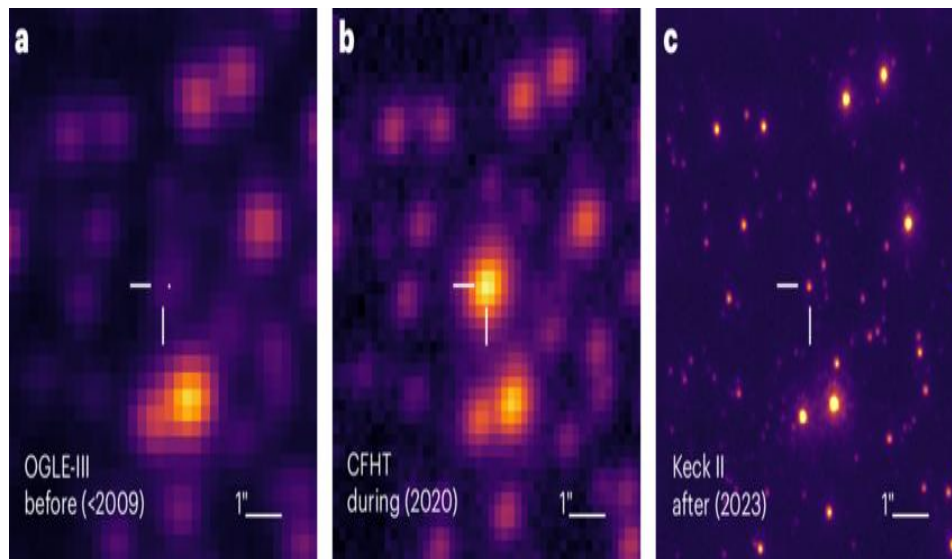
- ❖ Scientists have discovered a new process involving the Wntless (WLS) protein.
- ❖ It is crucial for the development of organs in animals with backbones (vertebrates).
- ❖ This discovery helps explain how proteins move inside cells.
- ❖ WLS is a protein found in cell membranes and is important for releasing another protein called Wnt3a.
- ❖ Wnt3a helps with the signalling that guides the early stages of organism development.
- ❖ WLS ensures that proteins go to the right places in the cell, helping organs like the intestines, lungs, inner ear, and eyes develop properly.



Earth's Future

- ❖ Eight billion years into the future, astronomers have discovered what may be a future Earth.
- ❖ Astronomers have got a unique look at what our planet might look like in eight billion years.

- ❖ The planet, known as KMT-2020-BLG-0414, is a rocky world 4,000 lightyears away from Earth that orbits a white dwarf, which is the burning remnant of a star.
- ❖ In 5 billion years, our sun is predicted to change into a white dwarf.
- ❖ But before then, Mercury, Venus, and maybe even Earth and Mars will be consumed by our sun as it accelerates outward into a red giant.
- ❖ Humans may migrate to the icy moons Europa and Enceladus, which will become water worlds as the sun becomes a red giant.



New FAST Core Array

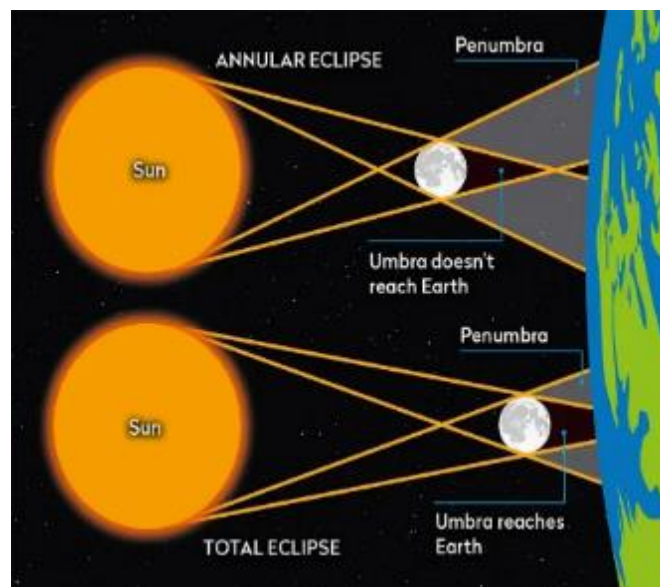


- ❖ The Five-hundred-meter Aperture Spherical Telescope (FAST) is situated in karst region in Guizhou, southwest China.
- ❖ Now a second phase will add 24 new moveable radio telescopes, each with a diameter of 131 feet (40 meters).

- ❖ This expansion is named the FAST Core Array.
- ❖ It aims to make use of the "quiet" electromagnetic environment that exists within a 3-mile (5 kilometers) radius around the telescope.

Annular solar eclipse 2024

- ❖ An annular solar eclipse was occurred recently, following the partial lunar eclipse on September 17.
- ❖ Only Easter Island and a small area near the southern tip of Chile and Argentina witnessed an annular eclipse.
- ❖ An annular eclipse happens when the moon is too far away from the Earth to completely blot out the sun.
- ❖ Thus, it creating a dark silhouette surrounded by a bright ring of light called an antumbra, or a "ring of fire".
- ❖ The next such eclipse, will be visible on March 29, across Europe, Asia, Africa and North and South America.
- ❖ The second solar eclipse will be seen on September 21 in Australia and Antarctica.



C/2023 A3 (Tsuchinshan–Atlas)

- ❖ Bengaluru witnessed the Comet C/2023 A3 (Tsuchinshan–ATLAS) passing above the city at a close range.
- ❖ The Comet C/2023 A3 was first discovered by China's Purple Mountain Observatory.

- ❖ C/2023 A3 is a non-periodic comet.
- ❖ This means there is no set timeline on when the comet will appear.
- ❖ The comet is revisiting our solar system almost after 80,000 years.
- ❖ It will travel at some 129.6 million kilometres away from Earth.
- ❖ It is said to be a part of the Sextans constellation.
- ❖ The Halley comet is the periodic comet, which appears once every 75 years.

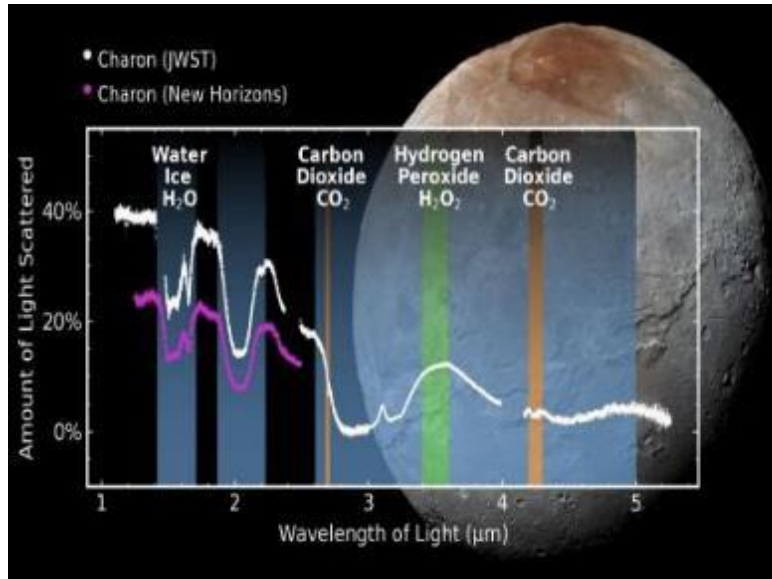


Map of Sun's rotation

- ❖ Indian astronomers have mapped the variation in the Sun's rotation speed from its equator to its poles for the first time.
- ❖ This was done by using 100 years of daily solar observations from the Kodaikanal Solar Observatory.
- ❖ This work provides a deeper understanding of the Sun's inner workings, crucial for predicting its activity and impact on Earth.
- ❖ The Sun experiences differential rotation, meaning different parts of it rotate at different speeds.
- ❖ The equator completes one full rotation in about 25 days, while the poles take about 35 days.

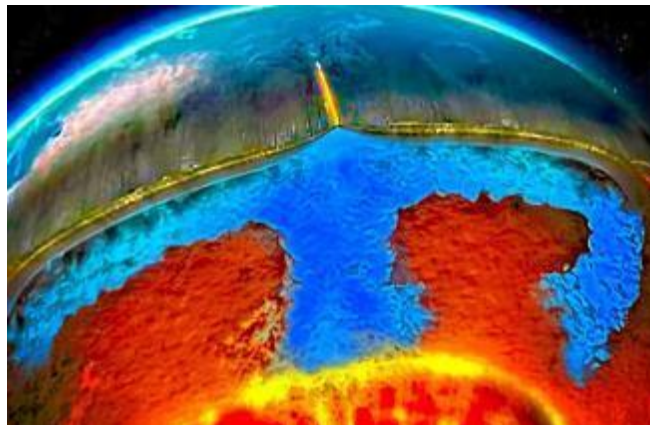


CO₂ and H₂O₂ in 'Charon'



- ❖ The James Webb Space Telescope has detected carbon dioxide and hydrogen peroxide on Pluto's largest moon Charon.
- ❖ The Charon's surface consists of the crystalline water ice, ammonia, and other organic materials.
- ❖ Charon with a diameter of approximately 1200 kilometres which is half the size of Pluto.

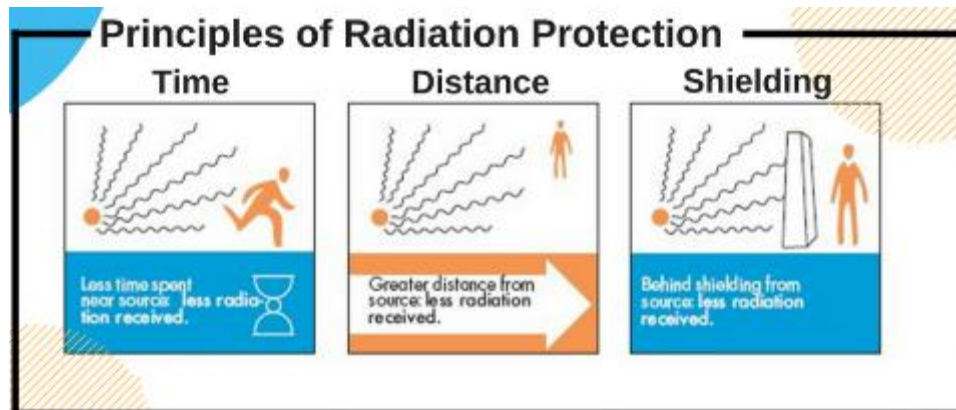
Sixth Ocean Hidden in Earth's Mantle



- ❖ Scientists have discovered a sixth ocean at approximately 700 kilometres beneath the Earth's surface.
- ❖ This ocean is three times larger than all surface oceans combined.

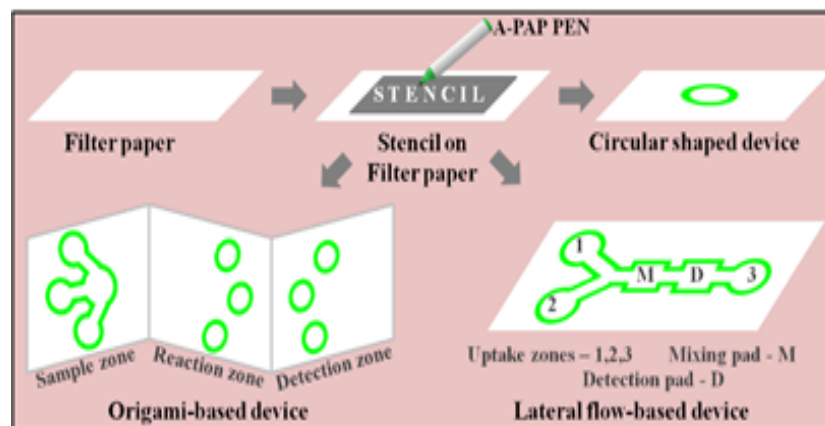
- ❖ This pool of water is trapped within a blue rock formation known as ringwoodite, situated deep within the Earth's mantle.
- ❖ However, the water reservoir is not an ocean in the traditional sense.
- ❖ They are water molecules trapped within the crystal structure of ringwoodite.

Portable X-Ray Protection Barrier



- ❖ Researchers have collaborated to devise a portable X-ray protection barrier and examination box.
- ❖ The prototype of the biomedical device, used for x-ray-based histopathology analysis of tissue samples to diagnose diseases.
- ❖ The shield effectively brought down radiation levels from some millihertz to negligible microhertz during tests.

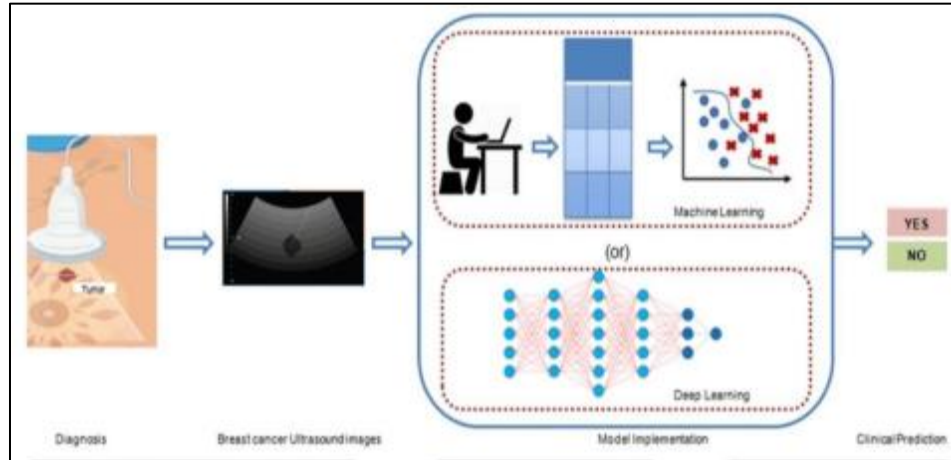
Advanced PAP pen



- ❖ Scientists have developed a cost-effective technique for fabricating paper-based devices using an Advanced PAP (A-PAP) pen.

- ❖ They have fabricated two-dimensional (2D) paper-based devices for chemical detection of heavy metal and nitrite.
- ❖ The paper-based devices fabricated are distinguished by rapid, simple, and cost-effective fabrication.

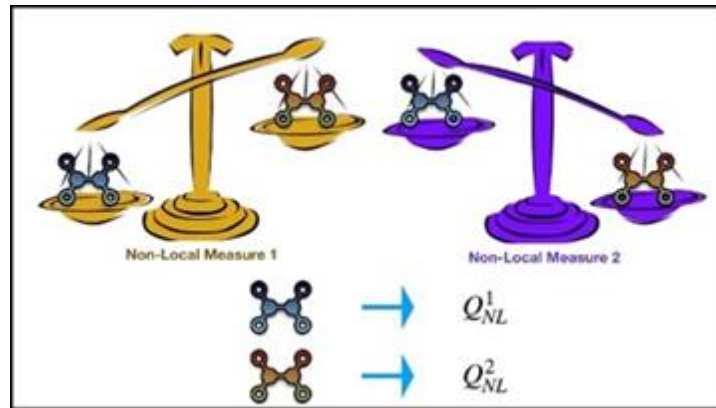
Cancer detection with sound waves



- ❖ The method uses ultrasound to turn a small part of our body's tissue into droplets that are released into the blood.
- ❖ These bubbles contain the molecules like RNA, DNA, and proteins that allow the scientists to identify particular types of cancer.
- ❖ The high-energy ultrasound can break off a small piece of cancerous tissue into droplets and release their contents into the bloodstream.
- ❖ This version of the test would cost a hundred-times less, around \$100 (Rs 8,400).

Quantum nonlocality

- ❖ The Scientists have demonstrated that a universal standard for measuring and quantifying non-local quantum correlations is not possible.
- ❖ Quantum nonlocality describes a strange connection between distant physical objects, one that doesn't allow for faster-than-light communication.
- ❖ This new research broadens the potential applications of quantum non-local correlations.
- ❖ These are already used in secure communication, random number generation, and cryptographic key creation.
- ❖ Quantum nonlocality used as a key resource for secure communication, random number certification, and cryptographic key generation.



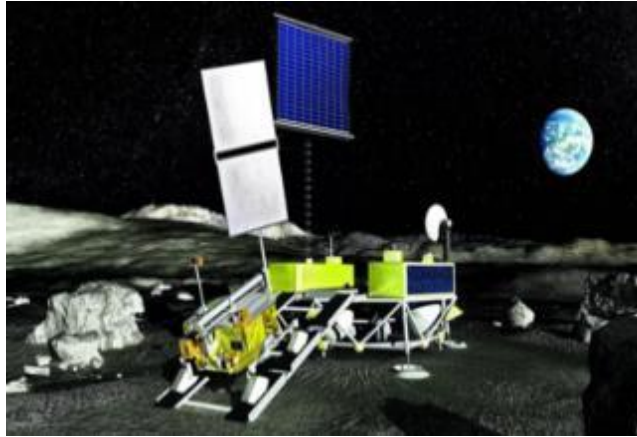
PSLV-37 mission Re-entry



- ❖ ISRO's upper stage of the Polar Satellite Launch Vehicle C-37 (PSLV C-37 mission) re-entered the Earth's atmosphere successfully.
- ❖ The PSLV-C37 mission was launched on February 15, 2017 with Cartosat-2D as the main payload along with another 103 satellites as co-passengers.
- ❖ The space agency has created history as it was the first mission to launch 104 satellites with a single vehicle.
- ❖ The atmospheric re-entry of the rocket body within eight years of its launch is fully compliant with the international debris mitigation guidelines.
- ❖ The guideline of Inter-Agency Space Debris Coordination Committee (IADC) recommends limiting the post-mission orbital life of a defunct object in Low-Earth orbit (LEO) to 25 years.

Lunar Polar Exploration Mission

- ❖ The National Space Commission, the apex body that decides on space missions, cleared the fifth lunar mission — the Lunar Polar Exploration Mission or LupeX.
- ❖ This will be jointly implemented by India and Japan.
- ❖ It is part of India's lunar series that eventually aims to send an Indian to the Moon and bring her/him back.
- ❖ Both Chandrayaan-4 and LupeX will happen parallel to each other.



MACE Project

- ❖ India inaugurated Asia's largest imaging Cherenkov telescope at Ladakh's Hanle.
- ❖ It is situated at an altitude of almost 4,300 metres.
- ❖ The Major Atmospheric Cherenkov Experiment (MACE) observatory is also the world's highest telescope of its kind.
- ❖ Gamma rays do not reach Earth's surface because the atmosphere absorbs them.
- ❖ However, they create high-energy particles that emit Cherenkov radiation, similar to a sonic boom, as they travel faster than light through the atmosphere.
- ❖ MACE's mirrors and cameras capture this radiation, which is then traced back to its cosmic source.

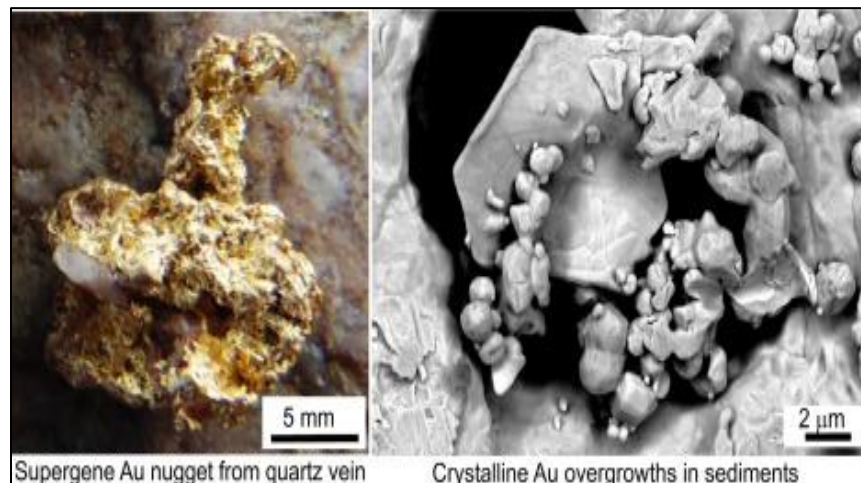
'Refreeze' Arctic Sea

- ❖ An innovative way is being created by scientists which will help them in "growing" ice and "refreezing" the Arctic Sea.
- ❖ Pumps will be used by the engineers to cover ice with seawater, which is expected to freeze in winter and thicken the ice layer.
- ❖ This will ensure that the ice lasts longer during the summer.

- ❖ This is the first time done successfully with the help of hydrogen.
- ❖ Every decade, the Arctic Ocean is losing nearly 13 per cent of its ice.



Gold nuggets in orogenic quartz veins



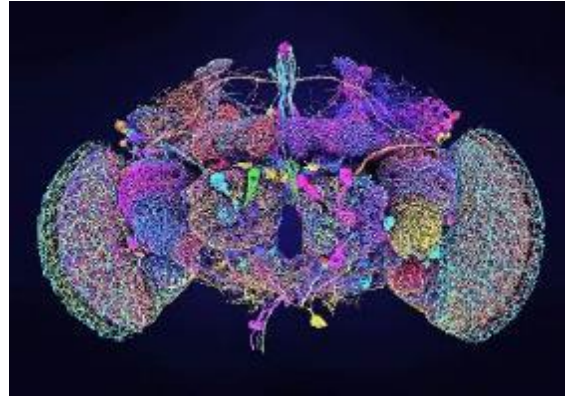
Supergene Au nugget from quartz vein

Crystalline Au overgrowths in sediments

- ❖ The Researchers discovered that the piezo catalytic effect of quartz under seismic stress causes the accumulation of gold in quartz veins.
- ❖ Orogenic gold systems are commonly found in mountainous regions where large-scale geological processes, such as the collision of tectonic plates, have occurred.
- ❖ The Large gold nuggets are often found in orogenic quartz veins formed during the tectonic processes that create mountains.
- ❖ These nuggets form because, during earthquakes, the stress on quartz crystals causes a reaction that deposits gold on their surfaces.
- ❖ This process happens repeatedly leading to the accumulation of gold nuggets.

First complete map of brain

- ❖ Researchers released the first complete wiring diagram of all 139,255 neurons in an adult fly brain — an animal capable of both walking and seeing.
- ❖ Previous studies have mapped smaller brain systems like fruit fly larva with 3,016 neurons, or the nematode worm with 302 neurons.
- ❖ Fruit flies have about 140,000 neurons, which is a tiny number compared to the 86 billion in the human brain.



Artemis Mission 2035

- ❖ NASA is planning to send humans to our closest extraterrestrial neighbour – Mars by 2035.
- ❖ The trip to Mars is expected to take anywhere between 6 to 7 months and will cover a distance of about 402 million kilometers.
- ❖ Mars was formed 4.6 billion years ago, the same time our solar system came into existence.
- ❖ This red planet was very Earth-like in the sense it had an abundance of liquid water and a denser atmosphere.




TDP1 enzyme

The first step towards targeted chemotherapy

IACS researchers have discovered a new target for killing cancer cells

- The new target that has been discovered is used by cancer cells to regulate DNA repair during cell division
- Cancer cells can develop resistance to treatment by using intrinsic DNA repair mechanism
- A combinatorial targeting of two key molecules — the CDK1 protein and the TDP1 enzyme — may lead to novel anti-cancer therapeutics
- Currently, anti-cancer drugs target a molecule (Top1) involved in DNA replication and transcription
- While drugs that target Top1 can disrupt its activity leading to the death of cancer cells, cancer cells can activate their repair mechanisms to counteract the drug effects
- Targeting another protein (CDK1) that disrupts the Top1-mediated repair process can potentially kill the cancer cells



IACS researchers are currently using mouse models to test the combination drug therapies using in vivo tumours

- Combining CDK1 inhibitors with Top1 inhibitors can prove lethal for cancer cells

- ❖ The Scientists from the Indian Association for the Cultivation of Science (IACS), Kolkata, have identified a new therapeutic target by activating a DNA repair enzyme called Tyrosyl-DNA phosphodiesterase 1 (TDP1).
- ❖ Current anticancer drugs like Camptothecin, Topotecan, and Irinotecan focus on inhibiting the enzyme Topoisomerase 1 (Top1).
- ❖ Cancer cells often develop resistance to these drugs, leading the researchers to explore alternative treatment strategies.
- ❖ The researchers have discovered that cancer cells can survive Top1-targeted chemotherapy by activating TDP1, which helps repair damaged DNA during cell division.
- ❖ This process allows the cancer cells to counteract the effects of chemotherapy and continue proliferating.

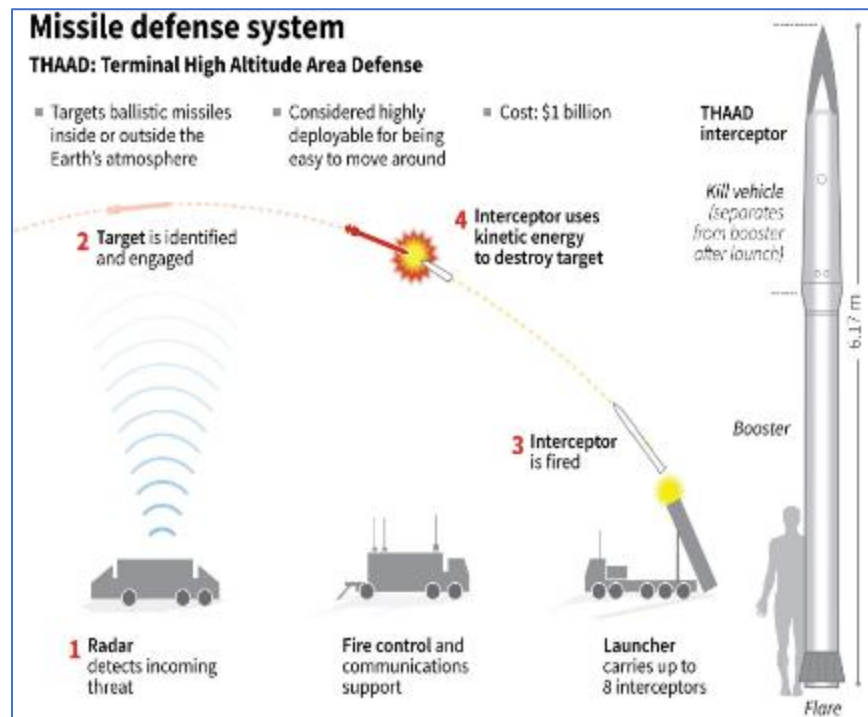
Dragon Drones

- ❖ A deadly new weapon has used in the Russia-Ukraine war.
- ❖ Dragon drones essentially release a substance called thermite - a mixture of aluminium and iron oxide.
- ❖ When it ignited, thermite triggers a self-sustaining reaction that is quite difficult to extinguish.
- ❖ It can burn through almost anything, from clothes to trees to military-grade vehicles, and can even burn underwater.

- ❖ During World War I, German zeppelins dropped thermite-laden bombs.
- ❖ The Allies dropped some 30 million 4-pound thermite bombs on Germany and another 10 million on Japan during World War II.
- ❖ The use of thermite in war is not prohibited under international law.



THAAD Missile Defense System

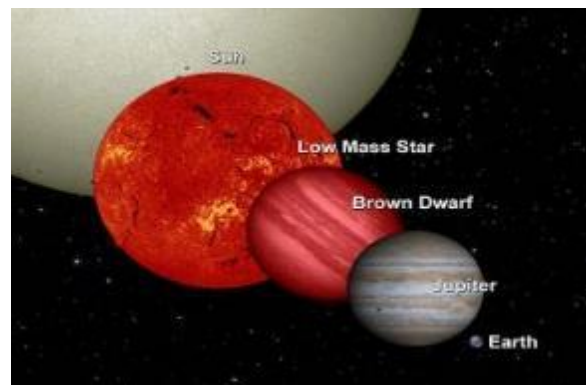


- ❖ The USA is sent its advanced missile defence system THAAD, along with troops to operate it, to Israel.
- ❖ THAAD stands for Terminal High-Altitude Area Defence.

- ❖ The battery is used to intercept and destroy enemy missiles.
- ❖ A THAAD battery consists of 95 soldiers, six truck-mounted launchers, 48 interceptors (eight per launcher), radar surveillance and radar.
- ❖ It is rapidly deployable capability against short-range (up to 1,000 km), medium-range (1,000–3,000 km).
- ❖ It has limited intermediate-range (3,000–5,000 km) ballistic missile threats inside or outside the atmosphere during their final (terminal) phase of flight.

Mysterious Brown Dwarfs

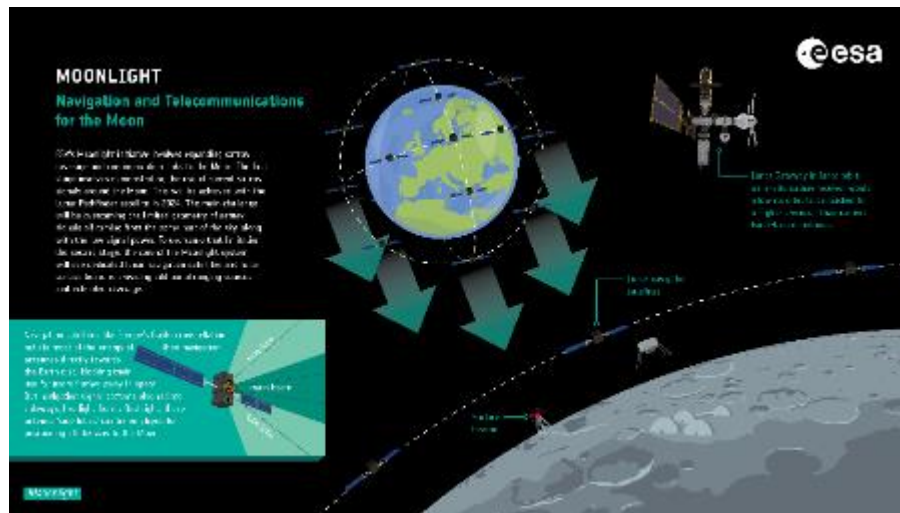
- ❖ In 1995, researchers observed a brown dwarf orbiting Gliese 229 – a red dwarf star located about 19 light-years from Earth.
- ❖ The brown dwarf names Gliese 229B was too dim for its mass.
- ❖ Its mass to be about 70 Jupiter masses, it should have been brighter than what telescopes had observed.
- ❖ Scientists suspected Gliese 229 B might be twins.
- ❖ The recent research results showed that Gliese 229 B consists of two brown dwarfs (Gliese 229 Ba and Gliese 229 Bb) about 38 and 34 times the mass of Jupiter.
- ❖ They orbit each other with a period of 12 days and a separation of 16 times the distance between Earth and the Moon.
- ❖ The observed brightness levels also match what is expected for two small brown dwarfs in this mass range.



Moonlight program

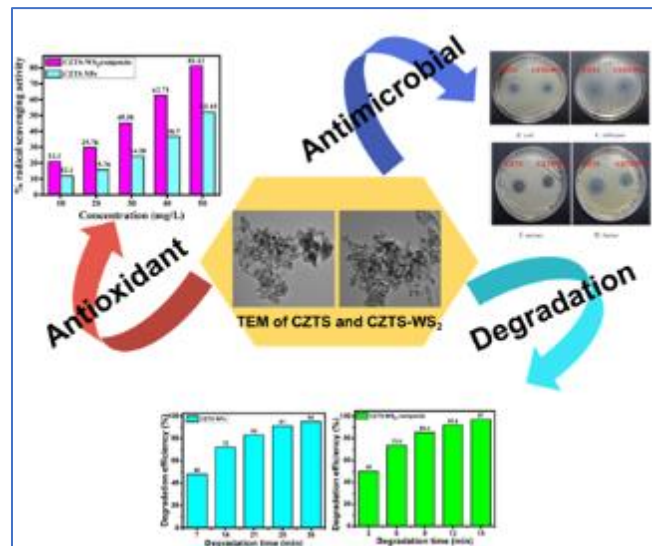
- ❖ The European Space Agency (ESA) at the International Astronautical Congress, launched its Moonlight Lunar Communications and Navigation Services (LCNS) program.

- ❖ It aims to offer critical support for over 400 moon missions planned by space agencies and private companies in the next 20 years.
- ❖ The programme will have a constellation of about five lunar satellites that will allow accurate autonomous landings, high-speed communication, and surface mobility.
- ❖ These satellites will reportedly enable data transfer over 2,50,000 miles or 4,00,000 kilometres between the Earth and the Moon.
- ❖ Europe reportedly also has plans to land its Argonaut spacecraft on the moon by 2031.



New photocatalyst

- ❖ The Scientists have developed an efficient photocatalyst that can degrade in sulfamethoxazole.
- ❖ It is a broad-spectrum antibiotic to less hazardous chemicals and reduce health and environmental concerns associated with antibiotic contamination.
- ❖ The Antibiotic contamination has several adverse effects, including the antibiotic resistance, ecological impact, human health concerns, etc.
- ❖ The Scientists have synthesized copper zinc tin sulfide $\text{Cu}_2\text{ZnSnS}_4$ (CZTS) nanoparticles (NPs) and copper zinc tin sulfide - tungsten disulfide CZTS-WS₂ composite.
- ❖ Broad-spectrum antibiotics like sulfamethoxazole (SMX) have long been used to treat human illnesses like urinary and respiratory tract infections.
- ❖ However, more than 54 % of SMX was released into the environment along with the faeces and urine of the patients.



X-band radar on Wayanad

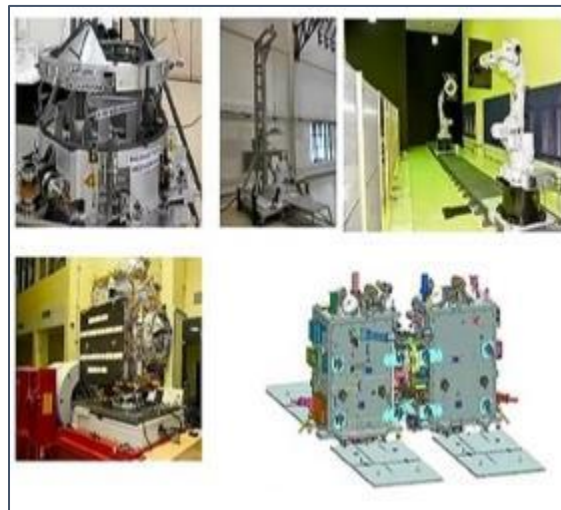


- ❖ The Union Ministry of Earth Sciences approved an X-band radar to be installed in Kerala's Wayanad district.
- ❖ The device uses radio waves to determine the distance, velocity, and physical characteristics of objects around the device.
- ❖ The Doppler radar relies on Rayleigh scattering, when the scatterer is much smaller than the wavelength of the radiation.
- ❖ An X-band radar is radar that emits radiation in the X-band of the electromagnetic spectrum: 8-12 GHz, corresponding to wavelengths of around 2-4 cm.
- ❖ The smaller wavelengths allow the radar to produce images of higher resolution.
- ❖ X-band radars have a relatively shorter range.

- ❖ The new radar is expected to be able to monitor the movements of particles, such as soil, to inform landslide warnings.
- ❖ The first indigenously designed and manufactured X-band storm detection radar was installed in 1970 in New Delhi.

SPADEX Docking Mission

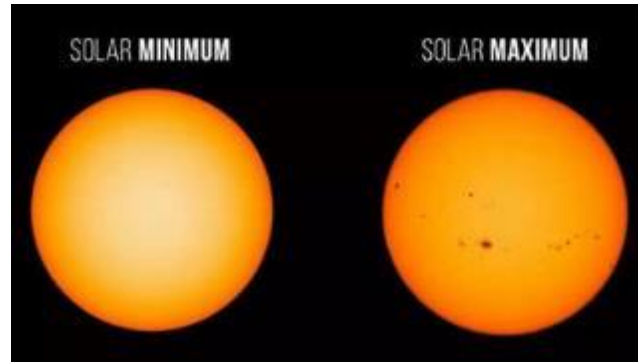
- ❖ ISRO got two 400kg satellites that are part of a crucial upcoming mission known as SPADEX – Space Docking Experiment.
- ❖ These satellites will be travelling at around 28,000 kmph and precisely align themselves in a manner where they can perform a 'space handshake' and dock to form a single orbiting entity.
- ❖ Ananth Technologies Private Limited (ATL) has completed the integration of two 400kg satellites for ISRO.
- ❖ This is the first time that ISRO is getting their satellites completely assembled, integrated and tested by the Indian private industry at a private facility.



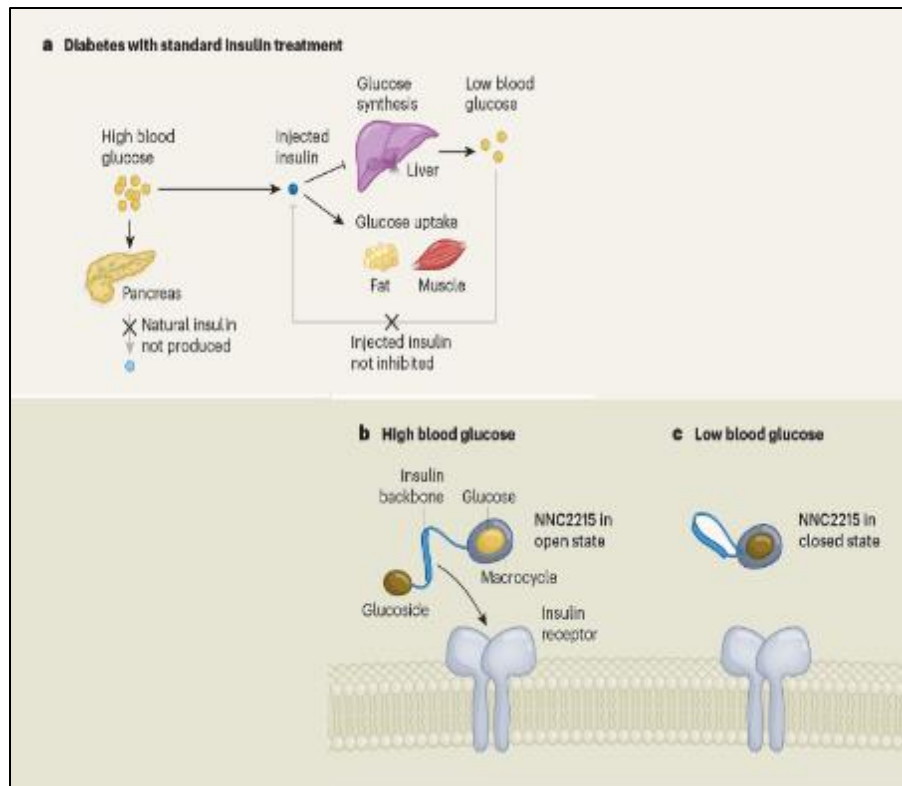
Solar Maximum 2024

- ❖ The Sun has now entered its "solar maximum period" in the current solar cycle.
- ❖ The solar maximum is a phase characterised by a significant rise in sunspots and solar phenomena.
- ❖ The solar cycle represents the natural fluctuation of the Sun as it moves between periods of low and high activity.
- ❖ Approximately every 11 years, at the peak of this cycle, the Sun's magnetic poles flip—similar to the North and South Poles on Earth swapping positions every decade.

- ❖ In the solar maximum phase, the Sun is capable of producing massive explosions of light, energy, and solar radiation.
- ❖ The solar emissions interact with Earth's magnetic field, resulting in geomagnetic storms.



Smart Insulin for Diabetes

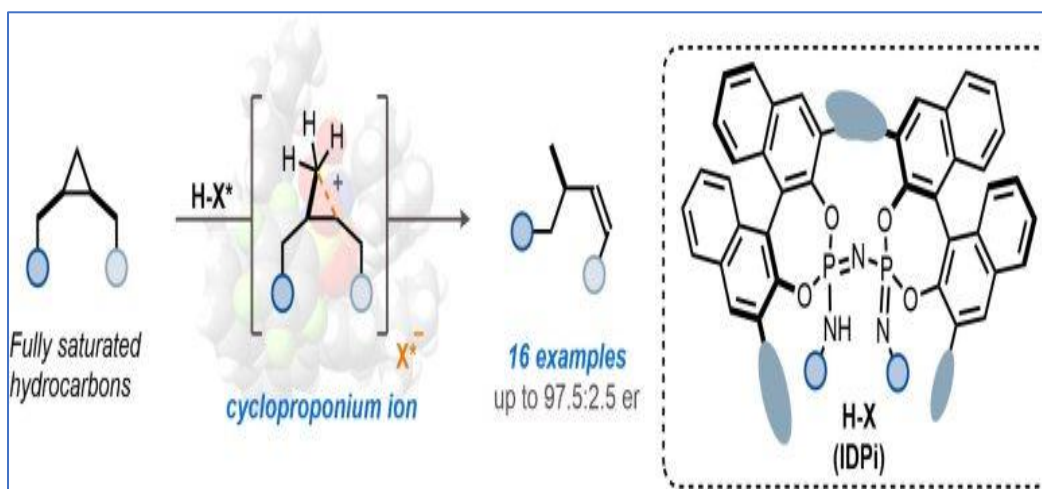


- ❖ Scientists have developed the “holy grail” diabetes treatments - a “smart” insulin that responds in real time to fluctuations in one’s blood sugar level.
- ❖ The newly developed NNC2215 is effective as human insulin at lowering blood glucose in rats and pigs.

- ❖ The engineered insulin requires a significant glucose spike to be activated, and once it is activated, there is a sudden rush of insulin in the system.
- ❖ Type 1 diabetes, which often starts in childhood, occurs when the pancreas does not produce insulin (or enough insulin).
- ❖ Type 2 diabetes sees the cells of the body develop resistance to insulin, meaning greater amounts are required than what is produced by the pancreas.

Alkanes - chiral Brønsted acids

- ❖ Researchers have developed a novel method to activate alkanes using confined chiral Brønsted acids.
- ❖ It is significantly enhancing the efficiency and selectivity of chemical reactions.
- ❖ Alkanes are organic compounds that consist entirely of single-bonded carbon and hydrogen atoms and lack any other functional groups.
- ❖ They are also relatively inert biologically and are not often involved in the chemistry of living organisms.
- ❖ Alkanes do, however, react with oxygen, halogens, and a few other substances under appropriate conditions.
- ❖ Reaction with oxygen occurs during combustion in an engine or furnace when an alkane is used as a fuel.

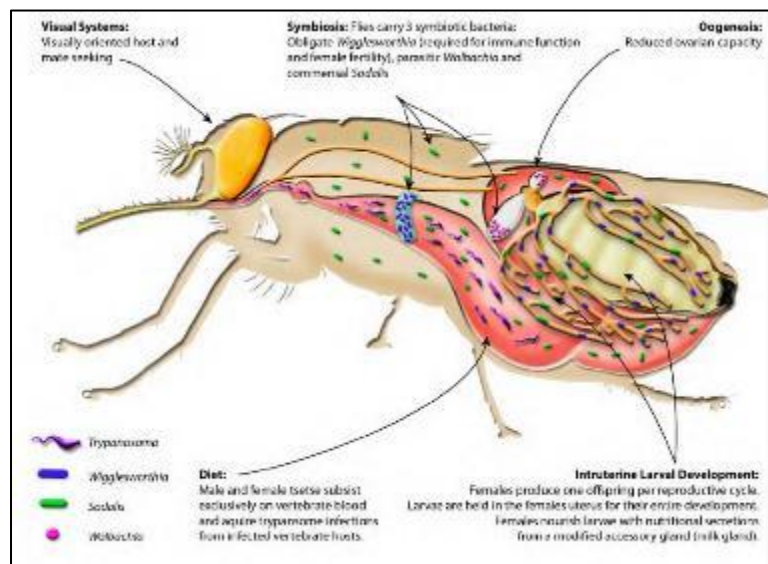


ENVIRONMENT

New species of invasive flatworm

- ❖ A new species of invasive flatworm has been discovered in the United States and has been found in several states in the south.
- ❖ The species, named *Amaga pseudobama*, was discovered by researchers and first spotted in 2020 in North Carolina.
- ❖ It is thought to be native to South America.
- ❖ Later they found that this flatworm species was a completely different species.
- ❖ Terrestrial flatworms are known to kill other invertebrates, especially other native worms, snails, and slugs.

Tsetse fly



- ❖ Tsetse flies are present in 34 African countries, according to a new atlas published by Food and Agriculture Organization of the United Nations (FAO).
- ❖ Tsetse flies (genus *Glossina*) transmit trypanosomes.
- ❖ Trypanosomes are unicellular parasites that cause sleeping sickness in humans.
- ❖ The parasites have a significant impact on livestock in Africa.

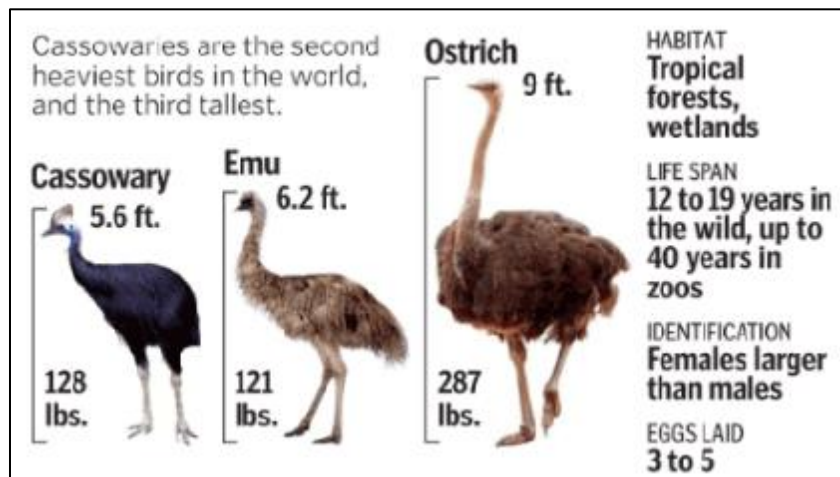
New species of ghost shark

- ❖ Scientists have discovered a new species of ghost shark that lives in deep ocean waters near Australia and New Zealand.

- ❖ The Australasian Narrow-nosed Spookfish, or *Harriotta avia* is closely related to sharks and rays.
- ❖ Ghost sharks like this one are largely confined to the ocean floor, living in depths of up to 2,600m (8,530 feet).



Most Dangerous Bird



- ❖ Cassowaries are native to Northern Australia, New Guinea, and surrounding islands.
- ❖ This species is now at risk of extinction due to increased hunting and rapid habitat loss.
- ❖ Fewer than 5,000 left in the wild in Australia.
- ❖ It is considered the most dangerous bird in the world.
- ❖ The family Casuariidae includes three living cassowary species, all of the genus *Casuarius*.
- ❖ The largest cassowaries can stand as high as six feet and weigh up to 160 pounds.
- ❖ These large birds cannot fly, but their extremely powerful legs propel them at great speeds (31m/Hr).
- ❖ Every year, World Cassowary Day is observed on September 26th.

Indian Wild Ass – Khur

- ❖ The Little Rann of Kutch is home to the wild ass sanctuary, which is the only remaining habitat of the Indian wild ass (*Equus hemionus khur*), locally called khur.
- ❖ About 6,000 of these sandy and brown creatures live in this area.
- ❖ The khur has outlasted predators such as the cheetah and the lion, which were last spotted in this region in the 1850s.
- ❖ The khur have recently overcome a near-extinction event on account of diseases.
- ❖ The viral African Horse sickness, and Surra (caused by the protozoan parasite *Trypanosoma evansi* and spread by biting insects) had decimated many herds.
- ❖ Only a few hundred survivors were estimated in the 1960s.

Erythrism among golden jackals

- ❖ Researchers have recorded the first expression of erythrism in golden jackals, *Canis aureus*, in the Nilgiris.
- ❖ This is an unusual congenital manifestation of reddish skin pigmentation.
- ❖ The record is the first that has been made in the golden jackal's entire distribution range.
- ❖ Erythrism is characterised by a deficit of melanin but an abundance of reddish pigmentation.
- ❖ It results in a lighter and redder appearance compared to the normal phenotype.

Prespa Lake



- ❖ One of Europe's oldest lake - Lake Prespa is slowly dying.
- ❖ The majority of Little Prespa Lake, also known as Small Lake Prespa, sits in Greek territory, with just its southern tip crossing into Albania.
- ❖ It is a smaller cousin of the larger Great Prespa Lake to the north.
- ❖ Of the 450 hectares of Little Prespa Lake in Albania, at least 430 hectares have been transformed into swamps or dried up.

Honey Badger in India

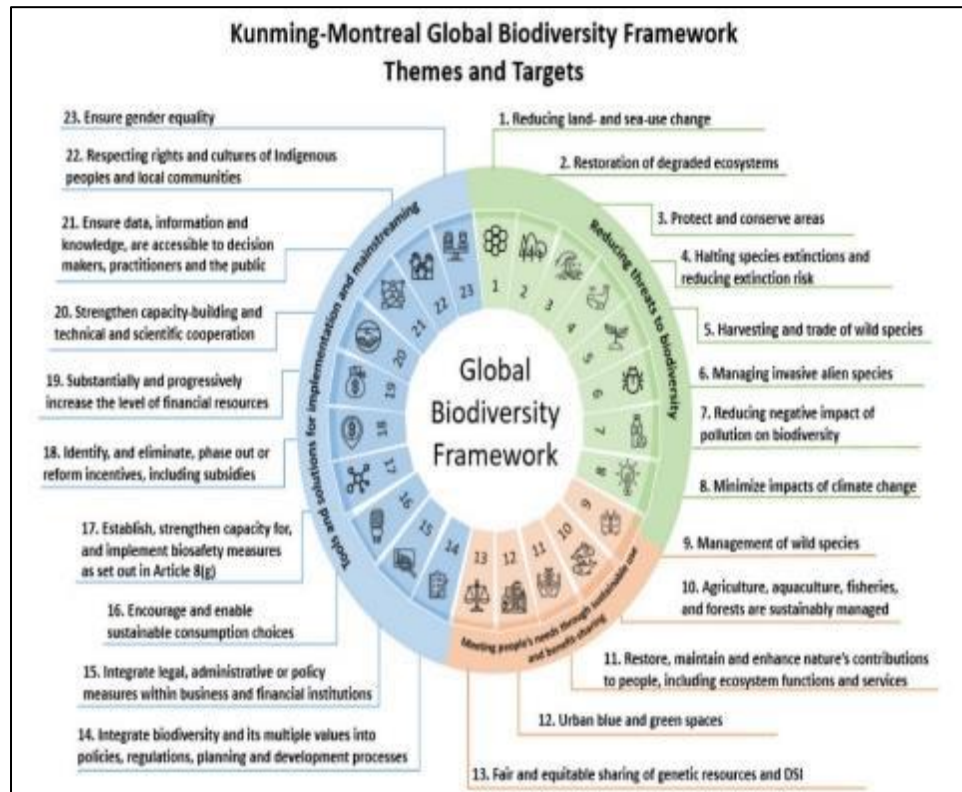


- ❖ A honey badger, also known as the Ratel, has been captured on camera for the first time in the Terai East Forest Division (TEFD) of Uttarakhand.
- ❖ Honey badgers are omnivorous mammals that belong to the weasel family.
- ❖ These nocturnal creatures' diet is diverse, consisting of small animals, fruit and honey.
- ❖ IUCN Red List listed it as "Least Concern".

NBSAP Tracker

- ❖ The National Biodiversity Strategy and Action Plans Tracker (NBSAP), a new tool developed by World Wildlife Fund for Nature (WWF).
- ❖ It is monitoring the progress of countries in developing their NBSAPs that align with the goals of the Global Biodiversity Framework (GBF).
- ❖ Adoption of the Global Biodiversity Framework was a crucial commitment by 196 countries who pledged to "halt and reverse" biodiversity loss by 2030.
- ❖ Only 10 per cent of nations have met their pledges to protect biodiversity, raising significant concerns.
- ❖ Currently, just 20 countries have fully revised their NBSAPs since COP15.
- ❖ Only nine countries, along with the European Union, have submitted these updated plans as of June 2024.

- ❖ This leaves 186 countries lagging behind, including India, which has not yet submitted its report.
- ❖ The Kunming-Montreal Global Biodiversity Framework (GBF) was adopted in 2022.



Status of Elephant in India 2022-23

- ❖ The Environment Ministry has shelved its elephant census report, 'Status of Elephant in India 2022-23'.
- ❖ Data from the unreleased report show a sharp decline in elephant populations in the east-central and southern landscapes.
- ❖ The slide in numbers is especially dramatic in Southern West Bengal (84%), Jharkhand (64%), Odisha (54%), and Kerala (51%).
- ❖ Until 2002, elephants were counted in India by the "total direct count" method.
- ❖ In 2002, the "indirect dung count method" was introduced in the southern states.
- ❖ In 2023, Karnataka, Tamil Nadu, and Kerala used a protocol combining the block count and dung count methods.

ELEPHANT NUMBERS IN INDIA (2012-2023)				
States	2012	2017	2022-23	Change
Tamil Nadu	4015	2761	3136	13.6%
Karnataka	6068	6049	6013	-0.6%
Kerala	6117	5706*	2785	-51.2%
Maha (W Ghat)	4	6	27	350%
Western Ghats	16204	14522	11961	-17.6%

Negro River water Level



- ❖ Negro, One of the Amazon River's main tributaries has dropped to its lowest level ever recorded.
- ❖ The level of the Negro River at the port of Manaus was at 12.66 metres recently.
- ❖ Its normal level is about 21 metres.
- ❖ It is the lowest since measurements started 122 years ago.
- ❖ The Negro River drains about 10 per cent of the Amazon basin and is the world's sixth-largest by water volume.
- ❖ The 2250 Km long river passes through Colombia, Venezuela, and Brazil.

EnviStats India 2024: Environment Accounts

- ❖ The Ministry of Statistics (MoSPI) has compiled and released the 7th consecutive issue of the publication “EnviStats India 2024: Environment Accounts”.
- ❖ Installed capacity of solar energy in India has increased by more than 25 times from 2.82 GW in March 2014 to 73.32 GW in December 2023.

- ❖ India is one of the world's 17 mega diverse nations with around 8% of the world's documented species.
- ❖ India hosts 4 of the 36 globally recognised biodiversity hotspots.
- ❖ There has been around 72% increase in the number and around 16% increase in area for the Total Protected Area during the period 2000 to 2023.
- ❖ The coverage of Mangroves, which is an important sub ecosystem of the ocean ecosystem, has increased around 8% over the years 2013 to 2021.
- ❖ Most of the IUCN Red List species in India are under the 'Least Concern' category.



Rare black panthers in Odisha

- ❖ A Black Panther has been spotted in the forest of Sundergarh district in Odisha.
- ❖ The panther was seen in the Daghora section jungle in Hemagiri Forest Range in the district.
- ❖ So far, Odisha's Similipal Tiger Reserve (STR) is known as the country's only habitat that has the melanistic Royal Bengal tigers (RBT).



New potter wasp species



- ❖ Entomologists have discovered a new species of potter wasp from Arunachal Pradesh, in the Eastern Himalayas.
- ❖ The new species, *Pseumenes siangensis*, was found in Upper Siang.
- ❖ The new species differs from others in having specific morphological features and colour patterns.
- ❖ Around 3,795 species of these wasps have been described across 205 genera.

2024 Wild Ass Population Estimation

FOALING RATES DECLINING

● The wild ass population is increasing, but the foaling rates are declining

● The genetic diversity of the wild ass is low and could be reduced further if the sanctuary population gets isolated

● Wild asses are exposed to diseases, from livestock. Surra outbreaks have been reported

● They are also vulnerable to road accidents on highways

Canal water brings invasive weeds that displace native vegetation of the Rann



● Wild asses come into conflict with humans, especially due to crop raiding. Electric fencing fragments their habitats

● Agriculture around the Rann has expanded and shifted to cash crops, which use more water and chemicals

- ❖ The number of Indian wild asses in Gujarat has increased over 26 per cent in the past five years.

- ❖ The total population of the wild ass is estimated to be at 7,672, compared to 6,082 counted in 2020.
- ❖ Earlier they found in northwest India and Pakistan to arid regions of Central Asia.
- ❖ But, now primarily found in the deserts of Little Rann of Kutch and Great Rann of Kutch.
- ❖ In 1976, their number was only 720, which rose to 2,072 in 1990 and 4,451 in 2014.
- ❖ They were classified as Near threatened animals by IUCN.

Rare Rain in Sahara Desert

- ❖ A rare downpour has occurred in Sahara Desert, one of the world's most dry and arid regions.
- ❖ This rare extreme weather came after two days of continuous rainfall in the southeastern Morocco region of the North African desert.
- ❖ The ultimate influence of the event was the filling of Lake Iriqui.
- ❖ This lake had been dry since 1925, a period of 50 years.
- ❖ With over 9 million km² of territory, the Sahara Desert is at increased risk due to extreme weather associated with global warming.



India's Bird Population status 2024

- ❖ WWF's Living Planet Report 2024 highlighting catastrophic 73 per cent decline in average size of wildlife populations in just 50 years.
- ❖ Between 1992 and 2002, the populations of white-rumped vulture and Indian vulture combined with the slender-billed vulture dropped by 98 per cent and 93 per cent respectively.

- ❖ 33 per cent decline in grassland butterfly species was reported in 22 countries over two decades.
- ❖ In Odisha, native bee populations have dropped by 80% since 2002.
- ❖ 35% decline witnessed in the population of neelkanthas or Indian rollers.



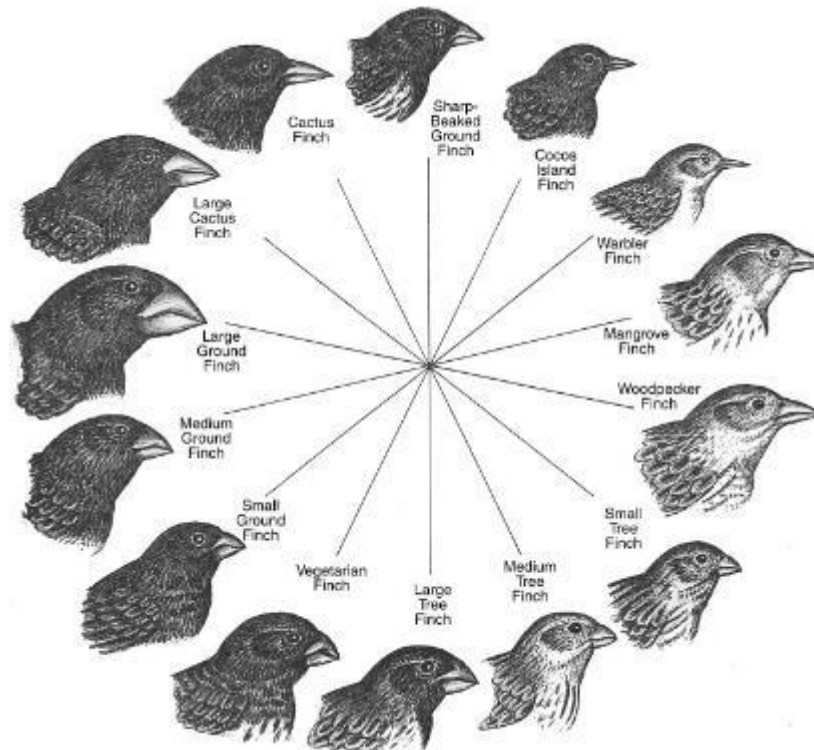
Extinction of 610 bird species

- ❖ Researchers have documented the extinction of 610 bird species over a period of 130,000 years.
- ❖ This coincides with the spread of Homo sapiens across the globe.
- ❖ Dodo, the flightless bird was first discovered in 1598 by the Dutch sailors and became extinct by 1681.
- ❖ The birds were used to the isolated environment of the island of Mauritius.
- ❖ Of the 610 bird species, 90% of them went extinct at least partially due to the humans.
- ❖ The 610 species combined represented 3 billion years of the unique evolutionary history.
- ❖ About 11,000 bird species now exist, occupying a dizzying array of ecological niches.
- ❖ The researchers projected future extinctions of more than 1,000 species over the next two centuries.

Darwin's Finches

- ❖ The Scientists have revealed that just six consecutive droughts can lead to the emergence of a new species of finch in the Galapagos islands.
- ❖ The physical changes in birds caused by extreme events "provide a pathway" for a new finch species to form.

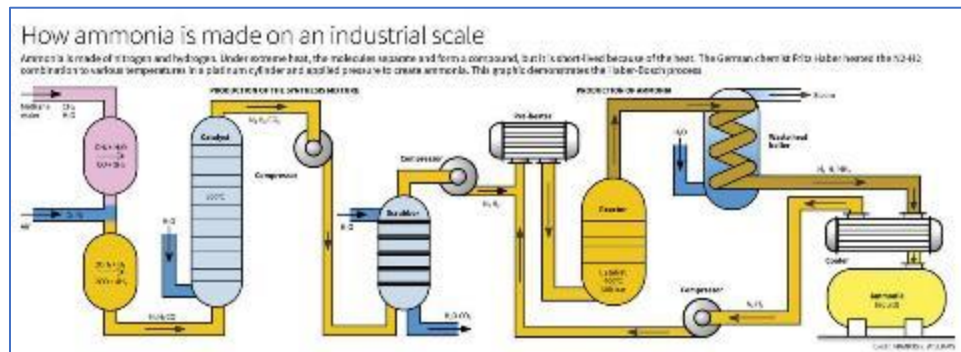
- ❖ The Galapagos, an Ecuadorian province, is renowned for its diverse finch population, collectively known as Darwin's finches.
- ❖ This is due to their role in helping British naturalist Charles Darwin understand evolution by natural selection.
- ❖ Darwin's finches are a group encompassing roughly 18 different passerine bird species.
- ❖ They are noted for their remarkable variation in beak size and functionality.



Haber-Bosch Process

- ❖ A hundred million tonnes of nitrogen are now removed from the atmosphere and converted into fertilizer via the Haber-Bosch process.
- ❖ This is adding 165 million tonnes of reactive nitrogen to the soil.
- ❖ To compare, biological processes replenish an estimated 100-140 million tonnes of reactive nitrogen every year.
- ❖ Engineering by BASF's Carl Bosch turned Haber's tabletop setup into an industrial process to produce fertilizer.
- ❖ Five years after Haber et al.'s accomplishment, BASF opened its first ammonia factory in 1913.

- ❖ The Haber-Bosch method has allowed industries to develop cheap synthetic fertilizers.
- ❖ It was a critical component in the sevenfold rise in the world's food supply during the 20th century.
- ❖ A century ago, the average lifespan at birth of an Indian was only 19 years, compared to 67+ years today.



Rufous-tailed rock thrush

- ❖ Rufous-tailed rock thrush (*Monticola saxatilis*) was spotted in Kanniyakumari Wildlife Sanctuary.
- ❖ This is the first record of the bird in Tamil Nadu.
- ❖ Earlier, the bird has been spotted a few times in Kerala and largely on north-western parts of India during migration.
- ❖ They breed in Southern Europe across Central Asia to Northern China.
- ❖ It migrates to Africa during the non-breeding season.



Swell wave surges

- ❖ The Indian National Centre for Ocean Information Services had issued a warning to States of Kerala, South Tamil Nadu, Puducherry and Lakshadweep.

- ❖ Swell waves are long-wavelength ocean waves that travel away from their places of origin.
- ❖ They are usually created by windstorms or other weather systems.
- ❖ Sea waves otherwise are usually generated due to local winds.
- ❖ Windstorms and other powerful air current systems transfer energy from the air to water, making swell waves more powerful than locally generated waves.
- ❖ Because of their high energy, swell waves are able to travel large distances and strike shores with considerably high power.
- ❖ Swell waves are also called Kallakkadal waves in India, which is a colloquial term used by Kerala fishermen.
- ❖ The term has now been approved for scientific use by UNESCO.



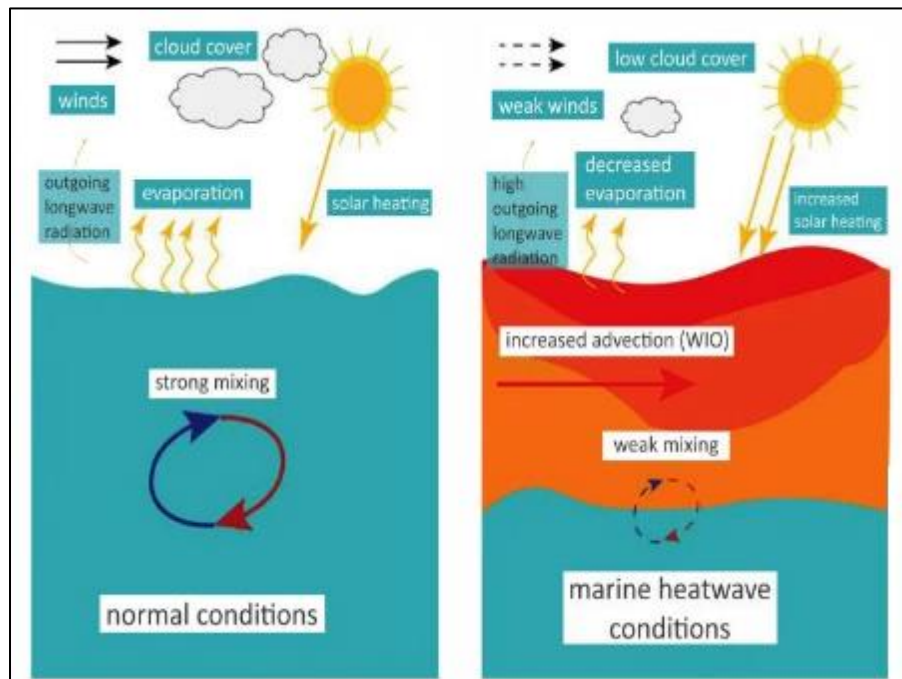
Fourth global coral bleaching

- ❖ The ongoing fourth global coral bleaching (GCBE4) event began in January 2023.
- ❖ It is now the most widespread and surpassed the coral bleaching levels of 2014-2017 by over 11 per cent.
- ❖ This severe and intense global bleaching event has been recorded in almost half the amount of time than the previous event.
- ❖ At least 77 per cent of global reef areas have experienced bleaching level heat stress in almost 20 months as part of GCBE4.
- ❖ Roughly 99.9 per cent of the coral reef areas in the Atlantic Ocean have experienced bleaching-level heat stress during this event.



NOAA and ICRI Confirm Fourth Global Coral Bleaching Event

Marine Heat Waves



- ❖ Marine Heat Waves (MHWs) are defined by the unusual warming of ocean waters.
- ❖ In recent years, global warming has made MHWs more frequent and intense.
- ❖ MHWs have typically been measured by observing temperatures at the ocean surface.
- ❖ The Researchers found that MHWs deep in oceans may be “significantly under-reported”
- ❖ Huge loops of swirling current, sometimes hundreds of kilometres across and reaching down over 1,000 metres.

Temperature rise in key biodiversity areas

- ❖ Up to 66 per cent of key biodiversity areas (KBAs) in tropical forests have recently entered a Mean annual temperature regime.
- ❖ KBAs are sites contributing significantly to the global persistence of biodiversity in terrestrial, freshwater and marine ecosystems.
- ❖ The proportion of KBAs with new temperature regimes was 72 per cent in Africa, 59 per cent in Latin America and 49 per cent in Asia and Oceania.
- ❖ The 2.9 per cent of KBAs in Latin America and 4.9 per cent in Asia and Oceania have recently transitioned to almost entirely novel temperature regimes.
- ❖ Only 0.02 per cent of KBAs in Asia and Oceania remained almost stable.
- ❖ 34 per cent of tropical forest KBAs are not yet experiencing the new temperature regimes.



Koalas - Extinction risk

- ❖ At one point, there were millions of Koalas, a eucalyptus-munching tree climber.
- ❖ Now, there are anywhere between 95,000 and 524,000 left in Australia.
- ❖ The government officially listed East Coast koalas as 'endangered' in 2022.
- ❖ Chlamydia is a common sexually transmitted infection (STI) caused by the bacteria Chlamydia trachomatis.
- ❖ It was first observed in koalas about 50 years ago.

- ❖ In the times that followed it has wiped out entire local populations.
- ❖ Their populations have plummeted to between 95,000 and 524,000.
- ❖ Now, Australia has become the 'extinction capital' of the world.
- ❖ This island nation is having the highest rate of mammal extinction in the world,
- ❖ About 100 of the country's unique flora and fauna species wiped out in the last 123 years.



India's second butterfly diversity hub



- ❖ Assam's Kaziranga National Park has earned the distinction of being the second butterfly diversity hub, after Namdapha National Park in Arunachal Pradesh.
- ❖ Butterfly Conservation Meet, the first of its kind, was held in September, this year to check the status of the butterflies.

- ❖ More than 446 butterfly species have been reported from the park.
- ❖ 18 of 446 butterfly species are new in India.
- ❖ This national park is spread across the districts of Golaghat, Sonitpur, Biswanath and Nagaon in Assam.
- ❖ The park is home to two-thirds of the world's Indian rhinoceroses and is considered a UNESCO world heritage site.

Nilgiri tit butterfly



- ❖ The Nilgiri tit (*Hypolycaena nilgirica*) is utilising a large terrestrial orchid plant as a host.
- ❖ This is the first known record of the butterfly using this particular species of plant as a host in India.
- ❖ The Nilgiri tit was first described in 1884 from Coonoor in the Nilgiris, since it has been recorded in Sri Lanka.
- ❖ The Nilgiri tit was noted to lay its eggs on the inflorescence (complete flower head) of the larval host plant, *Eulophia epidendrea*.
- ❖ This terrestrial orchid was found on rocky slopes in humid areas.

COP16 of CBD

- ❖ The 16th Conference of Parties (COP16) of the Convention on Biological Diversity (CBD) is taking place in Cali, Colombia.
- ❖ During the event, they released a report titled 'Closing Window of Opportunity: Mapping Threats from Oil, Gas and Mining to Important Areas for Conservation in the Pantropics'.
- ❖ It shows that the world's best and most important ecosystems are facing a threat from extractive industries.

- ❖ These include key biodiversity areas, high-integrity forest landscapes, protected areas, and Indigenous territories.
- ❖ The data reveals 518 Key Biodiversity Areas (KBA), which are 18 per cent of the total such areas, have active and potential oil and gas concessions.
- ❖ As much as 180 million hectares of high-integrity forests are at risk in Amazon and Congo basin regions and Southeast Asia.

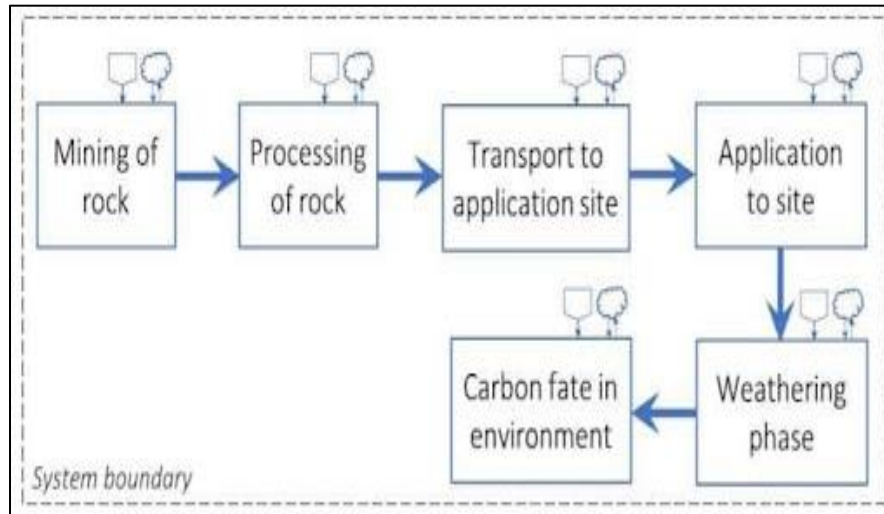


Great Indian Bustard - Artificial Insemination



- ❖ The first Great Indian Bustard chick born through artificial insemination.
- ❖ Scientists at the National Conservation Breeding Centre in Jaisalmer, Rajasthan made this process.
- ❖ The great Indian bustard is a highly endangered bird species found in the Thar area of Rajasthan.
- ❖ Now, only 173 birds are left, of which, 128 are found in the wild, while others are bred in captivity.

Mining Dust for Carbon Capture



- ❖ Darjeeling-based company, Alt Carbon, is turning mining dust into a climate-friendly solution.
- ❖ It utilising a geo-chemical process known as enhanced rock weathering to tackle atmospheric carbon dioxide (CO₂).
- ❖ Being an organic fertiliser, the basaltic dust enriches the soil as well as accelerates carbon sequestration.
- ❖ It takes about a 3-4 tonnes of basalt dust to sequester, or trap, a tonne of atmospheric carbon over two to four years.
- ❖ Carbon sequestration is the process of capturing and storing atmospheric CO₂.
- ❖ The oceans are the major carbon sinks and capture about 30% of the CO₂ from human activities.

Diamond Dust Solution for Global Warming

- ❖ A new study suggests that injecting diamond dust into the atmosphere could be an effective method to cool the planet.
- ❖ Diamond dust is chemically inert.
- ❖ Annually injecting 5 million tons of synthetic diamond dust into the atmosphere could potentially cool the Earth by 1.6°C over 45 years.
- ❖ However, implementing this solution would require an estimated investment of \$200 trillion.



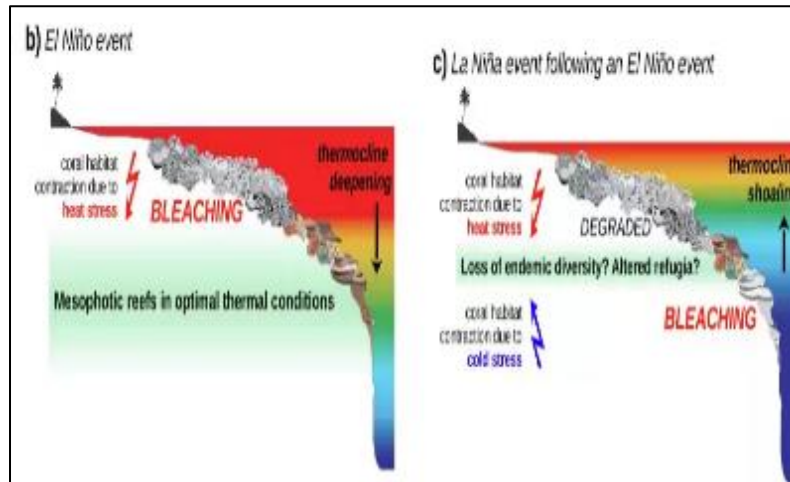
Pledge for Fungal Conservation



- ❖ The governments of Chile and the United Kingdom have prepared a 'pledge for fungal conservation'.
- ❖ Mushrooms, moulds, yeast, lichen and mildew may get their own taxonomical kingdom 'Funga' alongside animals and plants for their conservation.
- ❖ The proposal was submitted to the UN Convention on Biological Diversity (CBD) during the COP16 in Cali, Colombia.
- ❖ It aims to advance their conservation and to adopt concrete measures that allow for maintaining their benefits to ecosystems and people.
- ❖ It is estimated that only eight per cent of the total 2.2 and 3.8 million species of fungi are scientifically known.
- ❖ About 2,000 new species are discovered annually across the world.

Mesophotic Coral Ecosystems

- ❖ New study highlights that deep coral ecosystems in the Eastern Pacific likely face a two-pronged threat over the 21st century.
- ❖ They faced bleaching from warm water above and cold-water exposure from below.
- ❖ Mesophotic coral ecosystems are found in tropical and subtropical regions at depths between 100 and 490 feet.



Giant Salmon Carp - Mekong River



- ❖ With the last confirmed sighting in 2005, these species of fish seems to have disappeared from the Mekong region for decades.
- ❖ Three giant salmon carp found in the Mekong River and a tributary in Cambodia between 2020 and 2023.
- ❖ One nickname for the species is “ghost fish.”
- ❖ It is a fascinating species native to freshwater habitats in East Asia, particularly in regions like the Amur River basin.

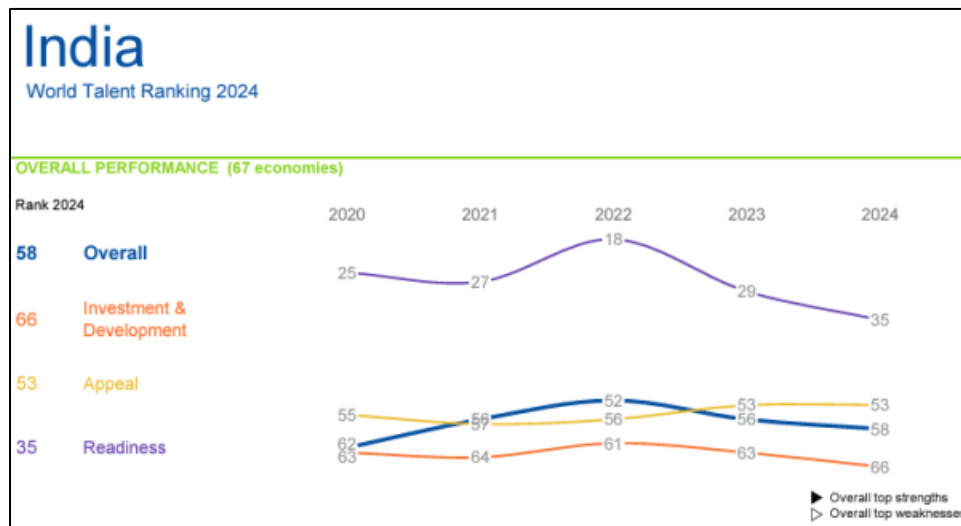
Anguiculus Dicaprio

- ❖ Scientists have recently classified a new snake species in the Western Himalayas, Anguiculus Dicaprio.
- ❖ It honours the actor and environmental activist Leonardo DiCaprio, for his efforts in raising awareness about climate change and wildlife conservation.
- ❖ Anguiculus Dicaprio is a member of the Colubridae family, the most extensive classification of snakes, consisting of various species and groups.
- ❖ The term “Anguiculus” means “small snake” in Latin.



REPORTS AND INDICES

World Talent Ranking 2024



- ❖ India's ranking at the IMD's World Talent Ranking 2024 has come down to 58 from 56 last year.
- ❖ In 2022, India was at the 52nd rank.
- ❖ Switzerland came first, Singapore second, and Luxembourg third out of 67 economies in the eleventh edition.
- ❖ Singapore's steady rise to the top – for the first time since the inception of the ranking in 2014.

Hurun India Under-35 List 2024

- ❖ Isha Ambani, and Parita Parekh, co-founder of Toddle, are among the youngest women named in the Inaugural 2024 Hurun India Under-35 list.
- ❖ The list features 150 Indian entrepreneurs under the age of 35.
- ❖ Akash Ambani and Ghazal Alagh of Mamaearth were also recognised in the list.
- ❖ Physics Wallah founder Alakh Pandey and Anjali Merchant got place in the list
- ❖ ShareChat co-founder Ankush Sachdeva is the youngest on this list.
- ❖ Around 82 per cent of the total entrepreneurs featured on this list are first-generation business leaders.
- ❖ Bengaluru and Mumbai are the cities with the highest number of entrepreneurs on this list, featuring 29 and 26 business leaders, respectively.



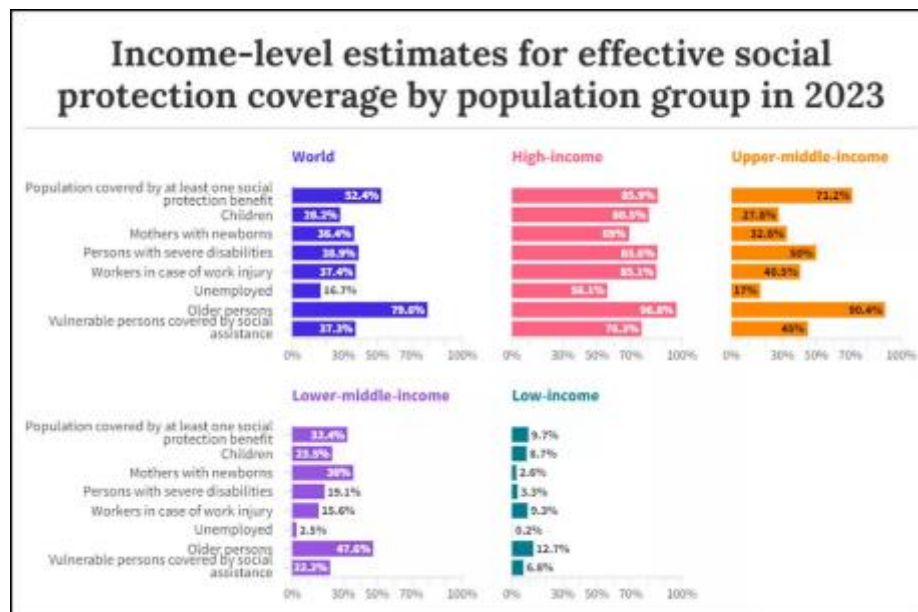
Global innovation index 2024

- ❖ This report is released by the Geneva-based World Intellectual Property Organization.
- ❖ India holds the 39th position in the Global Innovation Index (GII) 2024
- ❖ The country now ranked first among the 38 lower-middle-income economies.
- ❖ The index evaluates the innovation performance of around 133 global economies.

- ❖ It was 81st position in 2015.
- ❖ India has also secured the 4th position in the World Intellectual Property Organization (WIPO) Science and Technology (S&T) Cluster Ranking.
- ❖ China reached the 11th position and remains the only middle-income economy in the top 30.
- ❖ Switzerland, Sweden, the United States, Singapore, and the United Kingdom are the top rankers.

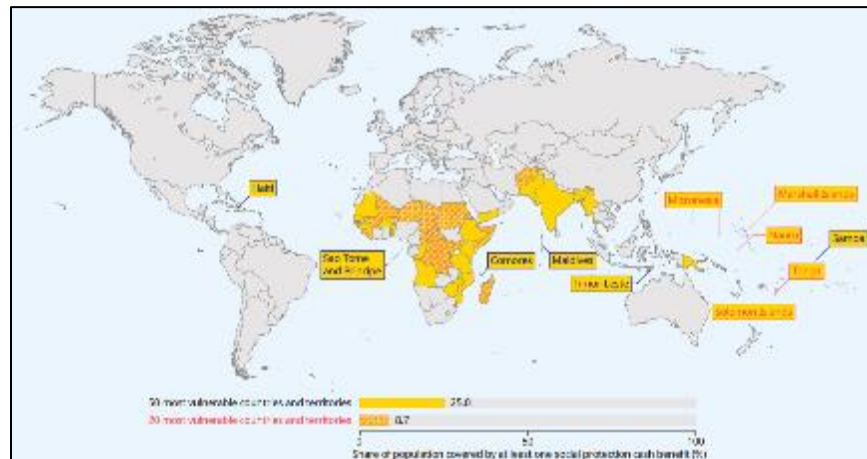


World Social Protection Report 2024-26



- ❖ The International Labour Organization (ILO) revealed that more than half of the world's population is covered by some form of social protection.
- ❖ The report is named “World Social Protection Report 2024–26: Universal social protection for climate action and a just transition”.
- ❖ 52.4 per cent of the global population is now covered by at least one social protection benefit, up from 42.8 per cent in 2015.
- ❖ In the 20 countries most vulnerable to climate change, a staggering 91.3 per cent of people (364 million) lack any form of social protection.
- ❖ Globally, 50.1 per cent of women are covered by at least one social protection benefit, compared to 54.6 per cent of men.
- ❖ Only 28.2 per cent of children aged 0-15 receiving child or family cash benefits globally.
- ❖ This leaves 1.4 billion children without coverage.
- ❖ High-income countries spend an average of 16.2 per cent of their GDP on social protection (excluding health).
- ❖ But low-income countries allocate a mere 0.8 per cent.

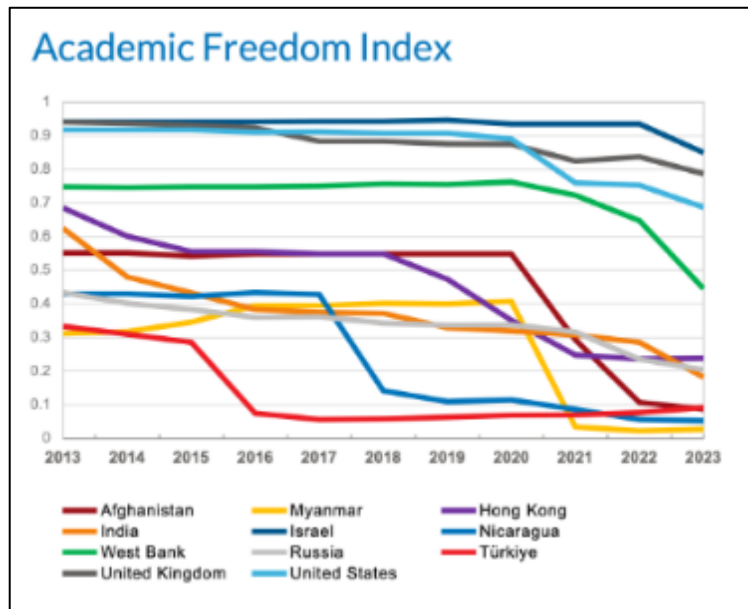
Regional companion report for Asia and the Pacific



- ❖ The International Labour Organisation (ILO) report released this report.
- ❖ The report is titled ‘Regional companion report for Asia and the Pacific of the World Social Protection Report 2024-26: Universal social protection for climate action and a just transition’.
- ❖ About 2.1 billion people still remain unprotected against various lifecycle and socio-economic risks.
- ❖ Since 2015 the effective coverage rate in southern Asia by 16.7 percentage points (18.7 to 35.4%).

- ❖ The Five most populous countries — Bangladesh, China, India, Indonesia and Pakistan have coverage rates as 22%, 75.6%, 48.4%, 54.3% and 20.2%, respectively.
- ❖ The unemployment insurance schemes exist in India and Iran, but their coverage is limited.
- ❖ In India, unemployment insurance covers by law only 11.5% of the working-age population.

Free to Think 2024 annual report

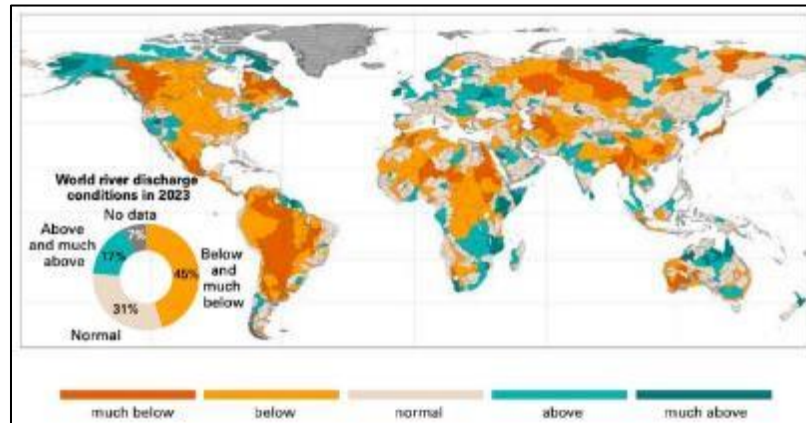


- ❖ This annual report was published by the Scholars at Risk (SAR) Academic Freedom Monitoring Project.
- ❖ It has documented 391 attacks on higher education communities in 51 countries between July 1, 2023 and June 30, 2024.
- ❖ India's academic freedom slipped from 0.6 points to 0.2 points from 2013 to 2023.
- ❖ India now ranks as “completely restricted”, its lowest score since the mid-1940s.

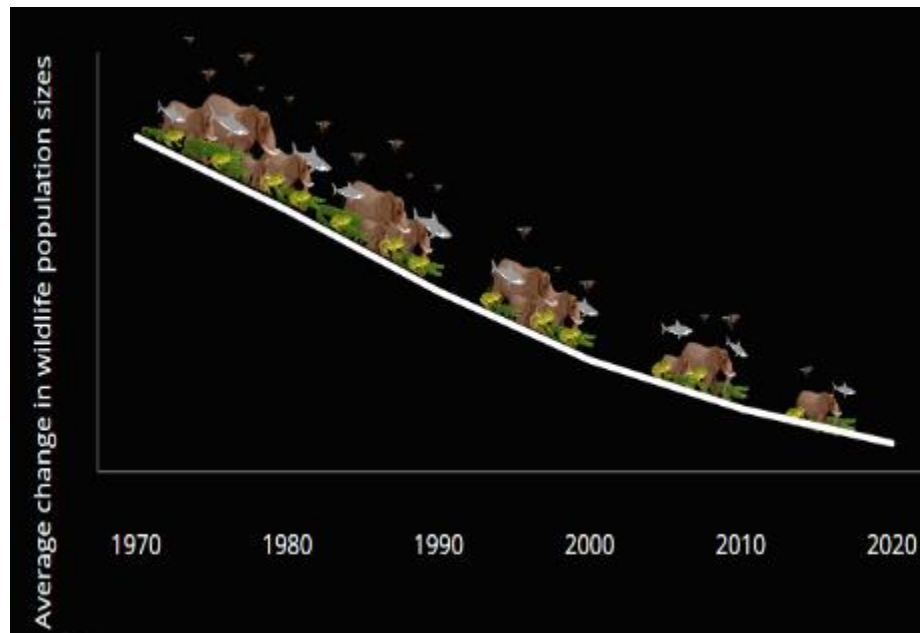
State of Global Water Resources Report 2023

- ❖ This new report was coordinated by World Meteorological Organization (WMO).
- ❖ 2023 is the second consecutive year in which all regions in the world with glaciers reported ice loss.
- ❖ 2023 was driest year for global rivers in 33 years.

- ❖ Glaciers suffer largest mass loss in 50 years.
- ❖ Currently, 3.6 billion people face inadequate access to water at least a month per year.
- ❖ This is expected to increase to more than 5 billion by 2050.



Living Planet Report 2024



- ❖ The Living Planet Report 2024 is a biennial assessment by the conservation organisation the World Wildlife Fund (WWF).
- ❖ It revealed that the average size of monitored wildlife populations has decreased by 73 per cent since 1970.
- ❖ Nearly 35,000 wildlife populations and 5,495 species of amphibians, birds, fish, mammals and reptiles declined significantly.

- ❖ Between 1970 and 2020, freshwater species were the most affected, with an 85 per cent decline.
- ❖ It is followed by a 69 per cent decline in terrestrial species and a 56 per cent decline in marine populations.
- ❖ Latin America and the Caribbean, where populations have dropped by 95 per cent, is followed by Africa, which has seen a 76 per cent decline.
- ❖ The Asia-Pacific region collectively reported a 60 per cent decline.
- ❖ Chinook salmon population dropped by 88 per cent between 1950 and 2020.

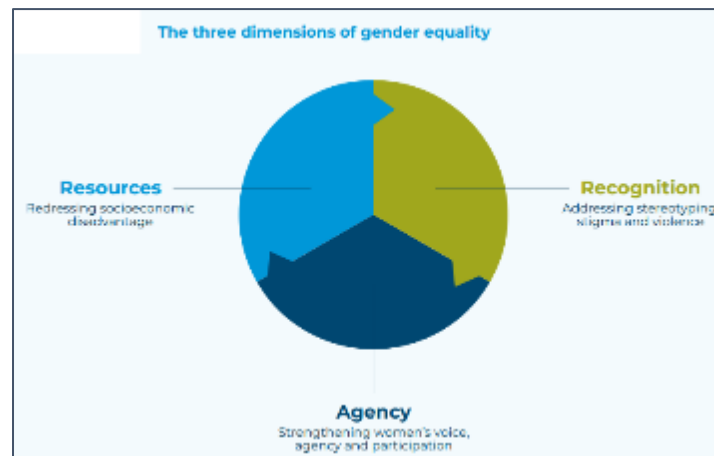
Global Hunger Index 2024

Rank in 2024 ↑	Country	2000	2008	2016	2024
1-22 ¹	Belarus	<5	<5	<5	<5
1-22 ¹	Bosnia & Herzegovina	9.4	6.4	<5	<5
1-22 ¹	Chile	<5	<5	<5	<5
1-22 ¹	China	13.4	7.2	<5	<5
1-22 ¹	Costa Rica	6.6	<5	<5	<5
1-22 ¹	Croatia	5.5	<5	<5	<5
1-22 ¹	Estonia	<5	<5	<5	<5
1-22 ¹	Georgia	12.0	6.6	5.4	<5
1-22 ¹	Hungary	<5	<5	<5	<5
1-22 ¹	Kuwait	<5	<5	<5	<5
1-22 ¹	Latvia	<5	<5	<5	<5
1-22 ¹	Lithuania	<5	<5	<5	<5
1-22 ¹	Montenegro	—	5.7	<5	<5
1-22 ¹	North Macedonia	7.6	5.3	5.1	<5
1-22 ¹	Romania	7.9	5.7	5.0	<5
1-22 ¹	Russian Federation	10.4	5.9	5.4	<5
1-22 ¹	Serbia	—	5.9	<5	<5

- ❖ It is jointly published by 'Concern Worldwide' and 'Welthungerhilfe'.
- ❖ The 19th Global Hunger Index (GHI) report for 2024 has ranked India 105th out of 127 countries.
- ❖ This is placing India among nations with 'serious' hunger problems.
- ❖ India lags behind its neighbours Sri Lanka, Nepal, Myanmar, and Bangladesh, while it ranks just above Pakistan and Afghanistan.
- ❖ The 2024 report is not directly comparable to the 2023 report due to a change in methodology and revised data.
- ❖ However, it provides comparative data for the years 2000, 2008, 2016, and 2024.
- ❖ India continues to face severe challenges in child malnutrition, with the highest child wasting rate (18.7%) globally.

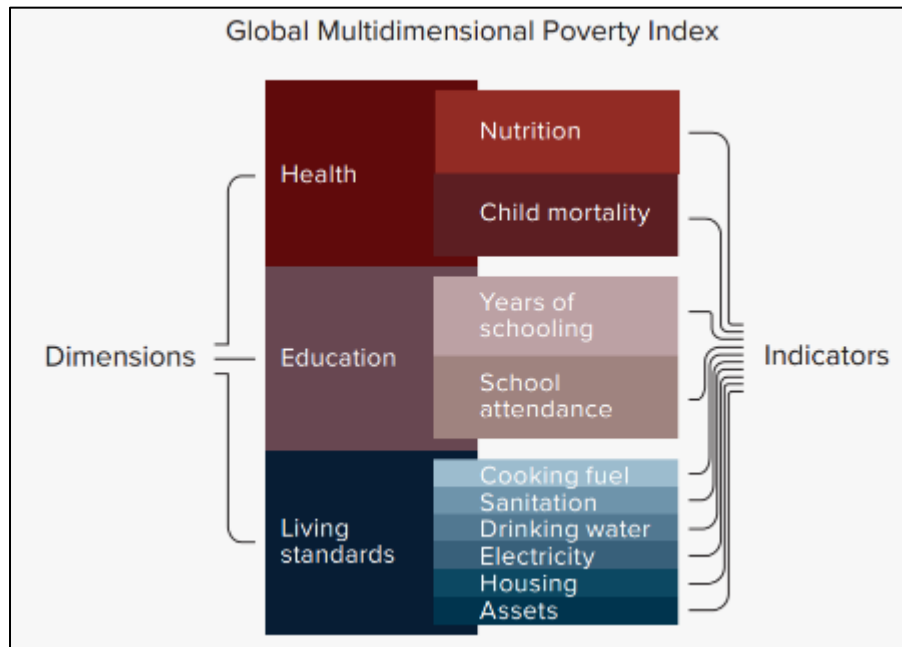
- ❖ The country also has a child stunting rate of 35.5%, an under-five mortality rate of 2.9%, and a prevalence of undernourishment at 13.7%.
- ❖ Globally, around 733 million people face hunger each day due to a lack of access to a sufficient amount of food.
- ❖ Also, about 2.8 billion people cannot afford a healthy diet.
- ❖ South Sudan, Burundi, Somalia are the bottom three countries.

United Nations Women's report 2024



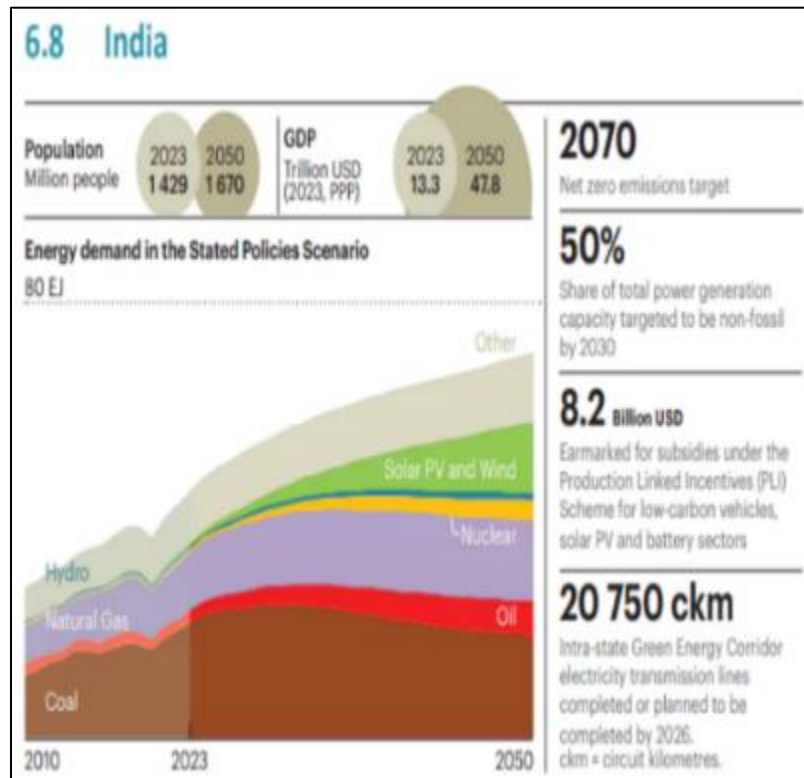
- ❖ The World Survey on the Role of Women in Development report was released recently.
- ❖ It was focusing on the theme, “Harnessing social protection for gender equality, resilience and transformation”.
- ❖ The paper is submitted every five years to the Economic and Financial Committee of the United Nations General Assembly.
- ❖ Over 63 per cent of women globally still give birth without access to maternity benefits.
- ❖ The rate rising to a staggering 94 per cent in sub-Saharan Africa.
- ❖ Women aged 25-34 are 25 per cent more likely than men of the same age to live in households facing extreme poverty.
- ❖ Nearly 1,000 social protection measures introduced by governments across 171 countries.
- ❖ But only 18 per cent focused on women's economic security.

Global Multidimensional Poverty Index 2024



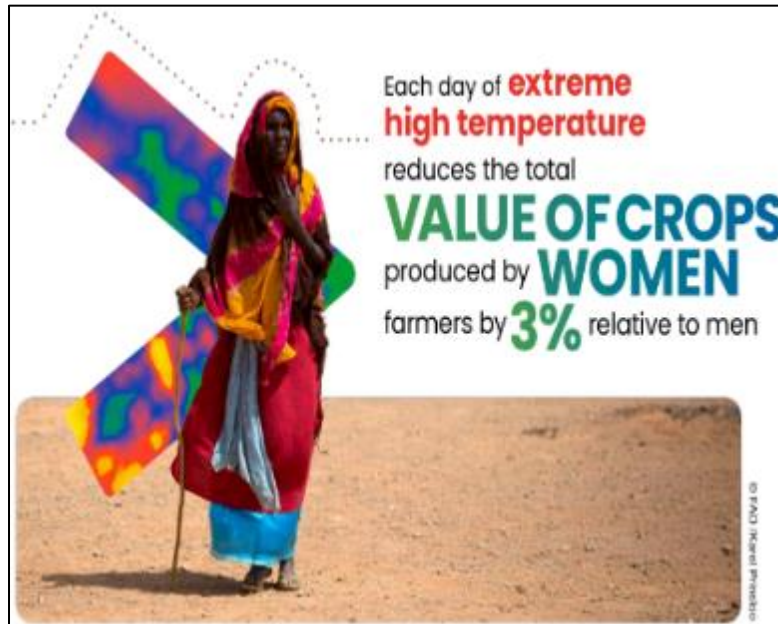
- ❖ The latest update of the global Multidimensional Poverty Index (MPI) was released by the United Nations Development Programme (UNDP) and the Oxford Poverty and Human Development Initiative.
- ❖ According to the UN report, 1.1 billion people, over half of them minors, live in acute poverty worldwide.
- ❖ India has 234 million people living in poverty, which is the medium Human Development Index.
- ❖ India is among the five countries globally with the largest number of people living in poverty.
- ❖ The other four countries are Pakistan (93 million), Ethiopia (86 million), Nigeria (74 million) and the Democratic Republic of the Congo (66 million), all low HDI.
- ❖ These five countries account for 48.1% of the global poor.
- ❖ The report notes that over half of the 1.1 billion poor people are children under the age of 18 (584 million).
- ❖ Globally, 27.9 per cent of children live in poverty, compared with 13.5 per cent of adults.
- ❖ In South Asia 272 million poor people live in households with at least one undernourished person, and in Sub-Saharan Africa 256 million.
- ❖ About 83.7 per cent of poor people live in rural areas.

World Energy Outlook 2024



- ❖ The report is published by the International Energy Agency (IEA) and provides key energy trends and projections.
- ❖ In 2023 alone, over 560 gigawatts (GW) of the renewable capacity were added globally.
- ❖ By 2030, the renewable energy is expected to become the dominant source of electricity, surpassing coal, oil, and gas.
- ❖ The global electric vehicle (EV) market is rapidly expanding, with EVs expected to account for 50% of new car sales by 2030.
- ❖ India is on track to become the third-largest economy in the world by 2028.
- ❖ By 2035, iron and steel production are on track to grow by 70%.
- ❖ The cement output is set to rise by nearly 55%.
- ❖ The stock of air conditioners is projected to grow by over 4.5 times.
- ❖ It will be resulting in electricity demand from air conditioners in 2035 more than Mexico's total expected consumption that year.
- ❖ The total energy demand in India is set to increase by nearly 35% by 2035.
- ❖ Its electricity generation capacity will nearly triple to 1400 GW.

The Unjust Climate report



- ❖ FAO economist presented the report “The unjust climate. Measuring the impacts of climate change on rural poor, women, and youth”.
- ❖ Farm income sources of the rural poor in India were affected in different ways depending on the type of climate stress.
- ❖ Poor households globally lose 5% of their total income in an average year due to heat stress and 4.4% due to floods compared with households that are relatively better off.
- ❖ Floods, globally, widen the income gap between poor and non-poor households in rural areas by approximately \$21 billion a year.
- ❖ Heat stress widen the gaps by more than \$20 billion a year.
- ❖ A 1° C increase in average long-term temperatures leads to a 53% increase in the farm incomes of poor households and a 33% decrease in their off-farm incomes, relative to non-poor households.

Global Trade outlook and statistics report 2024 - WTO

- ❖ WTO revised downwards its projection of world merchandise trade growth to 3 per cent in 2025, from its earlier estimate of 3.3 per cent.
- ❖ For 2024, the WTO revised upwards its forecast for merchandise trade growth to 2.7 per cent, up from the previous estimate of 2.6 per cent.
- ❖ The first half of 2024 saw 2.3 per cent year-on-year increase.
- ❖ Europe has continued to weigh heavily on global merchandise trade in 2024.

- ❖ Singapore, Malaysia and other Asian economies, including India and Vietnam, show stronger growth.



World Economic Outlook 2024

- ❖ The latest World Economic Outlook is released by the International Monetary Fund (IMF).
- ❖ The IMF expects the US economy the world's largest to expand 2.8 per cent this year.
- ❖ It is slightly down from 2.9 per cent in 2023 but an improvement on the 2.6 per cent it had forecast for 2024 back in July.
- ❖ The 20 European countries that share the euro currency are collectively expected to eke out 0.8 per cent growth this year.
- ❖ The German economy isn't expected to grow at all this year.
- ❖ Worldwide inflation has been cooling from 6.7 per cent in 2023 to a forecast 5.8 per cent this year and 4.3 per cent in 2025.
- ❖ India's economy is expected to 7 per cent this year and 6.5 per cent in 2025.

	2023	2024	2025
World Output	3.3	3.2	3.2
Emerging Market and Developing Economies	4.4	4.2	4.2
Emerging and Developing Asia	5.7	5.3	5.0
China	5.2	4.8	4.5
India	8.2	7.0	6.5
Emerging and Developing Europe	3.3	3.2	2.2
Russia	3.6	3.6	1.3
Latin America and the Caribbean	2.2	2.1	2.5
Brazil	2.9	3.0	2.2
Mexico	3.2	1.5	1.3
Middle East and Central Asia	2.1	2.4	3.9

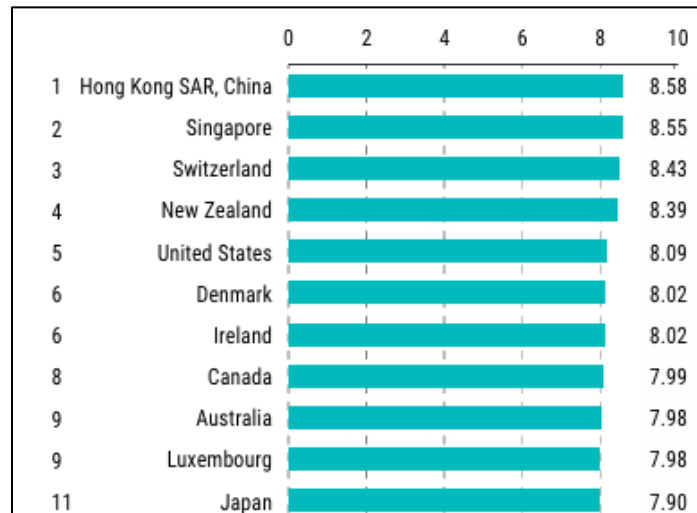
Commitment to Reducing Inequality Index 2024

- ❖ It is released by Oxfam and Development Finance International.
- ❖ It assessed the commitment of 164 countries and regions to fighting inequality.
- ❖ India was ranked at 127th place.
- ❖ The other South Asian countries such as Nepal (115) and Sri Lanka (118) have performed better than India.
- ❖ Norway, Canada, and Australia have topped in the list.
- ❖ South Sudan and Nigeria are ranked in the bottom rank.

TABLE 1 TOP AND BOTTOM 10 COUNTRIES IN THE CRI 2024 INDEX

Top and bottom ten countries in the CRI 2024 Index			
Top ten		Bottom ten	
Rank	Country	Rank	Country
1	Norway	164	South Sudan
2	Canada	163	Nigeria
3	Australia	162	Vanuatu
4	Germany	161	Haiti
5	Finland	160	Zimbabwe
6	Denmark	159	Uganda
7	Austria	158	Central African Republic
8	Japan	157	Liberia
9	Slovenia	156	Sierra Leone
10	France	155	Burundi

Economic Freedom of the World 2024



- ❖ The Fraser Institute, a Canada-based libertarian think tank, had produced the analysis.
- ❖ This Annual Report ranked Hong Kong as the freest global economy.

- ❖ It is followed by Singapore, and Switzerland.
- ❖ India was ranked 84th and neighbour Nepal placed 86th, Bhutan at 98th rank and China place in 104th place.

Emissions Gap Report 2024

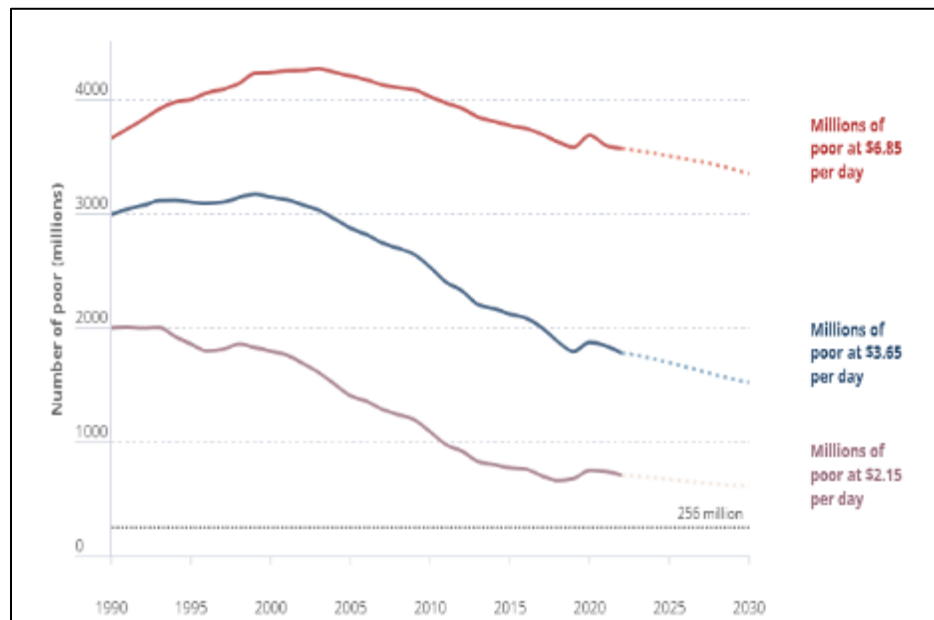
	Total GHG emissions in 2023	Change in total GHG emissions, 2022–2023	Per capita GHG emissions in 2023	Historical CO ₂ emissions, 1850–2022
	MtCO ₂ e (% of total)	%	tCO ₂ e/capita	GtCO ₂ (% of total)
China	16,000 (30)	+5.2	11	300 (12)
United States of America	5,970 (11)	-1.4	18	527 (20)
India	4,140 (8)	+5.1	2.9	83 (3)
European Union (27 countries)	3,230 (6)	-7.5	7.3	301 (12)
Russian Federation	2,660 (5)	+2	19	180 (7)
Brazil	1,300 (2)	+0.1	6.0	119 (5)
African Union (55 countries)	3,190 (6)	+0.7	2.2	174 (7)
Least developed countries (47 countries)	1,730 (3)	+1.2	1.5	115 (4)
G20 (excl. African Union)	40,900 (77)	+1.8	8.3	1,990 (77)

- ❖ The Emissions Gap Report is an annual publication of the UN Environment Program.
- ❖ Six largest GHG emitters accounted for 63% of global GHG emissions.
- ❖ Least developed countries accounted for only 3%.
- ❖ India ranks 3rd in total GHG emissions with 4,140 MtCO₂e compared to China and USA
- ❖ India's historical CO₂ emissions (1850–2022) are much lower (83 GtCO₂ than China (300 GtCO₂) and US (527 GtCO₂).
- ❖ Greenhouse-gas emissions rose to a new high of 57 gigatons (Gt) of CO₂ equivalent in 2023 (1.3 % increase from 2022).
- ❖ The Nations must collectively commit to cut 42 % off annual greenhouse gas emissions by 2030 and 57 % by 2035 in next NDCs.

Poverty prosperity and planet report 2024

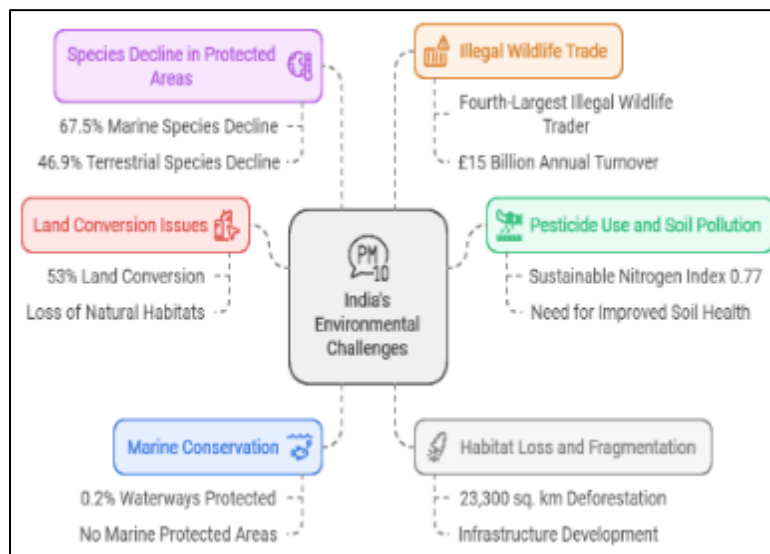
- ❖ World Bank has recently released the 'Poverty, Prosperity and Planet: Pathways out of the Polycrisis' report.
- ❖ Almost half the global population (44%) – around 3.5 billion people – live today on less than \$6.85 per day.

- ❖ 8.5% of the global population (almost 700 million people) live today in extreme poverty, on less than \$2.15 per day.
- ❖ According to World Bank, the people in extreme poverty is who live on less than \$2.15 per day.
- ❖ In 2024, Sub-Saharan Africa accounted for 16 % of the world's population, but 67 % of the people living in extreme poverty.
- ❖ 29 million Indians are living in extreme poverty in 2024 down from 431 million in 1990.
- ❖ 622 million people (7.3 % of the global population) are projected to live in extreme poverty in 2030.



Global Nature Conservation Index (NCI) 2024

- ❖ This report evaluates the conservation efforts using the four markers — land management, threats to biodiversity, capacity and governance, and future trends.
- ❖ India has been ranked 176th in the Global Nature Conservation Index, 2024.
- ❖ The country ranks as one of the five worst performers alongside Kiribati (180), Turkey (179), Iraq (178), and Micronesia (177) in the ranking of 180 countries.
- ❖ The index reveals high use of pesticides and also warns against soil pollution.
- ❖ At rank 15, Bhutan is the only South Asian country among the top 50 ranks.
- ❖ Nepal, at the rank of 60, along with Sri Lanka and Pakistan are also ahead of India, at ranks 90 and 151 respectively.



STATES

Unclimbed peak in Arunachal Pradesh

- ❖ A 15-member team from the National Institute of Mountaineering and Adventure Sports (NIMAS) has scaled an unclimbed peak in the Tawang-West Kameng region of Arunachal Pradesh.
- ❖ They named it as 'Tsangyang Gyatso Peak' in honour of the 6th Dalai Lama.
- ❖ The peak, at a height of 6,383 metres above sea level in the Gorichen range of Arunachal Pradesh Himalayas.
- ❖ The Sixth Dalai Lama, Tsangyang Gyatso, was born in 1682 in Arunachal Pradesh's Mon Tawang.
- ❖ He was enthroned as the Sixth Dalai Lama at the age of 14 in 1697.
- ❖ In 1706, he was invited to China and died on the way.
- ❖ China calls Arunachal Pradesh as Zangnan.
- ❖ Also, China has been renaming places in Arunachal Pradesh since 2017 to assert its claims.

Kasturirangan Committee Report - Karnataka

- ❖ The Karnataka government has rejected the Kasturirangan committee report - 2014.
- ❖ It gave recommendation for the protection of the fragile Western Ghats region from environmental degradation.
- ❖ It proposes that 37 per cent of the total area of Western Ghats, which is roughly 60,000 square kilometres, to be declared as eco-sensitive area.
- ❖ Out of this, 20,668 sq. km of the area falls in Karnataka covering more than 1,500 villages.
- ❖ A state-level expert committee conducted meetings in the Western Ghats districts and prepared a report in 2015.
- ❖ It has recommended only 153 (as opposed to 1,553 villages) in Karnataka should be declared ecologically sensitive areas.

TIMELINE		GADGIL REPORT	
<p>■ MARCH 2010: Ministry of environment and forests invites Madhav Gadgil to lead a committee to study the Western Ghats</p> <p>■ UP TO AUGUST 2011: The committee travels across the Western Ghats and holds 14 panel meetings, eight consultations with government agencies and 40 with the environmental organizations</p> <p>■ SEPTEMBER 2011: Committee submits its report to the ministry</p> <p>■ AUGUST 2012: The ministry forms a committee under the chairmanship of K Kasturirangan to advise the government on Gadgil's report</p> <p>■ APRIL 2013: Kasturirangan committee submits its report to the ministry</p> <p>■ OCTOBER 2013: Ministry gives in-principle acceptance to the Kasturirangan report</p> <p>■ MARCH 2014: Ministry issues draft notification following the recommendations of the Kasturirangan report</p>		<p>► Recommended that the entire stretch of the Western Ghats should be declared an Ecologically Sensitive Area (ESA)</p> <p>► It divided the region into three zones - ESZ1, ESZ2 & ESZ3 - and gave a broad outline of certain restrictions for each zone</p> <p>► It recommended the determination of an area as ESZ1 or ESZ2 or ESZ3 be done at the block/taluka level</p> <p>► No new polluting industries (red and orange category) were to be permitted in ESZ1 & ESZ2. Existing industries were to be phased out by 2016</p>	
		<p>KASTURIRANGAN REPORT</p> <p>► Divided the Western Ghats into two: natural landscape and cultural landscape</p> <p>► Of the natural landscape, it picked out merely 37% as "biologically rich" and "with some measure of contiguity." Any restrictions were only placed in this area</p> <p>► It proposed the demarcation of ESA be done at the village level</p> <p>► Only red category industries (heavily polluting such as mining) were completely restricted</p>	

Urban Governance Index in India

- ❖ Kerala has secured first rank in the Urban Governance Index (UGI).
- ❖ Odisha came second with 55.10.
- ❖ In fiscal empowerment, Kerala managed to have high score of 23.22 out of 30, with Maharashtra coming second with 21.15.

- ❖ Only four States (Chhattisgarh, Kerala, Mizoram, and Odisha) mandate that every councillor should be part of at least one deliberative committee.

BEST PERFORMER	
<ul style="list-style-type: none"> ➤ Odisha ranked first for 'citizen's empowerment' under 2024 Urban Governance Index with a score of 21 out of 25, followed by Telangana (19) and Madhya Pradesh (17) 	<ul style="list-style-type: none"> ➤ In right to elect mayor and recall elected city representatives, Odisha scored 2 out of 5
<ul style="list-style-type: none"> ➤ In the accessible open data portal category, Odisha scored 7.75 out of 8.75 	<ul style="list-style-type: none"> ➤ In formal and active citizens' consultative mechanism, state scored 5 out of 5
	<ul style="list-style-type: none"> ➤ In active grievance redressal mechanism, it secured 6.25 out of 6.25

Verified Health Facility

- ❖ Karnataka, Uttar Pradesh, Rajasthan, Maharashtra, and Andhra Pradesh are the top five states in terms of the absolute number of health care facilities verified in the Health Facility Registry (HFR).
- ❖ The National Health Resource Repository (NHRR) data was established in 2018.
- ❖ It aims to collect information on all public and private health care institutions across the country.

HEALTH FACILITY VERIFICATION		Verified facilities according to							
Top 5	HFR	NHRR	Saturation		Bottom 5	HFR	NHRR	Saturation	
		2018	rate (%)				2018	rate (%)	
Karnataka	60,711*	49,337	100.00		Odisha	6	16,867	0.03	
Tripura	2,495	3,073	81.20		Tamil Nadu	1,694	73,941	2.30	
Chhattisgarh	10,403	15,048	69.10		Delhi	1,590	37,228	4.30	
Rajasthan	33,228	54,083	61.40		Maharashtra	21,964	149,572	14.70	
Himachal Pradesh	3,989	7,069	56.40		Haryana	4,659	26,474	17.60	

Note: HFR refers to Health Facility Registry; NHRR refers to National Health Resource Repository; * Karnataka has verified more facilities than those in NHRR data

Source: ABDM Dashboard, as of 5 pm, October 2, 2024

- ❖ The HFR is a repository of health facilities that aims to create a national digital health register of both public and private health facilities.
- ❖ This includes hospitals, clinics, diagnostic laboratories, imaging centres, and pharmacies of both modern and traditional systems of medicine.
- ❖ Karnataka is the only state with the highest number of verified facilities in the country at 60,711.
- ❖ It is followed by Tripura and Chhattisgarh, which have coverage saturation rates of 81.2 per cent and 69.1 per cent, respectively.
- ❖ At the bottom of the list are Odisha, Tamil Nadu, and Delhi, which have the lowest levels of facility coverage.

Assam's Traditional Products - GI Tags



- ❖ GI tag was given to following eight products from the Assam region, including traditional food items and several unique varieties of rice beer.
- ❖ The first is the variant of rice beer 'Bodo Jou Gwran', which has the highest percentage of alcohol (about 16.11%).
- ❖ The second variant is 'Maibra Jou Bidwi', known locally as 'Maibra Jwu Bidwi' or 'Maibra Zwu Bidwi'.
- ❖ The third variant, called 'Bodo Jou Gishi', is also a traditionally fermented rice-based alcoholic beverage.
- ❖ A GI tag has been secured by 'Bodo Napham', an important and favourite dish of fermented fish.
- ❖ The other one is 'Bodo Ondla', a rice powder curry flavoured with garlic, ginger, salt, and alkali.
- ❖ The 'Bodo Gwkha' has also received the GI tag.
- ❖ 'Bodo Narzi' is a semi-fermented food prepared with jute leaves.
- ❖ The 'Bodo Aronai', a small beautiful cloth, also has the GI tag.

25th Hornbill Festival

- ❖ The 25th edition of Nagaland's iconic Hornbill Festival, or the "Festival of Festivals," will take place in December 2024.
- ❖ The 10-day event showcase of Nagaland's rich and traditional cultural heritage in all its ethnicity, diversity and grandeur.
- ❖ The festival is a tribute to this bird, known for its qualities of majesty and alertness.
- ❖ The IUCN Status of the bird is Near Threatened.

Co-District – Assam



- ❖ Co-districts is a pioneering initiative by the Assam government within the existing districts.
- ❖ They rolled out 39 co-districts in the first phase.
- ❖ It aims to ensure timely access to essential govt services and streamline citizen-centric services by bringing governance to the grassroots.
- ❖ These 'co-districts' will serve as smaller administrative units below the districts led by an officer of the rank of Assistant District Commissioner.

Pygmy hogs in Manas

- ❖ Nine captive-bred pygmy hogs were released in western Assam's Manas National Park.
- ❖ It was the fifth such exercise by the Pygmy Hog Conservation Programme (PHCP) since 2020.

- ❖ The pygmy hog (*Porcula salvania*) is the world's smallest and rarest wild pig most threatened by extinction.



Gudiya bird of Bihar

- ❖ The Women's Asian Champions Trophy-2024 is jointly being organised by Hockey India.
- ❖ 'Gudiya' was named as the mascot for the 2024 game.
- ❖ The logo, central to the design is the iconic Bodhi Tree, a symbol deeply connected to Bihar's spiritual heritage.

Banjara Virasat Museum - Maharashtra

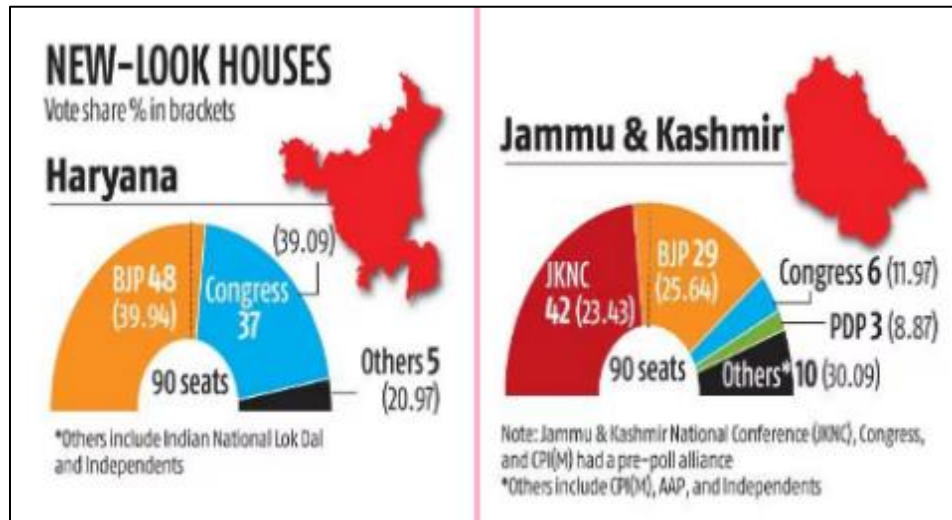
- ❖ The Banjara Virasat Museum has been inaugurated in Pohardevi at Washim in Maharashtra to celebrate the rich heritage of the Banjara community.
- ❖ Banjara community is a group of nomadic tribes originally from Rajasthan who have now settled in Karnataka, Andhra Pradesh, Madhya Pradesh, Gujarat and Maharashtra.
- ❖ Poharadevi is considered a sacred site by the community, they often refer to it as the "Kashi of the Banjara community."
- ❖ The Banjaras were historically pastoralists, traders, breeders and transporters of goods in the inland regions of India.

UP's rural women drive

- ❖ The Enterprising women business correspondents, known as BC Sakhis, have facilitated transactions worth Rs 27,000 crore in Uttar Pradesh.
- ❖ BC Sakhis are appointed under nationwide women empowerment programme.
- ❖ They are members of self-help groups (SHGs) who are trained and certified to provide banking and financial services in rural areas.

- ❖ Uttar Pradesh leads the nation in the number of BC Sakhis, followed by Madhya Pradesh and Rajasthan with nearly 19,000 and 10,000 correspondents, respectively.

Haryana and Jammu & Kashmir elections



- ❖ The alliance of the National Conference (NC) and Congress has won the Jammu and Kashmir assembly polls.
- ❖ This is the first assembly elections since 2014, first as a Union Territory and first after the removal of Article 370.
- ❖ In Haryana, the BJP has created history by retaining the state for the record consecutive third term.
- ❖ The BJP has won 48 seats while the Congress has secured 37.
- ❖ In J&K's 90 seats, the NC and Congress have won in 49, the BJP in 29 and the PDP in three.

Aurora Borealis - Leh

- ❖ Auroras has appeared up the skies over Leh, India, as a severe geomagnetic storm struck Earth.
- ❖ This event was triggered by a powerful coronal mass ejection (CME) from the Sun, which reached Earth.
- ❖ The CME originated from an X1.8 solar flare, and it travelled at speeds exceeding 1.5 million miles per hour.
- ❖ The National Oceanic and Atmospheric Administration (NOAA) has classified the geomagnetic storm as G4.

- ❖ It was indicating the severe conditions that could disrupt power grids and satellite operations.
- ❖ Solar activity peaks in cycles of 11 years, reaching their solar maximum once per cycle, which is due in 2025, and the effects of which are likely to be felt till 2026.

End of President's Rule in JK

- ❖ The President's rule has been revoked in Jammu and Kashmir before the appointment of the Chief Minister.
- ❖ The Central rule began in Jammu and Kashmir on October 31, 2019, when the erstwhile state was divided into two Union territories, Jammu and Kashmir, and Ladakh.
- ❖ Jammu and Kashmir was without an elected government since June 2018.
- ❖ On December 19, 2018, then President of India announced President's Rule in J&K under Article 356 of the Constitution.
- ❖ Now, the revocation allowed for the formation of a new government with a new chief minister.
- ❖ The lieutenant governor will exercise executive control over critical areas, including police, public order and land management.

Demonstration Facility for Biopolymers

- ❖ India's first Demonstration Facility for Biopolymers was inaugurated in Jejuri, Pune.
- ❖ This facility focuses on developing technology for producing Polylactic Acid (PLA) bioplastic.
- ❖ Biopolymers are made from biological sources such as fats, vegetable oils, and sugars.



- ❖ They offer advantages over synthetic polymers, including biodegradability, allowing for easy decomposition by bacteria in soil.
- ❖ They also promote the carbon neutrality since the CO₂ released during their degradation can be reabsorbed by replacement crops.

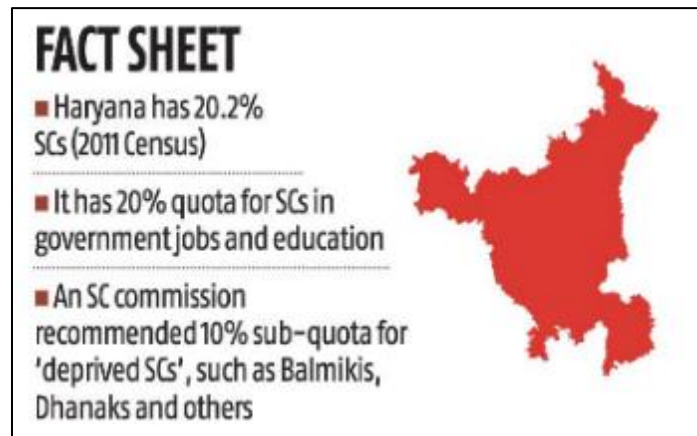
Uttarakhand's Roopkund Lake



- ❖ Roopkund Lake, Uttarakhand's trekking destination, is located 16,500 feet above sea level at the base of Mount Trishul.
- ❖ The lake's size is approximately two acres with a depth of around 9 feet.
- ❖ It is known as the "lake of skeletons", the glacial body conceals hundreds of human skeletons.
- ❖ The lake is now shrinking in both width and depth by about 0.1% to 0.5% annually.

Dalit sub-quotas System – Haryana

- ❖ Recently the Haryana SC commission had recommended subclassifying the Dalit communities into following two categories.
 - The deprived scheduled castes (DSC) comprising 36 groups such as Balmikis, Dhanaks, Mazhabi Sikhs and Khatiks, and
 - Other scheduled castes (OSC) comprising castes such as Chamar, Jatia Chamar, Rehgar, Raigar, Ramdasi, Ravidasi and Jatav.
- ❖ During the first meeting of the newly elected state cabinet had approved the proposal.
- ❖ Now each subgroup gets 50% of the 20% SC quota for government jobs.



24th National Para-Swimming Championship

- ❖ Karnataka has secured the overall title at the 24th National Para-Swimming Championships.
- ❖ Maharashtra finished second, while Rajasthan took the third spot.
- ❖ The event witnessed participation of 518 swimmers from 28 states.
- ❖ In the individual categories, Mohammed Aasim of Kerala emerged the men's senior champion.
- ❖ Jeya Selvan (Tamil Nadu) won Gold in 50 metre backstroke - Men's S6 Category.
- ❖ Simran Gaundalkar of Swimmers Club Belgaum set three national records in the 50 metre, 100 metre backstroke and 200 metre individual medley.

Bihar - First Dry Port

- ❖ Bihar's first dry port was inaugurated at Bihta, a town near state capital Patna.
- ❖ A dry port, or inland container depot (ICD), provides a logistics facility away from a seaport or airport for cargo handling, storage, and transportation.
- ❖ It acts as a bridge between sea/air ports and inland regions, facilitating efficient movement of goods.
- ❖ It is being run in a Public-Private Partnership (PPP) mode.
- ❖ Bihar is a major producer of fruits and vegetables such as potato, tomato, banana, litchi and makhana (fox nuts).
- ❖ The state recorded exports worth Rs 20,000 crore in 2022-23.

PERSONALITIES, AWARDS AND EVENTS

Best Tourism Villages Competition - 2024

- ❖ Ministry of Tourism announced winners of the Best Tourism Villages Competition 2024 on the occasion of World Tourism Day.
- ❖ To promote tourism to the Soul of India (India's villages), the Best Tourism Villages Competition was introduced in 2023.
- ❖ Totally 36 villages recognized as winners across 8 categories.
- ❖ Keeladi from Tamil Nadu topped in the Heritage Category.
- ❖ Melkalingam Patti from the Namakkal District won the award in Spiritual and Wellness Category.

American missionary Alice Brauer

- ❖ American missionary Alice Brauer passes away recently.
- ❖ She dedicated her life to the eradication of leprosy, tuberculosis, and polio in Ambur for over 60 years.
- ❖ During her career spanning over six decades, her work reached over 60 villages and improved the lives of the local communities.
- ❖ She is known in the name of "Missiyamma".

MIDORI Prize 2024

- ❖ Vera Voronova from Kazakhstan and Ysabel Agustina Calderón Carlos from Peru have been selected for the MIDORI Prize for Biodiversity 2024.
- ❖ They have been recognised for their outstanding contributions to conservation and sustainability.
- ❖ The MIDORI Prize is given every two years to people who make outstanding contributions to protecting biodiversity at all levels.
- ❖ With this year's winners, the total number of MIDORI Prize recipients has reached 19 individuals from 17 different countries.

Nobel Prize 2024 in Medicine

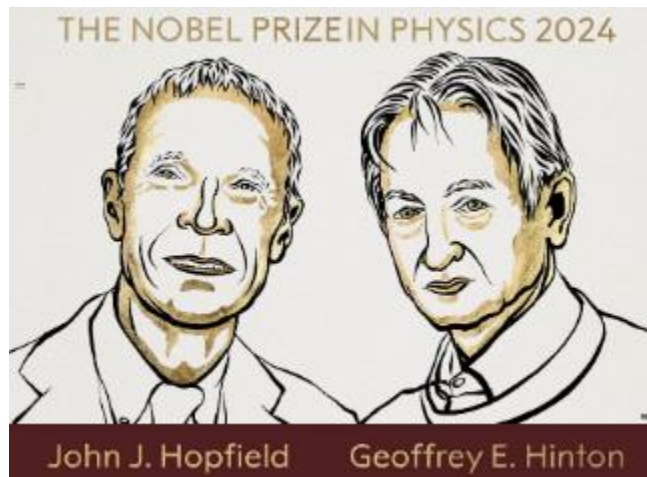
- ❖ Scientists Victor Ambros and Gary Ruvkun have won the 2024 Nobel Prize in Physiology or Medicine.
- ❖ They discovered microRNA, a new class of tiny RNA molecules that play a crucial role in gene regulation.

- ❖ It revealed a completely new principle of gene regulation that turned out to be essential for multicellular organisms, including humans.
- ❖ It is now known that the human genome codes for over one thousand microRNAs.
- ❖ The 2023 Nobel Prize in Physiology or Medicine was awarded to Katalin Karikó and Drew Weissman.



Nobel Prize in Physics 2024

- ❖ The Nobel Prize in Physics was awarded to John Hopfield and Geoffrey Hinton.
- ❖ They have used physics tools to develop methods that form the basis of today's powerful machine learning.
- ❖ John Hopfield has created an associative memory that can store and reconstruct images and other patterns in data.
- ❖ Geoffrey Hinton invented a method that can automatically find properties in data, allowing it to identify specific elements in pictures.
- ❖ The 2023 prize went to physicists Anne L'Huillier, Pierre Agostini, and Ferenc Krausz for their work with electrons.



Ratan Tata

- ❖ Ratan Tata, a former chairman of Indian conglomerate Tata Sons passed away recently.
- ❖ Tata received the Padma Bhushan, one of India's most distinguished civilian awards, in 2000 and "Padma Vibhushan" in 2008.
- ❖ Tata Group is a sprawling collection of nearly 100 companies, including the country's largest automaker and the largest private steel company etc.
- ❖ Tata pioneered commercial aviation in India when it launched an airline in 1932 that later became Air India.



Nobel Prize in Chemistry 2024



- ❖ The Nobel Prize in Chemistry 2024 has been awarded to David Baker, Demis Hassabis and John M Jumper.

- ❖ Baker won “for computational protein design”, the American Jumper and Briton were honoured for “protein structure prediction”.
- ❖ Baker has achieved the extraordinary feat of designing entirely new proteins.
- ❖ Demis Hassabis and John Jumper have developed an artificial intelligence (AI) model to solve a 50-year-old challenge: predicting the complex three-dimensional structures of proteins.

WAZA Awards 2024

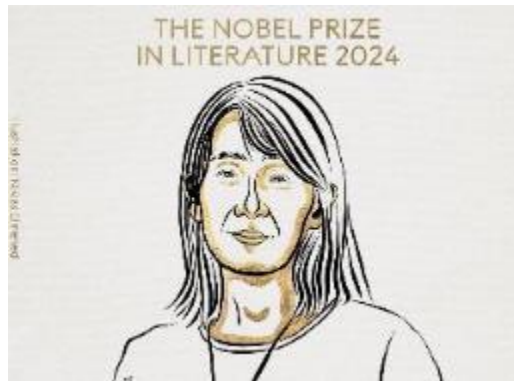


- ❖ For the first time, a conservation-breeding program of a zoo in India is shortlisted as a finalist for the 2024 Conservation & Environmental Sustainability Awards, by the World Association of Zoos and Aquariums (WAZA).
- ❖ It is for the Red Panda Conservation Breeding and Augmentation Programme of the Padmaja Naidu Himalayan Zoological Park.
- ❖ The breeding programme began with four red pandas from the wild taken into the Darjeeling Zoo in 1990.

Nobel Prize 2024 in Literature

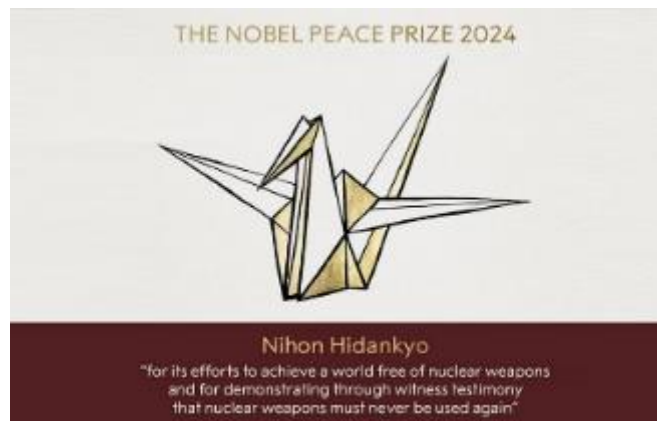
- ❖ The 2024 Nobel Prize has been awarded for the Literature to South Korean author Han Kang.
- ❖ It is recognizing her "intense poetic prose that confronts historical traumas and exposes the fragility of human life."
- ❖ Her another most notable works, "Human Acts" (2014), exemplifies her approach to literature.
- ❖ The novel is rooted in the real-life Gwangju Uprising of 1980.
- ❖ Han's short story "Europa" (2012) further showcases her literary prowess.
- ❖ Her "The Vegetarian" (2007) won the Man Booker International Prize in 2016.

- ❖ The Nobel Prize in Literature has been awarded 116 times to 120 Nobel Prize laureates between 1901 and 2023.



2024 Nobel Peace Prize

- ❖ Japanese organisation Nihon Hidankyo has been awarded the Nobel Peace Prize 2024 for its efforts to achieve a world free of nuclear weapons.
- ❖ It was representing survivors of the atomic bombings of Hiroshima and Nagasaki.
- ❖ Formed in 1956, Nihon Hidankyo is the largest and most influential organisation of atomic bomb survivors in Japan.
- ❖ Last year, the 2023 Nobel Peace Prize was awarded to Iranian activist Narges Mohammadi, who is currently imprisoned.



Nobel in Economics 2024

- ❖ The Nobel Memorial Prize in economics was awarded to Daron Acemoglu, Simon Johnson and James A Robinson for their research into differences in prosperity between nations.
- ❖ They have demonstrated the importance of societal institutions for a country's prosperity.

- ❖ Societies with a poor rule of law and institutions that exploit the population do not generate growth or change for the better.
- ❖ Acemoglu and Johnson work at the Massachusetts Institute of Technology while Robinson is a researcher at the University of Chicago.
- ❖ Even though this prize for economics is not technically a Nobel Prize, it has always been presented along with others.



5th National Water Awards 2023

- ❖ Odisha has been selected as the winner of the 5th National Water Awards 2023.
- ❖ UP is securing the second spot, and Gujarat and Puducherry jointly securing the third spot.
- ❖ The award covers nine categories, honouring outstanding contributions to water conservation and management across India.
- ❖ Parambur Big Tank Water User Association, Pudukkottai won third prize in Best Water User Association category.
- ❖ Tamil Nadu Agricultural University, Coimbatore Won 1st Prize in Best Institution (Other Than School/College) Category.
- ❖ IIT Madras has won third prize in Best Institution (Other Than School/College) Category.
- ❖ Apollo tyres limited (ATL), Kanchipuram won 2nd prize in best industry category.

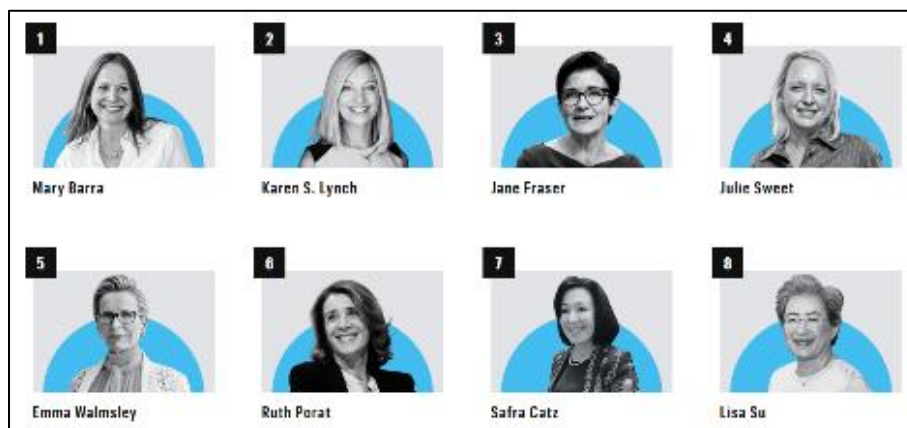


India Mobile Congress 2024



- ❖ The eighth edition of the India Mobile Congress was held at Delhi.
- ❖ The theme of the event is 'The Future is Now'.
- ❖ It witnessed the participation from over 120 countries.
- ❖ The digital plaque to inaugurate the WTSA 2024 organised by the International Telecommunication Union, was unveiled during the event.
- ❖ Mobile data in India costs 12 cents per GB.
- ❖ In other countries, one GB of data is ten times more costly.
- ❖ Indians consume an average of 30 GB of data every month.
- ❖ Currently, India is home to 200 smartphone manufacturing units.
- ❖ The World Telecommunication Standardization Assembly is also inaugurated along with this event.
- ❖ It is being held every four years.

2024 Most 100 powerful women in Business



- ❖ Mary Barra, CEO of General Motors, tops the 27th annual Most Powerful Women list.

- ❖ She is followed by CVS Health CEO Karen Lynch and Citigroup CEO Jane Fraser.
- ❖ It featured executives from 11 Asia-Pacific countries such as China, India, Japan, South Korea, Malaysia, Singapore, among others.
- ❖ Indian women business leaders in the list includes: Isha Ambani, Roshni Nadar, Sandhya Devanathan of Meta India, Arundhati Bhattacharya, Falguni Nayar and some others.

UNHCR Nansen Refugee Award 2024

- ❖ The Office of the United Nations High Commissioner for Refugees will present its annual Nansen Award to 5 people.
- ❖ This year's winners are
 - Jin Davod, is a young social entrepreneur.
 - Sister Rosita Milesi (Brazil), a nun, lawyer, social worker.
 - Maimouna Ba (Africa), an activist from Burkina Faso.
 - Nada Fadol (Middle East & North Africa), a Sudanese refugee.
 - Deepti Gurung (Asia-Pacific), who campaigned to reform Nepal's citizenship laws.
 - Jin Davod, Europe - a young social entrepreneur.
- ❖ The Nansen Award was established in 1954 in the honour of the Norwegian humanitarian, scientist, explorer, and diplomat Fridtjof Nansen.

Arjun Erigaisi



- ❖ GM Arjun Erigaisi made history by becoming the youngest Indian to surpass the coveted 2800 Elo rating mark.
- ❖ He is also the only second from the country after Viswanathan Anand.
- ❖ His win in the European Chess Club Cup 2024 helped him become the World No. 3 in the live rating list.

- ❖ Arjun became the 16th player to cross the 2800-rating mark.
- ❖ Five-time World Champion, Magnus Carlsen sits second on this list.

Rani Chennamma 200th birth anniversary

- ❖ Rani Chennamma, the Queen of Kittur was born on 23rd October 1778, in Kagati, Belagavi district in Karnataka.
- ❖ After the death of her husband, she adopted Shivalingappa with aim of making him heir to throne of Kittur.
- ❖ The British refused to recognize Shivalingappa under the 'doctrine of lapse' and subsequently led to the Revolt.
- ❖ Though British lost 1st battle in 1824, she was later captured & imprisoned, till her death in 1829.



SPORTS

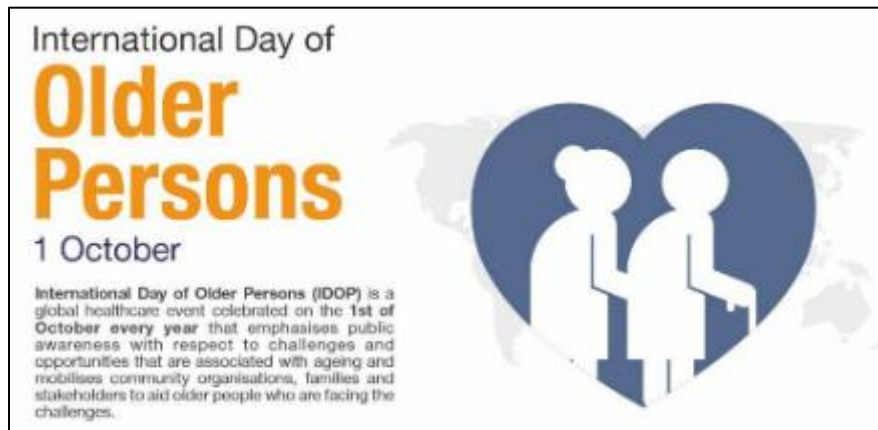
Rafael Nadal Retirement

- ❖ Spain's tennis player Rafael Nadal has announced his retirement from the professional tennis.
- ❖ Nadal has won 22-grand slam singles title and a record 14 French Open titles.
- ❖ A five-time year-end world number one, he remained in the ATP top 10 for an incredible 17 years, from 2005 until March 2024.
- ❖ During his peak years, he spent 209 weeks ranked as the world's top player.
- ❖ He won at least one title every year from 2004 to 2022.



IMPORTANT DAYS

International Day of Older Persons 2024 - October 01

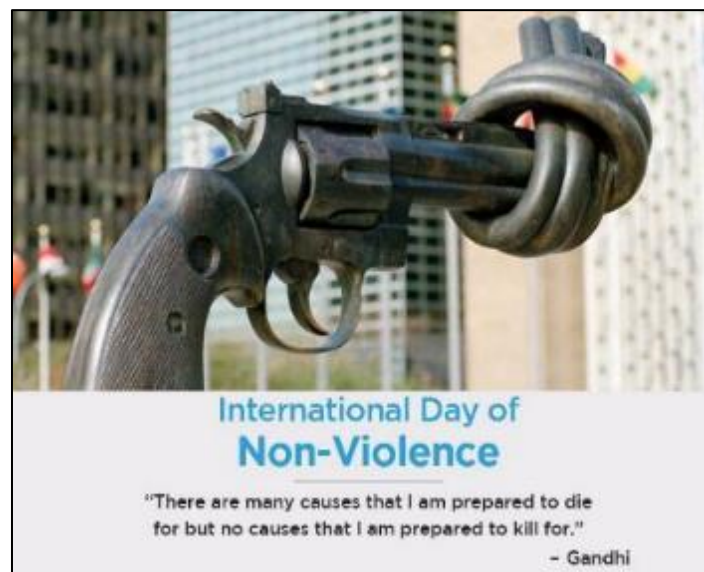


- ❖ It aims to recognize the contributions of older people to society and to raise awareness of the issues they face.
- ❖ This date was chosen to coincide with the adoption of the UN Principles for Older Persons.
- ❖ It set out a framework for addressing the rights and well-being of older individuals.

- ❖ The United Nations General Assembly established the day on December 14, 1990.
- ❖ The theme of 2024 is "Ageing with Dignity: The Importance of Strengthening Care and Support Systems for Older Persons Worldwide".

International Day of Non-violence 2024 - October 02

- ❖ The day is observed on the birth anniversary of MK Gandhi and reflects upon his philosophy and commitment to non-violence as a means of social and political change.
- ❖ His struggles guided by non-violence and peaceful resistance.
- ❖ The principle of non-violence/non-violent resistance rejects the use of physical violence in order to achieve social or political change.
- ❖ In June 2007, the United Nations General Assembly unanimously declared this day.



World Animal Welfare Day 2024 - October 04

- ❖ It aims to celebrate animal rights and welfare all over the planet.
- ❖ It educates people about our species diversity, how to protect and rescue them and about to make a positive impact on animal welfare.
- ❖ World Animal Day was first commemorated on March 24, 1925.
- ❖ The theme for this year is "The world is their home too."



World Space Week 2024 - October 04/10

- ❖ It is highlighting the benefits of space exploration and promoting international cooperation in space activities.
- ❖ It is established by the United Nations to commemorate two significant milestones:
 - The launch of Sputnik 1 on October 4, 1957, and
 - The signing of the Outer Space Treaty on October 10, 1967.
- ❖ The launch of Sputnik 1 by the Soviet Union on October 4 marked humanity's first artificial satellite in orbit.
- ❖ The Outer Space Treaty establishing a framework for international space law and promoting peaceful exploration of space.
- ❖ This year's theme is "Space and Climate Change."

World Teachers' Day 2024 - October 05

- ❖ It is established by UNESCO to recognise the importance of teachers in society.
- ❖ The day marks the anniversary of the 1966 UNESCO/ILO Recommendation concerning the Status of Teachers.
- ❖ It was first celebrated in 1994.
- ❖ It aims to honour the essential role that teachers play in shaping our lives.
- ❖ The 2024 celebrations will focus on "Valuing teacher voices: towards a new social contract for education".

92nd Indian Air Force Day 2024 - October 05

- ❖ Also known as 'Bharatiya Vayu Sena', the IAF was officially established on October 8, 1932, by the British Empire.
- ❖ The air force is divided into five operational and two functional commands.

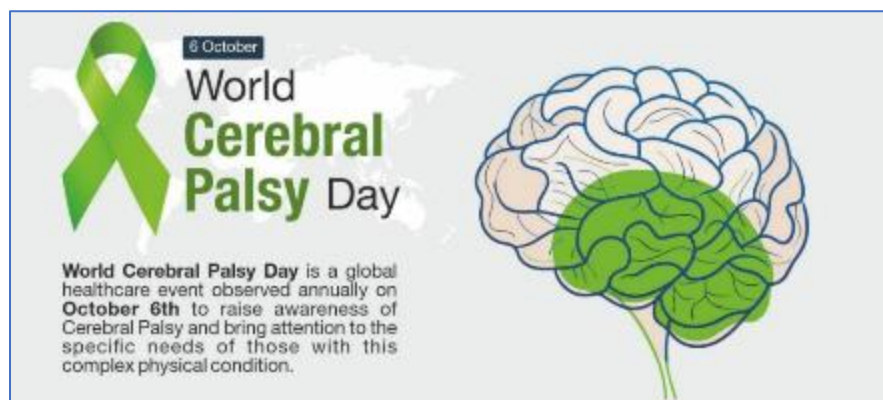
- ❖ IAF ranks as the fourth largest operational air force in the world.
- ❖ This year's theme is “Bhartiya Vayu Sena – Saksham, Sashakt, Atma Nirbhar”.
- ❖ The Indian Air Force (IAF) conducted a mega airshow on the Marina Beach in Chennai on October 6 to commemorate this day.
- ❖ The event drew an estimated 15 lakh people, setting a new record in the Limca Book of Records for the largest attendance at an air show.
- ❖ The last event held 21 years ago was on a small-scale in Chennai.

World Postal Day 2024 - October 09

- ❖ This day is the anniversary of the establishment of the Universal Postal Union in 1874 in the Swiss Capital, Bern.
- ❖ In 2024, the Universal Postal Union (UPU) celebrates its 150th anniversary.
- ❖ The theme for 2024 is “150 years of enabling communication and empowering peoples across nations”.

World Cerebral Palsy Day 2024 - October 06

- ❖ It is to raise awareness and advocate for the rights of individuals living with cerebral palsy (CP).
- ❖ This day serves as a reminder of the challenges faced by those affected by CP and underscores the importance of support and inclusion in society.
- ❖ Cerebral palsy is a condition of movement and posture.
- ❖ In cerebral palsy, the brain develops differently in different children.
- ❖ Globally, about 1.7 crores of people have some form of cerebral palsy.
- ❖ This year's theme is “Uniquely CP”.

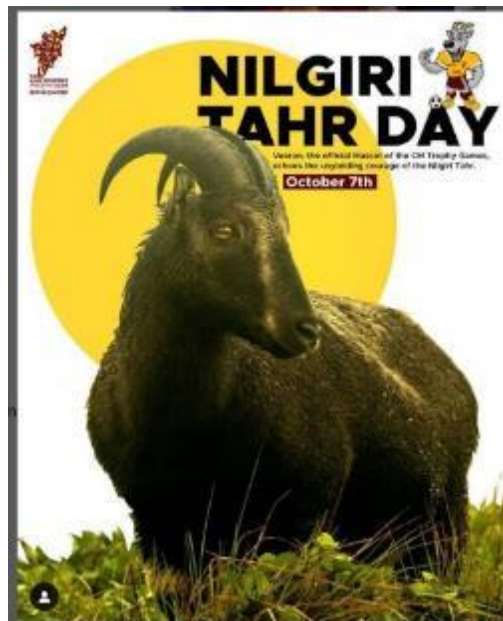


World Habitat Day 2024 - October 06

- ❖ In 1985, the United Nations General Assembly announced the celebration of this day on the first Monday of October.
- ❖ This day serves as a powerful reminder that everyone is entitled to a decent and safe place to live.
- ❖ "Engaging youth to create a better urban future" is the 2024's theme.

Nilgiri Tahr Day 2024 - October 07

- ❖ Tamil Nadu celebrated the first 'Nilgiri Tahr Day' in 2023.
- ❖ October 7 was chosen by the Government as Nilgiri Tahr Day in honour of E.R.C. Davidar.
- ❖ He was a wildlife conservationist who pioneered studies on the sole mountain ungulate of Southern India as early as in 1960s.
- ❖ He took the first census of the Nilgiri tahr in the Nilgiris landscape during 1963 and reported that there were about 400 tahr in the Nilgiris.



World Cotton Day 2024 - October 07

- ❖ This day is dedicated to showcasing the incredible versatility of cotton.
- ❖ While cotton is a staple in the textile industry.
- ❖ It also plays a crucial role in animal feed, medical supplies and even the production of edible oil.

- ❖ This day originated from the Cotton Four nations—Burkina Faso, Benin, Chad, and Mali—and other cotton-producing countries in Africa.
- ❖ The first World Cotton Day event was initiated in Geneva and observed on October 7, 2019.
- ❖ The theme of 2024 "Megatrends Shaping Cotton Textile Value Chain".

National Postal Week 2024 – October 09/15

- ❖ It aims to honour this integral service of the postal system.
- ❖ It is celebrated every year to highlight the importance of the postal services in connecting people, supporting businesses, and contributing to the global communication.
- ❖ October 10 is celebrated as the National Postal Day.
- ❖ The structured Postal service was introduced in 1854 by Lord Dalhousie.
- ❖ In 1852, the first postage stamp of India, known as the “Scinde Dawk,” was introduced.
- ❖ India has 23 postal circles and 9 postal zones including Army Post Office.
- ❖ Post offices in India follows a 6-digit PIN Code system, which was introduced in India in 1972.
- ❖ The theme for 2024 is "Connecting India: The Role of Postal Services in Nation Building".

World Mental Health Day 2024 – October 10



- ❖ This initiative was dedicated for raising the awareness, promoting mental health education, and advocating against the stigma surrounding mental health.
- ❖ World Mental Health Day was first observed on October 10, 1992.
- ❖ The theme for 2024 is 'Mental Health at Work'.

International Day of the Girl Child 2024 - October 11



- ❖ It was established by the United Nations General Assembly in December 2011.
- ❖ This day was dedicated for raising awareness about the unique challenges girls face worldwide and promoting their empowerment.
- ❖ This day highlights the need to address issues such as gender inequality, child marriage, and limited access to education and healthcare.
- ❖ The theme of 2024 is “Girls’ vision for the future.”
- ❖ UNESCO proclaimed 1979 as the International Year of the Child.

International Day for Disaster Risk Reduction 2024 - October 13



- ❖ The day aims to raising awareness about disasters, their effect on living beings, and preventive measures.
- ❖ This day was first observed in the year 1989 at the UNGA.
- ❖ Sendai Framework for Disaster Reduction 2015-30 was adopted at the 3rd UN World Conference on Disaster Risk Reduction in Japan.
- ❖ It aims to guide the multi hazard management of disaster risk in development at all levels as well as within and across all sectors.

- ❖ It is the successor instrument to the Hyogo Framework for Action (HFA) 2005-2015.
- ❖ This year's theme is "Role of education in protecting and empowering youth for a disaster-free future."

World Migratory Bird Day 2024 - October 12

- ❖ This day was celebrated in the Second Saturdays of May and October.
- ❖ The two days of this day serve as a means to reflect the cyclical nature of bird migration, as well as the varying peak migration periods in the northern and southern hemispheres.
- ❖ This year the dates are May 11 and October 12, 2024.
- ❖ It aims to highlight the need for international cooperation to conserve migratory birds.
- ❖ Theme of 2024 is "Protect Insects, Protect Birds".

World Hospice and Palliative Care Day 2024 - October 12

- ❖ It aims to advocate for People Living with Palliative Care Needs (PLWPCNs) on every second Saturday of October.
- ❖ 2024 marks 10 years of WHO's, the only stand-alone resolution on palliative care.
- ❖ It was calling for all countries to "strengthen palliative care as a component of comprehensive care throughout the life course."
- ❖ From 2011 to 2017 the number of palliative care services increased from 16,000 to 25,000, caring for 7 million patients.
- ❖ But still only about 12% of the need was met.
- ❖ The theme for 2024 is, "Ten Years Since the Resolution: How are we doing?".



Breast cancer awareness Month 2024 - October 01/31

- ❖ It aims to raise awareness about breast cancer, one of the most common cancers affecting women worldwide.
- ❖ This month provides an opportunity to educate the public, promote early detection, and encourage fundraising for breast cancer research and treatment.
- ❖ Breast cancer occurs when cells in the breast grow uncontrollably, forming a tumour.
- ❖ About 25.8 per 100,000 women (age adjusted rate) and mortality rates of 12.7 per 100,000 women.
- ❖ With an expected 2.3 million new cases in 2020 (11.7% of all cancer cases), it is the leading cause of global cancer incidence.
- ❖ Between 1965 and 1985 there was a nearly a 50% increase of breast cancer incidence in India.
- ❖ Breast Cancer Awareness Day is celebrated every year on October 13.
- ❖ Theme for 2024 is No-one should face breast cancer alone.



World Egg Day 2024 - October 11

- ❖ It is celebrated on the second Friday in October each year.
- ❖ This occasion highlights the nutritional benefits, versatility, and significance of eggs in diets around the globe.
- ❖ The day emphasises how eggs provide essential nutrients and affordable protein to people worldwide.
- ❖ It was established at Vienna 1996.
- ❖ The theme for 2024 is "United by Eggs."

World Standards Day 2024 - October 14

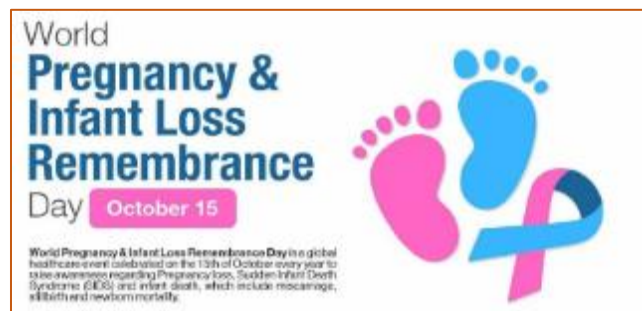
- ❖ This day offers the opportunity to increase understanding of the importance of standardization.
- ❖ The date commemorates the first meeting held in 1946, London to establish an international organization that would concentrate its efforts on standardization.
- ❖ The first World Standards Day was only celebrated in 1970.
- ❖ The theme for 2024 is Achieving industry, innovation and infrastructure through AI.

International Day of Rural Women 2024 - October 15

- ❖ It aims to recognise the significant contributions of rural women to their families, communities, and economies.
- ❖ It also promotes gender equality and empower these women.
- ❖ It was established by the United Nations General Assembly in 2007.
- ❖ The theme for 2024 is “Rural Women Cultivating Good Food for All”.
- ❖ Women engaged in wage employment in agriculture earn 82 cents for every dollar that men earn.
- ❖ From 2016, India also observes October 15 as Rashtriya Mahila Kisan Diwas.

Pregnancy and Infant Loss Remembrance Day 2024 - October 15

- ❖ This day dedicated to honouring the memory of babies lost to miscarriage, stillbirth or neonatal death.
- ❖ The day is also meant to raise awareness about the emotional and mental challenges faced by those impacted by pregnancy and infant loss.
- ❖ Nearly 20 lakhs babies are stillborn each year, and many of these deaths are avoidable.
- ❖ The probability of miscarriage before 20 weeks gestation in women aged 20 to 30 is 8.9%.
- ❖ This increase to 74.7% for women over the age of 40.



Global Handwashing Day 2024 - October 15



- ❖ It aims to raise the awareness about the role handwashing plays in preventing diseases and saving lives.
- ❖ This day was first initiated in 2008 by the Global Handwashing Partnership (GHP).
- ❖ The regular handwashing with soap is one of the most effective ways to prevent illnesses, such as diarrhoea and respiratory infections, especially among children.
- ❖ This year's theme is "Why are clean hands still important?".

World White Cane Day 2024 - October 15

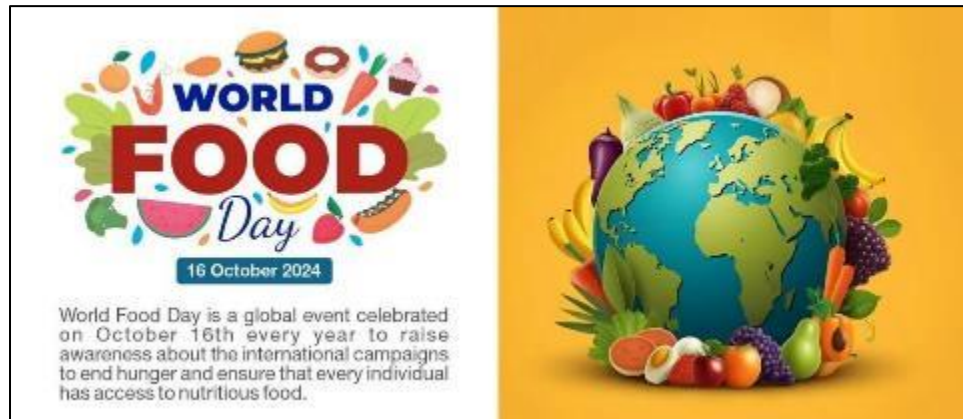


- ❖ It aims to recognise the importance of the white cane as a tool for individuals who are blind or visually impaired.

- ❖ The white cane allows them to navigate their surroundings safely and independently.
- ❖ The day was first celebrated in 1964, with President Lyndon B. Johnson marking the occasion.

World Food Day 2024 - October 16

- ❖ It aims to end hunger and make sure that every individual has access to nutritious food.
- ❖ The Food and Agriculture Organization was founded on 16 October 1945.
- ❖ FAO started this day to start a fight against hunger, raise awareness about healthy diets, and promote action against malnutrition and food security.
- ❖ The theme of 2024 is "Right to Food for a Better Life and a Better Future."



World Anesthesia Day - October 16

- ❖ This day honours the successful administration of the first anaesthesia and commemorate and celebrates the milestone.
- ❖ Anaesthesia is a medical procedure that prevents patients from feeling pain during treatments like surgery, tissue sample removal, dental work, certain screening, and diagnostic tests.
- ❖ On October 16, 1846, American dentist and physician William Thomas Green Morton conducted the first-ever diethyl ether anaesthesia experiment.
- ❖ The theme for 2024 is "Workforce Well Being".



World Spine Day 2024 - October 16

- ❖ It aims to raising awareness about spinal health and the prevention of spinal disorders.
- ❖ It was first celebrated in 2012 as part of the Bone and Joint Decade.
- ❖ The spine is the backbone and the central support structure of the body, which supports basic activities like sitting, standing, walking, twisting and bending.
- ❖ Around 100 crores globally suffer from back pain and spinal-related issues.
- ❖ The theme for 2024 is "Support Your Spine."



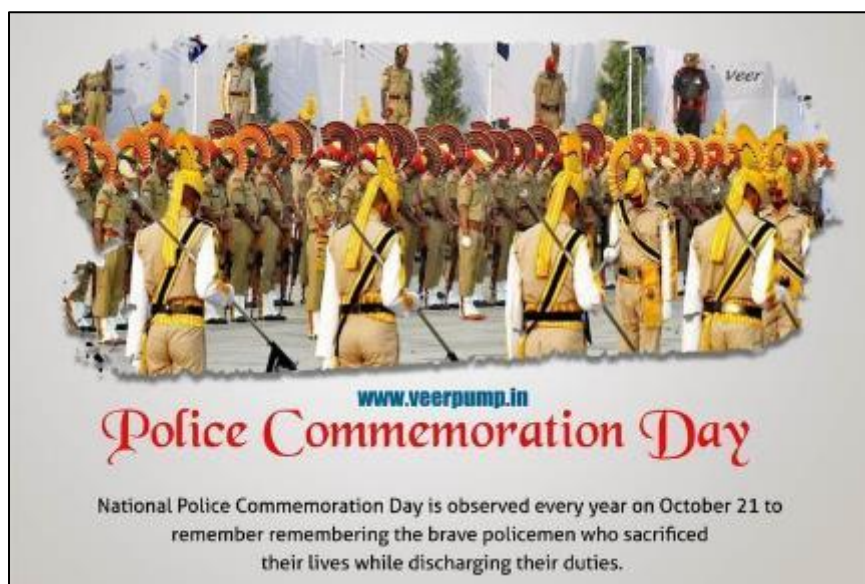
International Day for Eradication of Poverty 2024 - October 17

- ❖ The day tries to promote the dialogue and understanding about poverty within governments and policymakers.
- ❖ On this day in 1987 over 100,000 people assembled at the Trocadero in Paris to commemorate victims of poverty, hunger, violence and fear.
- ❖ In December 1992, the United Nations General Assembly (UNGA) declared this day.

- ❖ The theme for this year is “Ending Social and Institutional Maltreatment Acting together for just, peaceful and inclusive societies.”

Police Commemoration Day 2024 - October 21


- ❖ The day marks the sacrifice of 10 CRPF men who lost their lives to a Chinese attack in 1959.
- ❖ A police contingent comprising CRPF and ITBF personnel were killed by Chinese troops in an ambush in the Hot Springs area near Ladakh.
- ❖ Hot Spring in Aksai Chin in Ladakh is situated between 15,000 and 16,000 ft above the sea level on the Indo-Tibet border.



Mole Day 2024 - October 23


- ❖ The day is commemorated in honor of Avogadro’s number and is marked from 6:02 a.m. to 6:02 p.m.
- ❖ Avogadro number is denoted as 6.02×10^{23} to define the number of particles present in a single mole of any substance.
- ❖ This number - or a mole - is a basic measuring unit for atoms and molecules discovered by Amedeo Avogadro, an 18th-century Italian scientist.
- ❖ The theme for 2024 is EncantMole.

THE MOLE: 6.022×10^{23}



WHAT IS A MOLE?

One mole is the amount of a substance that contains exactly $6.02214076 \times 10^{23}$ atoms, molecules or ions. This number is also known as 'Avogadro's Number' (N_A). It is named after the Italian scientist Amedeo Avogadro (left), which was a suggestion put forward by French scientist Jean Perrin to recognise Avogadro's work.

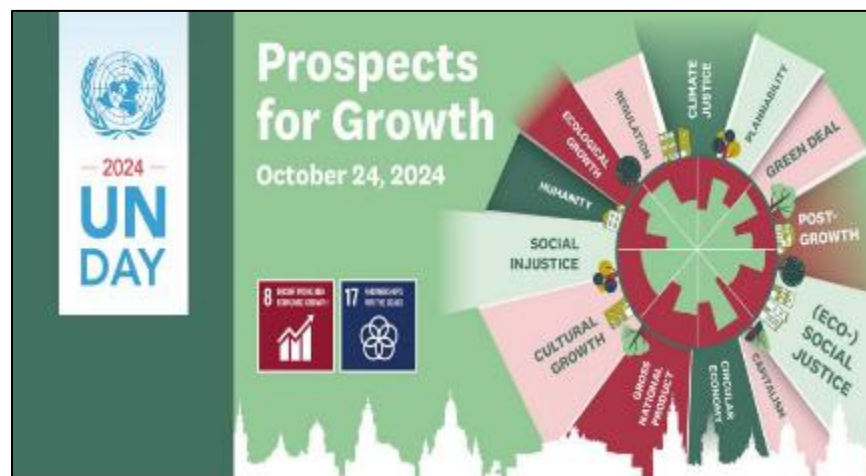


One mole is essentially _____

602,214,076,000,000,000,000,000

_____ *of something - in chemistry, atoms or molecules*

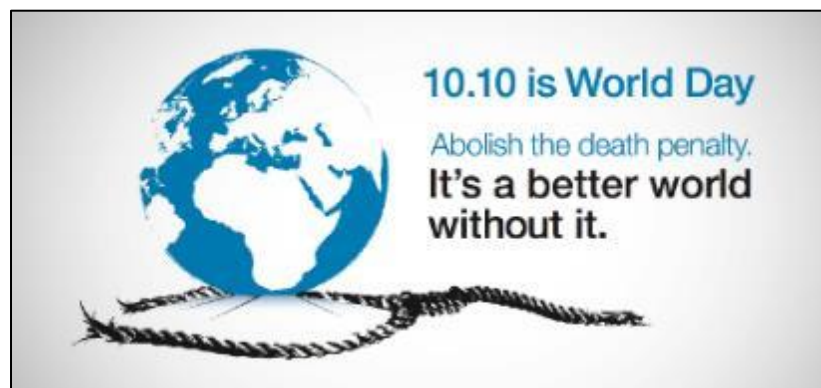
United Nations Day 2024 - October 24



- ❖ This day marks the anniversary of the UN Charter's adoption in 1945.
- ❖ After World War II, 51 nations established the United Nations in 1945 with the goals of preserving world peace and security.
- ❖ The name 'United Nations' was coined by the United States President Franklin D. Roosevelt.
- ❖ It is currently made up of 193 Member States.
- ❖ Each of the 193 Member States of the United Nations is a member of the General Assembly.
- ❖ This day was first celebrated on October 24, 1948.

World Day against Death Penalty 2024 - October 10

- ❖ The day encourages and consolidates the political and general awareness of the worldwide movement against the death penalty.
- ❖ This year celebration dedicated to challenging the misconception that the death penalty can make people and communities safer.
- ❖ 112 nations have abolished the death penalty for all crimes.
- ❖ The 5 countries that executed the most in the world in 2023 are, in order: China, Iran, Saudi Arabia, Somalia and the USA.
- ❖ At least 27,687 individuals are known to be under a sentence of death around the world at the end of 2023.



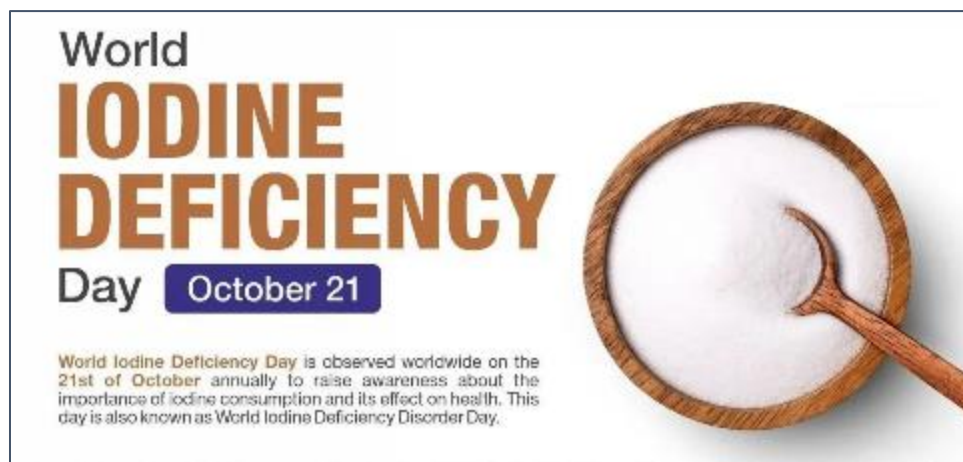
World Osteoporosis Day 2024 - October 20



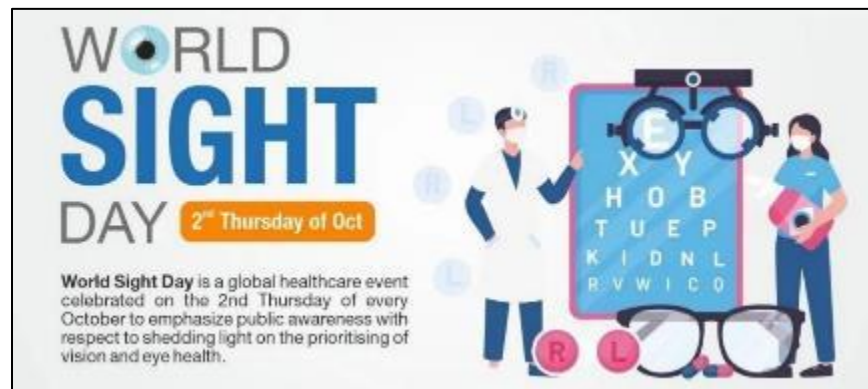
- ❖ It aims to raise awareness around the prevention, diagnosis and treatment of osteoporosis and metabolic bone disease.
- ❖ Osteoporosis is a metabolic bone disease wherein your new bone formation doesn't keep up with the loss of old bone.
- ❖ In India, about 23 percent of children suffer from osteoporosis.
- ❖ About 37 percent of the Elderly are diagnosed to have osteoporosis, whereas about 18 % of the adults have osteoporosis.

World Iodine Deficiency Day 2024 - October 21

- ❖ It aims to raise awareness about the importance of iodine consumption and its effect on health.
- ❖ This day is also known as World Iodine Deficiency Disorder Day.
- ❖ It causes significant health problems in 130 countries and affects 74 crore people.
- ❖ One-third (33%) of the world's population is exposed to the risk of the Iodine Deficiency Disorder (IDD).
- ❖ In India, more than 6.1 crore people are suffering from endemic goitre and 88 lakh people suffer from mental/ physical disabilities.



World Sight Day 2024 - October 10



- ❖ It is observed on the second Thursday of October.
- ❖ It aims to highlight the importance of protecting our eyes and vision, raise awareness of vision impairment and blindness, and promote eye and vision care.
- ❖ The theme of 2024 is "Children, love your eyes"

- ❖ Among all cases of blindness, 90% of them can be avoided or treated if identified early.
- ❖ Globally, nearly 220 crore individuals worldwide are visually impaired.
- ❖ 10 crore people suffer from a vision disability that could have been avoided or is still unaddressed.

Global Media and Information Literacy Week 2024 - October 24/31



- ❖ It aims to share ideas and promote Media and Information Literacy for all.
- ❖ It is an annual event organised by UNESCO to raise awareness of the importance of media and information literacy (MIL).
- ❖ It also celebrates the progress made towards achieving MIL for all.
- ❖ The Theme for 2024 will be “The new digital frontiers of information: Media and Information Literacy for public-interest information”.

Disarmament Week 2024 - October 24/30

- ❖ It seeks to promote awareness and better understanding of disarmament issues and their cross-cutting importance.
- ❖ It is starting on 24 October, the anniversary of the founding of the United Nations.
- ❖ The Ottawa Treaty, or the Anti-Personnel Mine Ban Convention, marks its 25th anniversary this year.
- ❖ The Treaty on the Non-Proliferation of nuclear weapons (NPT) was entering into force in 1970.
- ❖ The Comprehensive Nuclear-Test-Ban Treaty (CTBT) was opened for signature in 1996.

- ❖ Nuclear Suppliers Group was established in 1974 after Pokhran test.
- ❖ The Australian Group was established in 1985.
- ❖ The Missile Technology Control Regime was established in 1987.



International Snow Leopard Day - October 23



- ❖ This day was started in 2013, following the adoption of the Bishkek Declaration.
- ❖ The snow leopard (*Panthera uncia*) thrives in harsh, high-altitude environments.
- ❖ They are native to the mountains of Central and South Asia.

- ❖ They typically found at elevations between 9,800 and 17,000 feet in mountain ranges
- ❖ The snow leopard lives in 12 of the most mountainous countries in the world.
- ❖ They are Afghanistan, Bhutan, China, Kazakhstan, Kyrgyzstan, India, Mongolia, Nepal, Russia, Pakistan, Tajikistan, and Uzbekistan.
- ❖ It is listed as vulnerable by the IUCN.

World Development Information Day 2024 - October 24

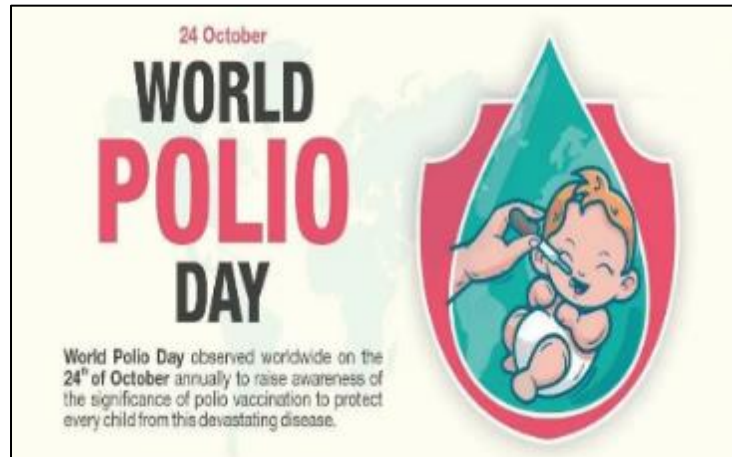
- ❖ It is a platform for raising awareness about issues such as education, health, the environment, and economic development.
- ❖ It aims to promote awareness of global development issues and the importance of information in addressing these challenges.
- ❖ It was established by the United Nations General Assembly in 1972.
- ❖ The date coincides with United Nations Day.

International Day of Diplomats 2024 - October 24



- ❖ It is honouring the invaluable role that the diplomats play in maintaining international relations, fostering peace, and promoting dialogue between the countries.
- ❖ It was initiated in 2017 by Indian diplomat Abhay Kumar.
- ❖ This day was first commemorated in Brasília, Brazil, with diplomats from several nations participating.
- ❖ International Day of Multilateralism and Diplomacy for Peace was observed on April 24.

World Polio Day 2024 - October 24



- ❖ The Day was established by the Rotary International to commemorate the birth of Jonas Salk.
- ❖ Jonas Salk led the first team to develop the vaccine against the disease in the 1950s.
- ❖ In 1955, he created the Inactivated Poliovirus Vaccine.
- ❖ In 1962, Albert Sabin created the Oral Polio Vaccine.
- ❖ OPV is being used exclusively in India since 1978.
- ❖ In 1988, WHO committed to eradicate the poliovirus, at the time, there were around 3,50,000 cases worldwide.

63rd ITBP Raising Day - October 24

- ❖ The Indo-Tibetan Border Police (ITBP) is one of India's five Central Armed Police Forces.
- ❖ It was raised in the aftermath of the 1962 Sino-Indian War.
- ❖ ITBP was formally raised on October 24, 1962.
- ❖ with the security of the India-China border in the Himalayas.
- ❖ The force safeguarded along the 3,488-km-long Line of Actual Control (LAC) with China.

International Gibbon Day 2024 - October 24

- ❖ Gibbons are apes in the family Hylobatidae.
- ❖ There are 20 different species of Gibbons and they are endemic to the tropical and subtropical rainforests of South Asia.

- ❖ India's only ape species, the Western Hoolock gibbon is listed as endangered in IUCN red list.
- ❖ Currently there are less than 3,000 gibbons in India, and they are usually seen in North Eastern States.

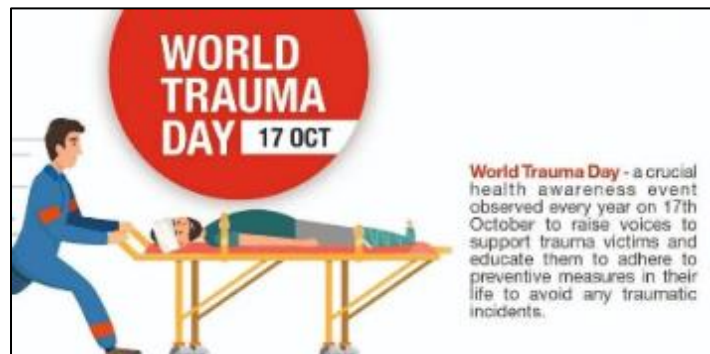
International Dwarfism Awareness Day 2024 - October 25

- ❖ The day spreads about awareness on Achondroplasia - bone growth disorder that causes dwarfism.
- ❖ Dwarfism is short stature that results from a genetic or medical condition.
- ❖ It is generally defined as an adult height of less than 4 feet 10 inches (147 centimetres).
- ❖ Achondroplasia is the most common type of dwarfism, and the word itself means 'without cartilage formation'.
- ❖ Dwarfism occurs one in every 15,000 to one in 40,000 births.

World Day for Audiovisual Heritage 2024 - October 27

- ❖ It recognises the dedicated efforts of professionals and institutions working to safeguard our audiovisual cultural heritage for future generations.
- ❖ This day was established by UNESCO in 2005.
- ❖ This day emphasises the significance of preserving audiovisual materials like films, sound recordings, and broadcasts.

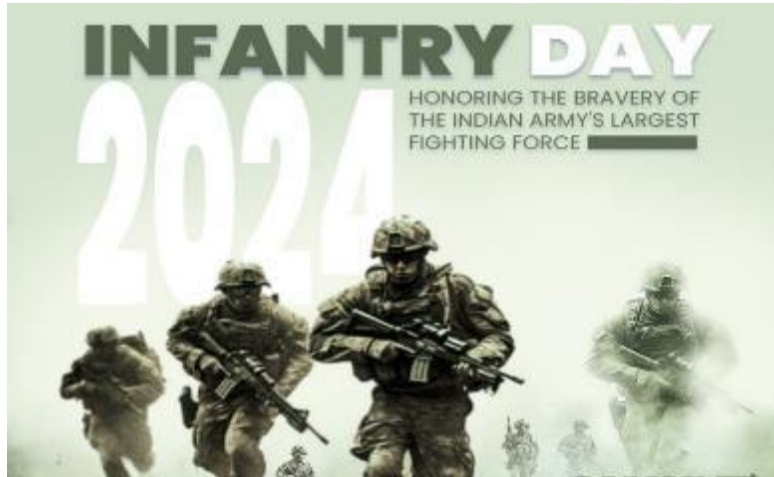
World Trauma Day 2024 - October 17



- ❖ It aims to raise the awareness about trauma and its effects on individuals and communities.
- ❖ This day highlights the importance of understanding trauma, its causes, and the need for appropriate responses, particularly through trauma-informed care.

- ❖ Trauma refers to an emotional response to distressing or life-altering events.
- ❖ The first annual World Trauma Day was established in 2011 in New Delhi, India.

Indian Army Infantry Day 2024 - October 27



- ❖ This day recognise the contributions of the largest fighting arm of the Indian Army.
- ❖ On October 26, 1947, the Maharaja of Jammu and Kashmir, Hari Singh, signed the instrument of accession.
- ❖ On 27th October 1947, the first troops of the Indian Army landed at Srinagar airport, forcing the invaders, backed by Pakistan, to retreat.

International Animation Day - October 28

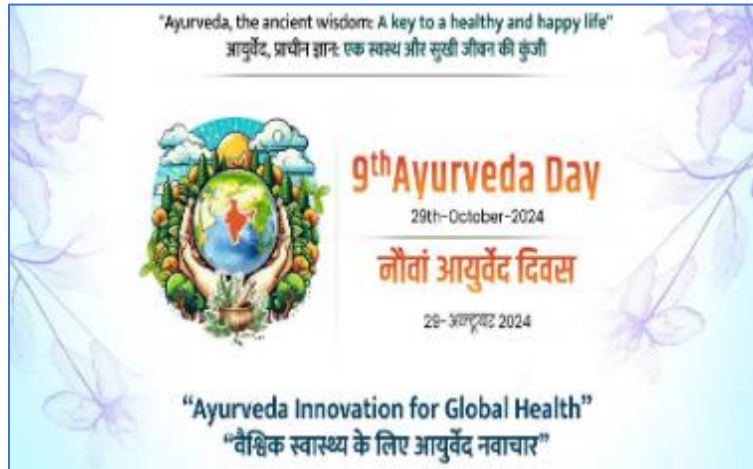
- ❖ It was established in 2002 by the International Animated Film Association (ASIFA), a branch of UNESCO.
- ❖ The first public performance of projected moving images was Emile Reynaud's Theatre Optique in Paris, on October 28, 1892.
- ❖ The journey of Indian animation started with the government setting up the Cartoon Films unit in 1955 in the Film Division complex in Mumbai.
- ❖ India's first full-length animated movie was released in the 1990s namely 'The Legend of Prince Rama'.

International Day of Care and Support 2024 - October 29

- ❖ It honours the accomplishments of caregivers and promote laws and programs that promote and improve care.

- ❖ The global care workforce comprises 249 million women and 132 million men.
- ❖ By 2030, the number of care recipients is predicted to reach 2.3 billion.
- ❖ Women perform 76.2 per cent of the total amount of unpaid care work, 3.2 times more time than men.

National Ayurveda Day 2024 - October 29



- ❖ This day is celebrated on Dhanvantri Jayanti.
- ❖ It aims to raise the awareness about Ayurvedic principles, medicinal herbs, and lifestyle practices.
- ❖ The theme for 2024 is 'Ayurveda Innovation for Global Health'.

World Thrift Day 2024 - October 30



- ❖ It aims to aware consciousness to people about their financial security, savings, and freedom.
- ❖ During the 1st International Savings Bank Congress on 31 October 1924, at Italy's Milan, World Savings Day was established.
- ❖ It was proposed by Filippo Ravizza, an Italian professor.



National Unity Day 2024 - October 31

- ❖ Rashtriya Ekta Diwas or National Unity Day is celebrated to commemorate the birth anniversary of Sardar Vallabhbhai Patel.
- ❖ He was India's first Deputy Prime Minister of India and first Home Minister of India from 1947 to 1950.
- ❖ Patel successfully persuaded all the 565 self-governing princely states to accede to India after getting independence from British colonial rule.
- ❖ The government will commemorate the 150th birth anniversary of Sardar Vallabhbhai Patel with a two-year-long nationwide programme from 2024 to 2026.

World Cities Day 2024 - October 31

- ❖ It highlights the global push towards creating sustainable, inclusive urban spaces.
- ❖ In 2013, the United Nations General Assembly officially designated this day.
- ❖ The theme for 2024 is "Youth leading climate and local action for cities."

MISCELLANEOUS

75th year of Central Silk Board

- ❖ The Central Silk Board (CSB) holds a celebration to mark its platinum jubilee year.
- ❖ A commemorative coin to mark the CSB platinum jubilee was also released on the occasion.
- ❖ The Central Silk Board is an autonomous body working under the Union Ministry of Textiles.
- ❖ The CSB is benefiting the sericulture stakeholders in the country by providing trainings, workshops, awareness programmes, financial aids, and subsidies.
- ❖ About 9.5 million people in the country are dependent on sericulture as their livelihood.

Shankh Air

- ❖ Shankh Aviation Private Limited, has received a no objection certificate (NOC) from the Union Civil Aviation Ministry, allowing it to begin operations.
- ❖ The NOC is valid for three years.
- ❖ It will be the first scheduled airline to launch from Uttar Pradesh, with hubs in Lucknow and Noida.



Nazca Lines – Peru

- ❖ Archaeologists assisted by artificial intelligence, have discovered 303 previously unknown giant symbols carved in the Nazca Desert.
- ❖ The carvings include birds, plants, spiders, humanlike figures with headdresses, decapitated heads and an orca wielding a knife.
- ❖ These mysterious artworks formed in the ground by moving stones or gravel that date back some 2,000 years.



Pillbox in Vizag

- ❖ Monsoon erosion in the sands of Visakhapatnam's beaches revealing a piece of the Pillboxes used during the Second World War.
- ❖ These pillboxes, built during the peak of the Second World War
- ❖ These are equipped with loopholes through which defenders can fire weapons.
- ❖ It enabled soldiers to fire weapons while being protected from enemy attacks.



250-year-old memorial stone

- ❖ A stone sculpture believed to be from the 17th or 18th centuries was unearthed in Modakkurichi taluk of Erode district.
- ❖ The sculpture, which has no inscriptions, depicts a couple along with images of the sun and moon.
- ❖ Since there were no inscriptions, exact details on why the stone was carved are unknown.



IVC and Dravidian links

- ❖ This Indus valley civilisation spanned 2,000 sites across 1.5 million square kilometres in the territories of India, Pakistan, and Afghanistan during the Bronze Age (3000-1500 BCE).
- ❖ Scholars Iravatham Mahadevan and Asko Parpola studied the antiquity of Tamil language and the link between the language and the Indus Valley Civilisation.

- ❖ Tamil goes back to Proto-Dravidian, can be identified as the language of the thousands of short texts in the Indus script, written in 2600-1700 BCE.
- ❖ Sanskrit goes back to Proto-Indo-Aryan attested in a few names and words related to the Mitanni kingdom of Syria between 1500 and 1300 BCE.
- ❖ The earlier forms of Indo-Iranian known only from a few loanwords in Finno-Ugric languages as spoken in central Russia around 2000 BCE.
- ❖ But none of these very earliest few traces are older than the roots of Tamil.



Judge's Asset Disclosure

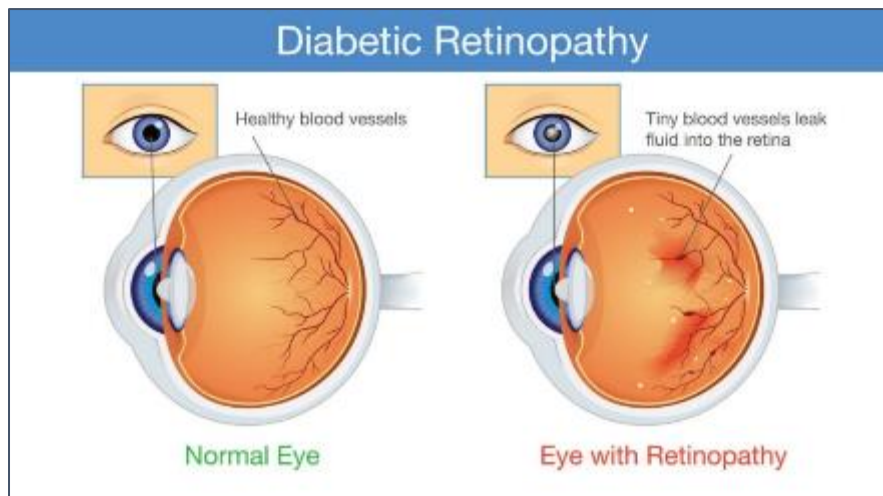
HC	Total judges at present	Assets in Public domain	For others what website states
Delhi High Court	39	11	"File not uploaded"
Punjab and Haryana	55	31	No mention
Himachal Pradesh	12	10	No mention
Chhattisgarh	17	2	No mention
Karnataka	50	2	No mention
Kerala	39	37	No mention
Madras	62	5	No mention

- ❖ Of the 749 judges currently shown as posted in the 25 High Courts across the country, the assets of only 98 are available in the public domain through the declarations.
- ❖ Of these, three High Courts constitute over 80 per cent of the asset declarations.

- ❖ The Kerala High Court tops with the details of 37 out of 39 judges available on its website.
- ❖ The Punjab and Haryana High Court has uploaded the information of 31 of 55 judges.
- ❖ Thirly, the Delhi High Court has posted details of 11 of 39 judges.
- ❖ From Tamil Nadu, 5 of 62 has uploaded their information.

Treatment for retinal diseases

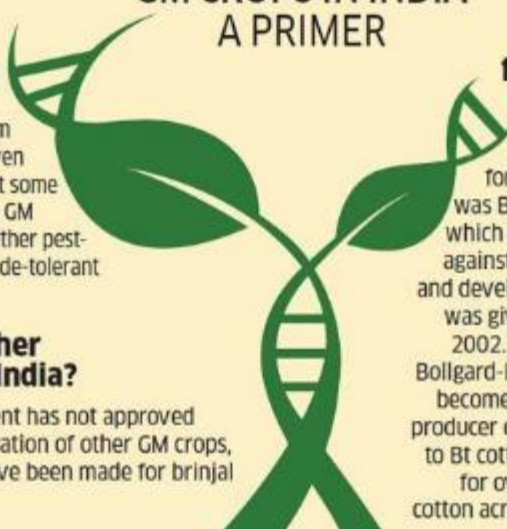
- ❖ IIT Madras, have identified a method to treat the retinal tears and diabetic retinopathy.
- ❖ They used mild laser-induced convection to enhance the delivery of drugs injected into the retina of the eye.
- ❖ There are around 11 million people in India with retinal disorders.



Herbicide-tolerant BT cotton

- ❖ The government is promoting Herbicide-tolerant BT (HTBT) cotton to reduce the use of herbicide 'glyphosate'.
- ❖ 'Glyphosate' is designed to kill all plants coming into contact with it, the chemical cannot ordinarily distinguish between crop and weed.
- ❖ The use of glyphosate involves health hazards and risk to human beings and animals.
- ❖ The HTBt cotton variant adds another layer of modification, making the plant resistant to the herbicide glyphosate.

GM CROPS IN INDIA A PRIMER



What is a GM crop?

A crop which has a gene artificially inserted into it from another species, even unrelated, to give it some desired properties. GM crops are mostly either pest-resistant or herbicide-tolerant

Are there other GM crops in India?

No, the government has not approved commercial cultivation of other GM crops, though efforts have been made for brinjal and mustard

When did India get its first GM crop?

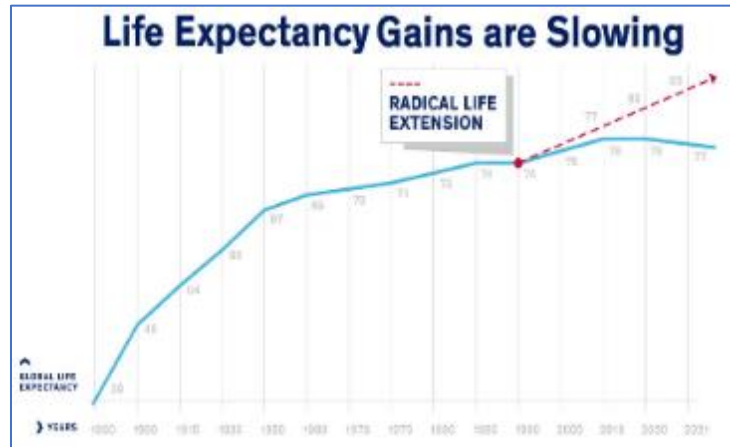
The first GM crop variety approved for commercialisation was Bt cotton. Bollgard-I, which provided immunity against the pink bollworm and developed by Monsanto, was given the go ahead in 2002. Monsanto released Bollgard-II in 2006. India has become the world's largest producer of cotton partly due to Bt cotton, which accounts for over 90% of the total cotton acreage in the country

Doddalathur Megalithic Site - Karnataka



- ❖ Excavation works have started at the Doddalathur Megalithic burial site in Hanur taluk of the Chamarajanagar district.
- ❖ The west of the village is a small hillock and in the adjacent fields are hundreds of burials of the megalithic period which corresponds to the Iron Age.
- ❖ The burials consist of circles made of large boulders hence the name “megalithic”.
- ❖ Since iron technology came into use during this period, it is also known as Iron Age.
- ❖ In south India, this period has been broadly placed in the time bracket of 1200 BCE to 300 CE.

Life Expectancy Trends 2024



- ❖ According to new research, the humanity may have hit the upper limit of life expectancy.
- ❖ Despite medical advances, breakthroughs in genetic research, and an increasing number of people reaching the age of 100.
- ❖ But overall life expectancy has not significantly increased.
- ❖ Life expectancy measures the average number of years a newborn can expect to live.
- ❖ While women continue to live longer than men, the rate of life expectancy improvement has slowed.
- ❖ In the 1990s, life expectancy rose by an average of 2.5 years per decade.
- ❖ Between 1990 and 2019, the increase in life expectancy was only 6.5 years in the longest-living countries.
- ❖ By the 2010s, that rate had dropped to 1.5 years per decade—and almost zero in the U.S.
- ❖ The chances of reaching 100 years old are still quite low—5.3% for girls and 1.8% for boys born in these regions.

Mechazilla

- ❖ SpaceX has landed its Starship rocket using an innovative structure called "Mechazilla."
- ❖ This tall structure, equipped with massive mechanical arms, has transformed rocket recovery methods.
- ❖ Mechazilla is the nickname for the large 400-ft rocket-catching structure at SpaceX's Starbase in South Texas, USA.

- ❖ These arms are designed to catch the Super Heavy booster in midair as it returns to Earth.
- ❖ This new method of rocket recovery is far more efficient and reusable compared to traditional landing techniques.

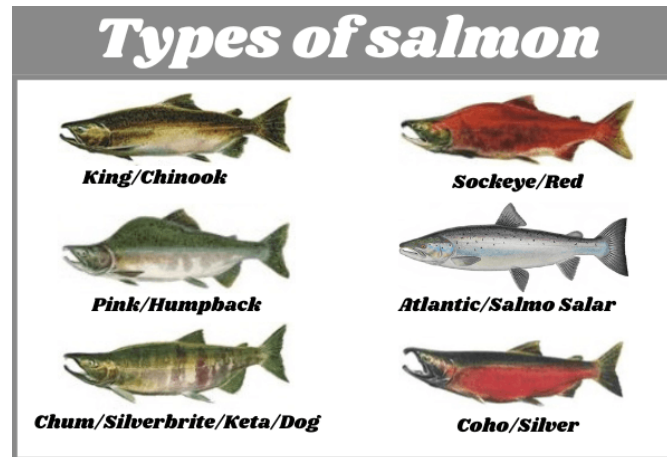


Battle of Walong

- ❖ Indian Army commemorated the 62nd anniversary of the Battle of Walong fought during 1962 war with China.
- ❖ It honours the sacrifices of the brave soldiers and citizens of Walong.
- ❖ The battles were occurred at 3,000 to 14,000 feet.
- ❖ A small Indian troop, successfully halted the Chinese army's advance for 27 days in the challenging terrain of Kibithu, Walong, and Namti Tri Junction (Tiger's Mouth).



Salmon farming



- ❖ The rising demand for farmed salmon is affecting coastal communities to access affordable fish.
- ❖ Fish oil is increasingly in demand for salmon farms, which now supply 70 per cent of all salmon consumed worldwide.
- ❖ The farmed Atlantic salmon alone accounted for 60 per cent of fish oil usage in 2020.
- ❖ Poor coastal communities depend on these small fish for both food and their livelihoods.
- ❖ But because these fish are being used to feed farmed fish, like salmon, instead of being available for local consumption, these communities are struggling to access an affordable source of protein.

Statue of Lady Justice

- ❖ The Supreme Court has recently unveiled a new statue of "Lady Justice" with no blindfold.
- ❖ The blindfold in the classic rendition has been popularly understood to represent the impartiality of justice.
- ❖ It holds scales on one hand and the Indian Constitution (instead of sword) on the other.
- ❖ The new statue with unimpeded vision is meant to signify that "Law is not blind; it sees everyone equally."
- ❖ This has been designed by Vinod Goswami, a muralist from College of Art in Delhi.
- ❖ The imagery of Lady Justice can be traced back to Greek and Roman mythology.

- ❖ The first Roman emperor Augustus (27 BCE-14 CE) introduced the worship of Justice in the form of a goddess known as Justitia (or Iustitia).
- ❖ At the Calcutta High Court — first constructed in 1872 — images of Lady Justice were carved into the pillars supporting the building.



Cyber fraud cases 2024



- ❖ Indians lost approximately Rs 120.3 crore to ‘digital arrest’ fraud schemes during the first quarter of 2024.
- ❖ Also, they had lost Rs 1,420.48 crore in trading scam, Rs 222.58 crore in the investment scam, and Rs 13.23 crore in romance/dating scam.
- ❖ The National Cybercrime Reporting Portal had recorded 0.74 million complaints between January 1 and April 30 this year.
- ❖ It is following 1.5 million complaints logged in 2023.
- ❖ Tamil Nadu had a 9% share in cyber fraud cases.

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