

TNPSC THERVUPETTAGAM CURRENT AFFAIRS NOVEMBER 2023

www.tnpscthervupettagam.com



SHANKAR
IAS ACADEMYTM
Best Academy for Civil Services Exam Coaching

Plot No. 1742, I Floor, 18th Main Road,
Anna Nagar, Chennai - 600 040.

Phone - 044-26216435, 4353 3445, Mobile: 9444166435

www.shankariasacademy.com



CONTENTS

TNPSC BITS	11
TAMIL NADU	22
Population of peafowls	22
Breeding nests of crab-plovers	22
Dravidian family Languages	23
Tamil Lambadi art	24
Ban on manja threads	24
Sixth Driest October in 123 years	25
Tamil Nadu's Own Tax Revenue 2023-24	25
Namma salai app	26
Tamil Nadu Digital Transformation Strategy	26
Dolphin conservation project	27
Online Games Act – 2022	27
Menace of wild animals in agricultural fields	28
Women workers in industries - Tamilnadu	28
State's capital expenditure 2023-24	28
Overall immunization coverage 2023	29
Silent Deepavali 2023	30
Justice Chandru panel recommendations	30
Highest disposal of cases - Madras High Court	31
Section 8 company Conversion	31
SC on Tami Nadu Governor	32
Crop loan 2023	33
India's first 'Net Zero Carbon' rating system	33
Re-adopted Bills in 2023	33
Merlinhawk Aerospace in Tamilnadu	34
Health walk stretch	35
NATIONAL	35
Ethics committee of Lok Sabha	35
Vision India@2047	36
Disparities in Hypertension Care	37



Limited Liability Partnerships	37
India's bird flu self-declaration	38
Fairwork India 2023 Report	39
Block Proving by Axle Counter System.....	39
Road accidents in 2022.....	40
Mera Yuva Bharat Platform	41
One Nation One Registration Platform	42
Risk of type 2 diabetes and air pollution	42
Appointment of State DGPs.....	43
NECP and EEFP Programs	44
World Food India 2023	44
Free Ration Scheme for 5 More Years.....	44
State Food Safety Index 2022-2023.....	45
ENCORE - Election Commission of India	45
Dayapar Wind Project	46
Maternity leave for women in Armed Forces.....	46
6th Most hard-working country	47
Bharat Atta	48
Cotton Production 2023-2024	48
Krishi 24/7	49
India's TB incidence	50
Disposal of Criminal Cases Against Legislators	50
Indian students in USA 2022-23	51
Rules for Senior Citizen's Savings Scheme and PPF	51
Broadcasting Services (Regulation) Bill 2023.....	52
Digital Advertisement Policy, 2023	52
ATACH - The Alliance	53
PM Kisan Bhai (Bhandaran Incentive) scheme	53
PM-PVTG Development Mission.....	54
India - CITES RST	54
Parliamentary Panel reports on the Indian Criminal Law bills	55
AAINA Dashboard for Cities	56
Limiting MBBS Seats in States	57
Selling Agreement and ownership.....	57



Patents in 2023-24.....	58
Measles Vaccination Gaps in India	58
4th Anti-Submarine Warfare Craft	59
Nayi Chetna – 2.0	59
Innovation Handshake agenda.....	60
Tantalum deposit	60
LEAP AHEAD initiative.....	61
Gyanodaya express.....	61
Committee for Madiga community	61
Basic Animal Husbandry Statistics 2023	62
INTERNATIONAL	64
Sponge Bombs.....	64
Turkish Republic’s 100th Anniversary.....	64
Passenger-carrying flying taxi	65
International Humanitarian Law on Human Shields	65
Rafah border crossing – Egypt	65
Global nuclear test ban treaty	66
New Earthquake Threat in Pacific region.....	67
Bletchley Declaration	68
Poppy cultivation and opium production.....	68
New session of the Britain’s parliament.....	69
Treaty of Conventional Armed Forces	69
Record-Breaking Global Temperatures.....	69
Lost Continent of Argoland	70
List of ‘safe states’	71
Valneva’s Chikungunya Vaccine	71
Humanoid robot CEO	72
New Volcanic Island – Japan.....	72
Ben Gurion Canal Project	73
World Local Production Forum	73
Global Landscape of Climate Finance 2023	74
Tuvalu pact with Australia	75
Climate change and water scarcity.....	75
Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA)	76



USA - China Climate Deal	77
WHO's 2023 Roadmap to End Maternal Tuberculosis.....	77
BDS Movement.....	78
Operation 1027	79
APEC Summit 2023.....	79
Voice of Global South Summit.....	79
30 Years of India-China Border Agreement	80
CII India-Nordic-Baltic Business Conclave	81
USI Annual UN Forum 2023.....	81
59th International Tropical Timber Council (ITTC) 2023	82
Same sex marriages in Thailand	82
8th wonder of the world	82
World's Largest Single-Site Solar Power Plant.....	83
World's first 'Near-space command'	84
ECONOMY	84
Shifting Trends and Income Inequality.....	84
'Penny drop' verification	85
Carbon Border Adjustment Mechanism.....	86
India finance report 2023.....	86
India Microfinance Review FY 2022-23	87
BofA survey.....	87
IPEF Clean and Fair Economy Agreement	88
SCIENCE AND TECHNOLOGY.....	88
CAIPEEX phase-4	88
FRB 20220610A	89
INFUSE Mission.....	90
Breaking Newton's laws of motion	90
Subsurface Water Ice Mapping project.....	91
DeepMind's AlphaMissense.....	92
Carbon nanoflorets.....	92
Asteroid 'Dinkinesh'/Lucy spacecraft.....	93
White Hydrogen	93
Project Kusha.....	94
Pralay Tactical Ballistic Missile.....	95



CO2 to CO Conversion.....	96
High energy X-ray glimpse of solar flares.....	96
Venus’s Atmospheric Composition	97
Oldest Black Hole	97
Rare Red Aurora – Ladakh	98
Blue Walker satellite	98
PET46 enzyme	99
Vulcan 20-20 Project.....	100
‘Kill Switch’ for Cancer Cells.....	100
Gene therapy for Sickle cell Disease.....	101
CALIPSO Science Mission.....	101
Jupiter-sized objects in Orion Nebula	102
Perseverance Speed Record.....	103
Melting Moon Dust.....	103
Igla-S anti-aircraft missiles.....	104
IISR Chandra.....	104
NanoPtA.....	105
Digital Twins	105
“Sun goddess” cosmic ray.....	106
25 years of the International Space Station	107
ENVIRONMENT.....	107
New Mushroom Species in Western Ghats.....	107
Global Declaration for River Dolphins.....	108
New species of gecko.....	108
Artificial Rains to Tackle Air Pollution	109
Climate Change Displacing Animals	110
Megamonodontium mclluskyi.....	110
Melting Ice and Heavier Snowfall: An Antarctic Paradox.....	111
IQAir’s AQI Data 2023	111
Marine cloud brightening	112
New Species of Seer Fish	113
World's first sperm whale reserve	113
High Rainfall: A Lifesaver for Equatorial Rainforests	114
Microplastics in Clouds	114



Swiss Glaciers Lose 10 per cent Volume	115
Kadalundi mudflat shrink.....	116
Mont Blanc.....	116
Picocystis Salinarum	117
Nugu Wildlife Sanctuary	117
New ‘Music Frog’ Species	118
REPORTS AND INDICES	119
OECD International migration outlook 2023	119
The Three Basins Threat Report.....	119
Commodity Market Outlook Report.....	120
EU Global Tax Evasion Report 2024	121
FAO and WFP Report 2023	121
Interconnected Disaster Risks Report 2023	122
2023 State of the Climate Report.....	123
Ecological Threat Report 2023	123
Adaptation Gap Report - 2023	124
2023 McKinsey Health Institute survey	125
World Intellectual Property Indicators Report 2022	126
2024 Asia-Pacific Human Development Report.....	126
WHO Global report on TB 2023.....	127
QS Asia University Rankings 2024	128
2023 Production Gap Report	129
State of Food and Agriculture Report 2023	129
Inclusiveness Index 2023	130
Towards Eliminating Plastic Pollution by 2040 Report	131
Countdown on Health and Climate Change.....	132
World Energy Employment 2023	132
State of the Cryosphere 2023 Report	133
14 th Emissions Gap Report 2023	134
Oxfam report 2023	134
Butterfly Migration in Tamil Nadu 2023	135
Melanistic pelicans.....	136
STATES.....	137
Hostile Activity Watch Kernel (HAWK) system.....	137



Highest cancer rate in India	137
Increasing reservation ratio	138
GPS tracker anklets	138
Nagaland Municipal Bill 2023	139
Uttarkashi Tunnel Collapse	140
Private sector quota in Haryana	140
Best State in Inland Fisheries	141
State fish of Gujarat	141
Uttarakhand Tunnel Crash rescue	141
Bihar's demand for Special Category Status	142
SC on Punjab Governor.....	143
PERSONALITIES, AWARDS AND EVENTS	144
Chinese Premier Li Keqiang	144
2023 Mahatma Awards	144
Wildlife Photographer of The Year 2023	144
Rohini Nayar Prize	145
Champions of the Earth Award 2023	145
Golden Globe Race	146
NASA astronaut Thomas Kenneth Mattingly.....	146
Hindu Businessline - Changemaker awards.....	146
Earthshot prize 2023	147
Eco warriors award 2023	147
Freedom fighter N Sankaraiah (102)	148
The Infosys Prize 2023.....	148
Former RBI Governor S Venkitaramanan.....	148
2023 Kenneth Building award	149
19 th Asian Power awards 2023	149
Shanti Swarup Bhatnagar award 2022	149
51 st International Emmy award	149
Justice Fathima Beevi.....	150
Nandini Azad.....	151
BBC 100 Women 2023 List	151
PRSI National Awards 2023	151
SPORTS.....	152



Asian Para Games 2023 – China	152
Angelo Mathews - ‘Timed out’	152
Raja Bhalindra Trophy.....	152
Asian Archery Championships 2023	153
World Cup 2023	153
Stop Clock to Regulate Pace of Play	154
IMPORTANT DAYS.....	154
Vigilance Awareness Week 2023	154
State Formation Day 2023 - November 01	155
International Day to End Impunity for Crimes against Journalists 2023 - November 02	156
International day against violence and bullying at school including cyberbullying 2023 - November 02	156
Zojila Day 2023 - November 01.....	157
International Day for Biosphere Reserves 2023 - November 03.....	157
World Tsunami Awareness Day 2023 - November 05	157
World Day of Romani Language 2023 - November 05	158
International Day for Preventing the Exploitation of the Environment in War and Armed Conflict 2023 - November 06	158
National Cancer Awareness Day 2023 - November 07.....	158
World Radiography Day 2023 - November 08	159
Guru Nanak Dev’s Birth Anniversary - November 08	159
World Town Planning Day 2023 - November 08.....	160
National Legal Services Day 2023 - November 09	160
World Usability Day 2023 - November 09	160
World Quality week 2023	161
International Week of Science and Peace – November 09/15	161
World Science Day for Peace and Development 2023 - November 10	162
National Ayurveda Day 2023 - November 10	162
World Public Transport Day 2023 - November 10.....	162
World Immunization Day 2023 - November 10.....	163
National Education Day 2023 - November 11.....	163
World Pneumonia Day 2023 - November 12	164
World Kindness Day 2023 - November 13	165



World AMR Awareness Week 2023 - November 18/24	165
International Day against Illicit Trafficking in Cultural Property 2023 - November 14	165
National Children's Day - November 14	165
World Diabetes Day 2023 - November 14	166
Jharkhand Foundation Day 2023 - November 15	166
Public service broadcasting day 2023 - November 12.....	167
International Day of Tolerance 2023 - November 16.....	167
National Press Day 2023 - November 16	168
World Prematurity Day 2023 - November 17.....	168
National Epilepsy Day 2023 - November 17	168
National Newborn Week 2023 - November 15/21	169
World Chronic Obstructive Pulmonary Disease Day 2023 - November 18	170
National Naturopathy Day 2023 - November 18	170
World Day for the Prevention of and Healing from Child Sexual Exploitation, Abuse, and Violence 2023 - November 18	171
National Naturopathy Day 2023 - November 18	171
Women Entrepreneur's Day 2023 - November 19.....	172
International Men's Day 2023 - November 19.....	172
National Integration Day 2023 - November 19	172
World Toilet Day 2023 - November 19	173
Universal Children's Day 2023 - November 20	173
Transgender Day of Remembrance 2023 - November 20	173
World Television Day 2023 - November 21.....	174
World Day of Remembrance for Road Traffic Victims 2023 - November 21 ...	174
World Fisheries Day 2023 - November 21	175
Fibonacci Day 2023 - November 23	176
World Heritage week 2023 - November 19/25.....	176
International Day for the Elimination of Violence against Women 2023 - November 25	176
Constitution Day or Law Day 2023 - November 26.....	177
National Milk Day 2023 - November 26.....	178
World Sustainable Transport Day 2023 - November 26	178
World Tourism Day 2023 - November 27.....	179



Red Planet Day 2023 - November 28.....	179
International Jaguar Day 2023 - November 29.....	180
International Day of Solidarity with the Palestinian People 2023 - November 29	180
Day of Remembrance for all Victims of Chemical Warfare 2023 - November 30	180
MISCELLANEOUS	181
QR codes on Food Products.....	181
Hurun India's Philanthropy List for 2023	182
Old Iron Age geoglyph circle.....	182
Outdoor working and skin cancer	183
Airgun Surrender Abhiyan initiative	183
FATF On-Site Review in India.....	184
Kavro Doma 360	184
Cyclone Midhili.....	185
Ship-To-Ship LNG Transfer	185
Women-Led Startups	186
COVID-19 vaccines and sudden deaths	186
Cyclone 'Michaung'	187



TNPSC BITS

- ❖ Ministry of Consumer Affairs has launched a Dark Patterns Buster Hackathon - 2023 to provide easy solutions to consumers to bust unfair practices adopted by e-commerce platforms.
- ❖ Third Ammunition Cum Torpedo Cum Missile (ACTCM) Barge, LSAM 17 (Yard 127) was launched recently.
- ❖ The 16th Urban Mobility India (UMI) Conference & Exhibition 2023 was held in New Delhi.
- ❖ India and Kazakhstan take part in the 7th edition of Joint Military 'Exercise KAZIND-2023'.
- ❖ Former Reserve Bank of India (RBI) governor Raghuram Rajan's new book in collaboration with fellow economist Rohit Lamba, 'Breaking the Mould: Reimagining India's Economic Future,' will be released on 7 December.
- ❖ 25T Bollard Pull (BP) Tug, 'Mahabali' was launched by Indian navy.
 - This will provide assistance to Naval ships and submarines during berthing and un-berthing, turning and manoeuvring in confined waters.
- ❖ The US-India Strategic Partnership Forum (USISPF) felicitated Nita Ambani with the 2023 Global Leadership Award for Philanthropy and Corporate Social Responsibility.
- ❖ Bangladesh builds a memorial to honour the Indian soldiers who sacrificed their lives in the Liberation War of Bangladesh in 1971 at Ashuganj.
 - This will be the first memorial in Bangladesh to exclusively honour Indian soldiers from the 1971 war.
- ❖ Heman Bekele, a 14-year-old from Virginia, USA has been crowned "America's Top Young Scientist" after inventing a groundbreaking soap designed to treat skin cancer.
- ❖ The Financial Action Task Force (FATF) has removed offshore tax haven Cayman Islands from its 'grey list'.
 - Besides Cayman, Panama, Jordan, and Albania have been removed from the list.
- ❖ The Tamil Nadu Cabinet approved a policy for the development of ports with private participation.
- ❖ CapitaLand Investment Limited (CLI) has commenced operations for Phase 1 of International Tech Park Chennai.
 - This is the first business park in India to be certified by the Indian Green Building Council (IGBC) as Net Zero for energy efficiency, water conservation and waste management.



- ❖ The first Global Conference on Cooperation in Enforcement Matters (GCCEM) was held in New Delhi
- ❖ The Army's Light Combat Helicopter (LCH) Prachand was successfully carried out inaugural firing of 70 mm rockets and 20 mm turret guns both by day and night.
- ❖ Union Finance Minister launches phase IV of 'Operation Sesha' to curb the illegal trade of Timber, including Red Sanders.
- ❖ The fourth edition of the Goa Maritime Conclave (GMC) was hosted by the Indian Navy.
 - The conclave's theme "Maritime Security in the Indian Ocean Region: Converting Common Maritime Priorities into Collaborative Mitigating Frameworks."
- ❖ Lionel Messi was named the Ballon d'Or 2023 winner at a ceremony in Paris.
 - This is the eighth time he has won the prestigious award.
- ❖ The Asian Games silver medallist Jyothi Yarraji (13.22s) and Tejas Shirse (13.71s) smashed the 37th National Games records and winning gold medals, held at Goa, in 100 m and 110m hurdles in athletics competitions.
- ❖ The 77-kilometer New Bhandu-New Sanand section of the Western Dedicated Freight Corridor (DFC) was dedicated to the nation.
- ❖ World Vegan Day is celebrated every year on November 1.
 - It is aimed at spreading awareness among people about the advantages of a vegan diet on health and well-being.
- ❖ All Saints' Day is the season of festivals celebrated every year on November 1.
 - ❖ Swedish vendor Ericsson announced the launch of its "India 6G" program with the formation of an India 6G Research team in its Chennai R&D Center.
 - ❖ Kozhikode in Kerala and Gwalior in Madhya Pradesh have made it to the prestigious creative cities list of UNESCOs for contributions in the fields of literature and music respectively.
 - Kozhikode is the first city in India to receive this prestigious title in literature.
 - ❖ The White House of USA hosted the 50 members (including India) International Counter Ransomware Initiative (CRI) summit recently.
- ❖ The Tamil Nadu government has passed an order to set up a fact-check unit to counter fake news, communal misinformation and hate speech in news related to the state government across all media platforms.
- ❖ The International Solar Alliance (ISA) announced that the Global Solar Facility (GSF), a payment guarantee fund formed by ISA is set to receive a capital contribution of \$35 million.



- ❖ The United Kingdom hosted a two-day artificial intelligence (AI) summit by bringing together government officials and companies from across the globe, including the U.S. and China.
- ❖ Nokia has signed a deal with Tata Play Fibre to launch the first Wi-Fi 6 ready broadband network in India.
- ❖ G20 Standards Dialogue 2023 was organized by the Bureau of Indian Standards (BIS) under the aegis of India's G20 presidency.
- ❖ Ms Saima Wazed has been nominated as the next World Health Organization Regional Director for South-East Asia.
- ❖ India-born author Nandini Das has been named the winner of the 2023 British Academy Book Prize for Global Cultural Understanding, for her book 'Courting India: England, Mughal India and the Origins of Empire'.
- ❖ Bhutan became the first country in the world to have completely sterilised and vaccinated its entire stray dog population, following a 14-year dog population control programme.
- ❖ The abbreviation of artificial intelligence (AI) has been named the Collins Word of the Year for 2023.
- ❖ Thailand is scrapping visas between Nov 10, 2023 to May 10, 2024 for attracting Indian tourists.
- ❖ Mohammed Shami became the leading wicket taker for India in the World Cup with 45 scalps, surpassing the likes of Zaheer Khan (44) and Javagal Srinath (44).
- ❖ The ozone hole over Antarctica had reached approximately 26 million square kilometers in size, the largest ozone holes on record.
- ❖ Mumbai recorded the 4th highest year-on-year growth (6.5%) in prime residential prices in Q3 2023.
- ❖ The domestic sailing of the first International (Italian) Cruise Liner 'COSTA SERENA' in India was launched at Mumbai.
- ❖ The crest of Indian Navy's latest warship 'Surat' was unveiled by Gujarat Chief Minister.
 - This is the first warship named after a city in Gujarat.
- ❖ Aishwary Pratap Singh Tomar won the gold in rifle 3-position event in the 15th Asian shooting championship in Changwon, South Korea.
- ❖ IIT Madras became the first IIT to open an international campus with the inauguration of a campus in Zanzibar in Tanzania, an east African country.
- ❖ Alvin Anto, a young professional at the ICAR-Central Marine Fisheries Research Institute (CMFRI), is securing the prestigious Hasmukh Shah Memorial Award for Ecological Studies for the year 2023 in the research category.



- ❖ The Chanakya Defence Dialogue 2023 was steered by the Indian Army in collaboration with the Centre for Land Warfare Studies (CLAWS) in New Delhi.
- ❖ Seven years after the government had first announced plans to open its sixth consulate in the U.S. city of Seattle, India has appointed its first Consul-General in Seattle.
- ❖ The Indian junior men's hockey team securing the bronze medal at the Sultan of Johor Cup 2023, in Johar, Malaysia.
- ❖ Bangladesh Prime Minister Sheikh Hasina, the world's longest-serving (19 years) female head of government, has appeared on the cover page of Time magazine recently.
- ❖ The city of New York has been declared the winner of the US National Gatka Championship.
 - This is the first-ever American national championship of the popular Sikh martial arts.
- ❖ The World Local Production Forum (WPLF) was held in The Hague, the Netherlands.
- ❖ Every year, Infant Protection Day is celebrated on November 7.
- ❖ The Ministry of Housing and Urban Affairs (MoHUA) is launching an empowering initiative called "Women for Water, Water for Women Campaign" under the Atal Mission for Rejuvenation and Urban Transformation (AMRUT).
- ❖ Senior bureaucrat Heeralal Samariya has sworn in as the chief of the Central Information Commission (CIC).
 - He is the first Dalit person to hold that post.
- ❖ The Indian Institute of Technology (IIT) Kanpur has established a new centre of excellence — ATMAN (Advanced Technologies for Monitoring Air-quality iNdicators).
 - It will focus on building indigenous low-cost sensor manufacturing and AI/ML capabilities to enhance air quality.
- ❖ Bharat Botanics brand announced the opening of its wood-pressed cold oil processing facility in Gondal, Rajkot Gujarat.
- ❖ Mundra port became the India's first port to handle cargo volumes of 16.1 MMT in a month.
- ❖ Virat Kohli equalled Sachin Tendulkar's record for most centuries (49) in One-Day Internationals.
- ❖ The Indian women's hockey team ousted Japan to won Asian Champions Trophy title.
- ❖ Vidit Gujrathi and R Vaishali claimed the two top titles at the FIDE Grand Swiss chess event at the Isle of Man.



- R Vaishali and R Praggnanandhaa have made history by becoming the first brother-sister duo to qualify for the Candidates tournament.
- ❖ The All-India Football Federation won the AFC President's Recognition Award for Grassroots Football in the Bronze Category at the AFC Annual Awards in Doha.
 - It was AIFF's second bronze medal in the category, having earned the same recognition back in 2014.
- ❖ Swedish defence company Saab's plan to set up a rocket manufacturing facility in India approved by centre and this is the first 100 percent foreign direct investment (FDI) project in the defence sector.
- ❖ Kerala bagged the prestigious Global Responsible Tourism Award 2023, for its sustainable and women-inclusive initiatives successfully promoted by the state's Responsible Tourism Mission.
- ❖ Adani Green Energy Ltd (AGEL) has become India's largest green energy company as it reached the 8.4 gigawatt (GW) installed capacity mark.
- ❖ Legacy Iron Ore Limited, a subsidiary of National Mineral Development Corporation (NMDC) will commence its mining operation at the Mount Celia gold project located in western Australia.
- ❖ Chile has become the 95th member of the International Solar Alliance (ISA).
- ❖ November 9 is celebrated as Uttarakhand State Foundation Day or Uttarakhand Divas every year.
 - On November 9, 2000, Uttarakhand became India's 27th state, carved out of the hilly regions of undivided Uttar Pradesh.
- ❖ The newly-created National Cooperative Organics Ltd (NCOL) launched organic food products under the brand name 'Bharat Organics'.
- ❖ Amazon is building its own conversational LLM like ChatGPT, codenamed 'Olympus'.
- ❖ The Central Pollution Control Board (CPCB) has reported that the Air Quality Indexes in several parts of Tamil Nadu's capital city, Chennai, has exceeded 250, indicating poor air quality.
- ❖ Tamil Nadu's third government dental college and hospital is all set to be inaugurated in Pudukkottai.
 - The other two are Chennai government dental college hospital and Rajah Muthiah Dental College and Hospital, Chidambaram.
- ❖ The Supreme Court on Nov 7th clarified that its order banning the use of barium and banned chemicals in firecrackers are applicable not just to the National Capital Region but to the entire country.
- ❖ Nasa Astronaut Frank Rubio returned to earth after Record-Breaking 371 Days stay in Space.



- He holds the record for the longest single spaceflight by an American.
- ❖ Tamil Nadu Chief Minister virtually unveiled a statue of Rao Bahadur Cruz Fernandes in Thoothukudi.
 - He was known for his efforts to ensure drinking water supply to the coastal city from the Thamirabarani river.
- ❖ Chief Justice of India inaugurated the Mitti Cafe's newest branch on the Supreme Court premises.
 - The café exclusively hires differently-abled people and has more than 30 branches around India.
- ❖ The 4th edition of Bilateral Exercise between Indian Navy and Bangladesh Navy, BONGOSAGAR-23, and the 5th edition of Coordinated Patrol (CORPAT) by the two navies was conducted in the Northern Bay of Bengal.
- ❖ Samsung unveiled its own generative AI model like ChatGPT, Samsung Gauss, at the Samsung AI Forum 2023.
- ❖ The song 'Abundance in Millets', sung by Falguni Shah and her husband Gaurav Shah, has been nominated in the best global music performance category at the 2024 Grammy Awards.
- ❖ The three-day long Global Conference on Cooperation in Enforcement Matters (GCCCEM) was held in New Delhi.
- ❖ India hosts the 6th Session of the International Solar Alliance Assembly in New Delhi.
- ❖ Flying Wedge Defence and Aerospace has become India's first-ever private firm to secure a Directorate General of Civil Aviation - type certification for indigenous UAV technology.
- ❖ The RBI has issued a notification which allowing NRIs to invest, without any restrictions, in the Government's Sovereign Green Bonds issued for 2023-24.
- ❖ South Africa will become the first African nation to introduce shared parental leave.
 - Both parents will have the right to have four months leave after the birth of their child or if they adopt a child.
- ❖ The 42nd edition of the India International Trade Fair -2023 was inaugurated at Pragati Maidan in New Delhi.
- ❖ Virat Kohli finally surpassed Sachin Tendulkar as the international batter with the highest number of centuries (50) in ODI cricket.
 - He also became the batter with most runs (674) in a single edition of the Cricket World Cup.



- ❖ In a first for India, a prisoner in Jammu and Kashmir, Ghulam Mohammad Bhat, accused under the UAPA, has been released on bail with a condition to wear a GPS Anklet device.
- ❖ NHAI has accepted Insurance Surety Bond for the monetization program of the upcoming bid of Toll Operate Transfer (TOT) Bundle 14.
 - This will be the first time this innovative instrument is being utilized as a Bank Guarantee (BG) in the road infrastructure sector for monetization of bids.
- ❖ The US Supreme Court adopted its first formal code of conduct governing the ethical behavior of its nine justices in its 234-year history.
- ❖ World Philosophy Day was observed annually on the third Thursday of November (16th).
 - It encourages people to contemplate philosophical ideas, engage in debates, and address societal issues.
- ❖ Viksit Bharat Sankalp Yatra was launched across the country to promote the Centre's welfare schemes.
- ❖ The 6th High-Level Meeting of the India-OPEC Energy Dialogue took place at the OPEC Secretariat in Vienna, Austria.
- ❖ A parliamentary committee recommended that the people accused of economic offences should not be handcuffed.
 - It also recommends that Clause 43(3) of the Bharatiya Nagarik Suraksha Sanhita (2023) may be suitably amended to delete the words 'economic offences' from the clause.
- ❖ Ashok Leyland delivers India's first batch of 12 liquefied natural gas-powered transport truck named AVTR 1922.
- ❖ Over 15 products including Berinag tea, Lal chawal, Buransh juice and Almora Lakhori mirchis from Uttarakhand have been given the coveted GI tag by the Geographical Indications Registry.
- ❖ Virender Sehwag (IND), Diana Edulji (IND) and Aravinda de Silva (SL) have been inducted into the ICC's Hall of Fame.
 - Edulji became the first Indian woman cricketer to receive this honour.
- ❖ Pablo Picasso's famous painting "Femme à la montre" ("Woman with a Watch") sold for a record-breaking \$139 million at a Sotheby's auction in New York.
- ❖ Former U.K. Prime Minister David Cameron has been appointed as new Foreign Secretary.
- ❖ Indian bowler Mohammed Shami become the first Indian bowler to pick seven wickets in a One Day International (ODI).



- ❖ A special session of the Tamil Nadu Legislative Assembly had been convened on November 18 (Saturday) to readopt certain Bills returned to the assembly by Governor.
 - This was the third time in the history of the Tamil Nadu Assembly where Bills returned by the Governor are set to be readopted.
- ❖ Tamil Nadu Governor flagged off the Viksit Bharat Sankalp Yatra van in Kovilur village near Jamunamarathur, Jawadhu Hills, Tiruvannamalai.
- ❖ World-renowned author Salman Rushdie has been awarded the first-ever 'Lifetime Disturbing the Peace Award' by the Vaclav Havel Center.
- ❖ Janjatiya Gaurav Divas is celebrated on November 15 each year.
 - The day commemorates the birth anniversary of Birsa Munda, a tribal leader who fought against British.
- ❖ International Students Day is observed on November 17 to commemorate the death anniversary of Students in Prague of Czech Republic in 1939.
- ❖ The “Indo-Pacific Regional Dialogue 2023” (IPRD-2023), the three-day annual apex-level regional strategic dialogue of the Indian Navy, was held in New Delhi.
- ❖ Alok Sharma, a senior Indian Police Service (IPS) officer from the Uttar Pradesh cadre, was appointed as the director of the Special Protection Group
- ❖ The 37th Infantry Commanders’ Conference was held at the Infantry School in Mhow, Madhya Pradesh.
- ❖ The 3rd Hockey India Senior Women Inter Department National Championship 2023 inaugurated at Shivaji Stadium, New Delhi.
- ❖ The 10th ASEAN Defence Ministers' Meeting - Plus (ADMM-Plus) was held in Jakarta, Indonesia.
- ❖ Pakistan-based cleantech startup She-Guard emerged victorious at the ‘Climate Launchpad Asia-Pacific’ finals.
- ❖ The United States hosted the Asia Pacific Economic Cooperation Summit 2023.
- ❖ The executive board of the International Monetary Fund (IMF) approved a proposal to make a 50 per cent increase in the quota allocated to members in proportion to their current quotas.
- ❖ To promote sustainable and eco-friendly constructions in the domestic housing sector, the Indian Green Building Council (IGBC) of the Confederation of Indian Industry launched a rating and certification initiative ‘Nest’.
- ❖ The 2023 Olympic Cup has been awarded to the Taekwondo Humanitarian Foundation (THF) in recognition of its long-term commitment to supporting refugee athletes and refugees worldwide through taekwondo.



- ❖ Shital Mahajan, Indian skydiver, has achieved a new feat by becoming the first woman in the world to jump off a helicopter from the height of 21,500 feet in front of Mt Everest.
- ❖ India batter Virat Kohli was adjudged Player of the Tournament of the ODI World Cup 2023 for his historic 765 runs in 11 innings.
 - He surpassed Sachin Tendulkar's previous record of 673 runs set in the 2003 edition.
- ❖ As UNESCO proclaimed, November 18 is observed as the International Day of Islamic Art.
- ❖ The Tamil Nadu Assembly, in a Special Session, again passed 10 Bills for which Governor had earlier withheld assent.
- ❖ The Madras high court has clarified that mother of a man who died intestate does not become the heir unless there is a failure on other heirs' widow and children under Indian Succession Act, 1925.
- ❖ Tamil writer Perumal Murugan wins the coveted JCB Prize for Literature for his novel, Fire Bird, an English translation of his Tamil novel Aalanda Patchi.
- ❖ The Renowned art historian and writer Brijender Nath Goswamy passed away recently.
 - He quit the civil services in 1958 to follow a career in academics and research.
- ❖ Nicaragua's Sheynnis Palacios has been crowned Miss Universe for the year 2023.
- ❖ London-based luxury travel magazine Condé Nast has listed Kochi as one of the best places to visit in Asia in 2024.
- ❖ Cambridge Dictionary has announced 'hallucinate' as its Word of the Year 2023.
- ❖ The ninth edition of the Joint Military exercise, known as "Exercise MITRA SHAKTI-2023 ", between Indian and Sri Lanka kicked off in Pune.
- ❖ India hosted the 33rd Conference of the WOA (World Organization for Animal Health) Regional Commission for Asia and the Pacific at New Delhi.
- ❖ Africa Industrialization Day was observed on November 20 every year.
- ❖ The Indira Gandhi Prize for Peace, Disarmament and Development 2022 was jointly awarded to the Indian Medical Association and the Trained Nurses Association of India as representatives of the COVID-19 warriors in the country.
- ❖ The four-day International Conference on Plant Health Management – Innovations and Sustainability, was organized by Plant Protection Association of India.
- ❖ Ladakh received the 4th GI Tag for sea buckthorn after Apricot (Raktsey Karpo), Pashmina, and Ladakhi Wood Carving.



- ❖ Dr SS Badrinath, founder and chairman of Sankara Nethralaya, one of India's biggest charitable eye hospitals was passed away recently at Chennai.
- ❖ The Tamil Nadu government has registered the Tamil Nadu Zoo Foundation under Section 8 of the Companies Act, 2013 as part of a recent initiative to transform government societies into companies.
- ❖ The first ever Global Fisheries Conference India 2023 was held at Science City in Ahmedabad.
- ❖ India and Australia held 2+2 Ministerial Dialogue to step up defence cooperation and deepen the strategic relationship in sectors such as critical minerals and trade and investment.
- ❖ Every year, World Hello Day is celebrated on November 21.
- ❖ The Ministry of Ayush and World Health Organization (WHO) have signed Traditional and Complementary Medicine 'Project Collaboration Agreement' in Geneva.
- ❖ The 11th edition of the International Tourism Mart (ITM) was held in in Shillong, Meghalaya.
- ❖ The 14th edition of 'Vajra Prahar' a joint exercise of the special forces of India and the United States commenced in Meghalaya.
- ❖ Delhi's Khan Market is the 22nd most expensive retail high street location in the world with an annual rent of \$217 per square feet.
- ❖ ICC bans transgender players from international women's cricket as per the new gender eligibility regulations.
- ❖ India's Pankaj Advani has lifted his 26th world title as he won the World IBSF Billiards Championship 2023 in Doha, Qatar.
- ❖ Comptroller and Auditor General of India (CAG) Girish Chandra Murmu has been elected as the Vice-Chair of the UN Panel of Auditors for the next year.
- ❖ The Ministry of Ayush launched the 'Ayurveda Gyan Naipunya Initiative' (AGNI) to Promote Innovations by Ayurveda Practitioners.
- ❖ India has launched a five-day Millets Festival in the Indonesian capital Jakarta to raise awareness for millets as a farmer-friendly and sustainable food choice.
- ❖ India and Australia will take part in the second edition of Joint Military Exercise AUSTRALIND-23 at Perth, Australia.
- ❖ Tamil Nadu Chief Minister inaugurated the city's first 'U'-shaped flyover near the Indira Nagar signal on Rajiv Gandhi Salai, Chennai.
- ❖ Tamil Nadu Chief Minister unveiled a statue of former Prime Minister V.P. Singh at the premises of Presidency College in Chennai.



- ❖ Bengaluru hosted its maiden Kambala, a popular buffalo racing contest of the coastal Karnataka region recently.
- ❖ The 8th Edition of the India Water Impact Summit (IWIS) was held in New Delhi.
 - The theme of IWIS 2023 is 'Development vis-à-vis Land, Water and Rivers.'
- ❖ World Olive Tree Day was proclaimed at the 40th session of the UNESCO General Conference in 2019 and takes place on 26 November every year.
- ❖ Nagaswaram player M.P.N. Ponnusamy, who shot to fame after playing for Thillana Mohanambal, starring Sivaji Ganesan in the lead role, passed away recently.
- ❖ Irish author Paul Lynch has won the 2023 Booker prize for his fifth novel Prophet Song.
- ❖ President Droupadi Murmu Sunday unveiled a statue of Dr B R Ambedkar in the Supreme Court premises on the occasion of Constitution Day.
- ❖ Prime Minister Narendra Modi became the first Prime Minister to fly in fighter aircraft, Tejas as he took a sortie trainer version.
- ❖ "Authentic" was selected as the 2023 word of the year by the Merriam-Webster dictionary.
- ❖ In honour of Sadhu TL Vaswani's birth anniversary, Uttar Pradesh government declares a "no non-veg day" on November 25.
- ❖ The Afghanistan embassy has announced its permanent closure in New Delhi.
- ❖ India becomes Chair of International Sugar Organisation (ISO) for 2024 to lead global sugar sector.
- ❖ The Veteran player Vidya Pillai from Chennai clinched the IBSF 6-Red Snooker World Championship title in Doha, Qatar.
- ❖ The Saffron of the mountainous Kishtwar district, Jammu and Kashmir has been given the Geographical Indication (GI) tag.
- ❖ Malaysia recently announced its decision to allow visa-free entry for Indian and Chinese citizens.
 - Under the new visa-free rule, Indian travellers can stay for up to 30 days without a visa.
- ❖ Every year, November 29 is observed as International Women Human Rights Defenders Day.
- ❖ The National Computer Security Day is observed annually on November 30.

TAMIL NADU

Population of peafowls

- ❖ The population of peafowls has increased exponentially across Tamil Nadu in the last five to 10 years.
- ❖ It led to increase in the human-animal conflicts.
- ❖ One of the reasons for the proliferation of peafowls is due to a drop in the numbers of predators such as jackals as a result of reducing thickets.
- ❖ Another reason could be due to the rising temperatures due to climate change and subsequent increase in dry areas, which are preferred by the bird
- ❖ The Indian peafowl (*Pavo cristatus*) is regarded as the national bird.
- ❖ It is listed under Schedule-I of the Wildlife Protection Amendment Act, 2022, with the highest degree of protection.

Major findings

● Birds that live in key habitats such as open ecosystems, rivers, and coasts have declined

● Raptors, migratory shorebirds and ducks have declined most



● Indian peafowl continues to thrive

● Asian koel has increased in past three decades

● Urgent conservation action needed for most critically threatened species in the country: Jerdon's courser, great Indian bustard, white-bellied heron, Bengal Florican, Finn's weaver

● Certain species groups like nocturnal birds (owls, nightjars), mountain pheasants and seabirds are poorly represented in citizen science (or other) datasets for large-scale analysis

● IUCN Red List shows 49% of bird species worldwide are declining in population compared with only 6% increasing

Breeding nests of crab-plovers

- ❖ For the first time, breeding nests of crab-plovers spotted at Great Vedaranyam Swamp near Point Calimere.
- ❖ Crab-plover (*Dromas ardeola*) is considered a winter visitor to Pakistan, peninsular India, the Andaman and Nicobar Islands, Lakshadweep, northern Sri Lanka, and the Maldives, and a vagrant to Bangladesh.

- ❖ The chicks are semi-nidifugous, unlike chicks of other shorebirds that leave the nests shortly after hatching.
- ❖ Parents take care of the young ones for five to six months.



Dravidian family Languages

Exploring linguistic variety

According to a report of the Linguistic Survey of India-Tamil Nadu (LSI-TN), 60 million people, mainly in southern India, and 68 million worldwide speak Tamil. Here are some observations on the different dialects of the language

<p>How is the word <i>in̄ku</i> (here) in Centamil (the classic variety) said in various Tamil dialects?</p> <ul style="list-style-type: none"> ■ <i>in̄kō</i> in the Kongu dialect of Coimbatore ■ <i>in̄ga</i> in the dialect of Thanjavur ■ <i>in̄kai</i> in some dialects of Sri Lanka ■ <i>in̄kane</i> in the dialect of Tirunelveli (believed to be derived from old Tamil's <i>in̄kan</i>, where <i>kan</i> means place) 	<p>■ <i>in̄kuttu</i> in the dialect of Madurai</p> <p>■ <i>in̄kaṭe</i> in various northern dialects</p> <p>Dialects in different regions</p> <p>NORTHERN DIALECT: Chennai, Chengalpattu, Tiruvallur, Kancheepuram, and Vellore districts</p> <p>EASTERN DIALECT: Pudukkottai, Thanjavur, Tiruvarur, and Nagapattinam districts (The Cauvery delta region)</p>	<p>WESTERN DIALECT: Coimbatore, Tiruppur, Erode, Salem, Namakkal, Karur and parts of the Nilgiris and Dharmapuri districts (The Kongu region)</p> <p>SOUTHERN DIALECT:</p> <ul style="list-style-type: none"> ■ Madurai Tamil/Madurai dialect is spoken in Madurai, Dindigul, Sivaganga, and Theni districts ■ Tirunelveli Tamil/Nanjil dialect is spoken in Tirunelveli, Thoothukudi and Kanniyakumari districts
--	--	---

- ❖ A report of the Linguistic Survey of India-Tamil Nadu (LSI-TN), was published in July.
- ❖ This was released by the Language Division of the office of the Registrar-General & Census Commissioner of India (RG&CCI).
- ❖ The report classifies the languages of Badaga, Chetti Bhasha, Irula/Iruliga, Kathodi, Kota, Maliyad, Pania, Toda, Solaga and Urali as the mother tongues of the 'Dravidian family' spoken in Tamil Nadu.
- ❖ Besides, it identifies another mother tongue, Saurashtra/Saurashtri, spoken in some parts of the State, as belonging to the 'Indo-Aryan family'.

- ❖ According to the report, 60 million speakers, mainly in southern India, and 68 million worldwide speak Tamil.
- ❖ The 2011 Census had pointed out that 96 mother tongues with a speakers' strength of over 10,000 were recorded in Tamil Nadu.
- ❖ Overall, people speaking 142 mother tongues were identified in the Tamilnadu State.
- ❖ Tamil is spoken as the first language by 88.37% of the State's population.
- ❖ In Tamil Nadu, there are speakers of Telugu (5.87%), Kannada (1.78%) and Malayalam (1%).

Tamil Lambadi art

- ❖ The traditional Tamil Lambadi embroidery designs are all geometrical patterns with squares, rectangles, and circles.
- ❖ They have also been influenced by the local forests, birds, fruits and flowers.
- ❖ These are not the same as those of the Banjaras in Andhra Pradesh or the Lambanis in Karnataka.
- ❖ This is more filled in, though the stitches, 42 of them, are quite similar.

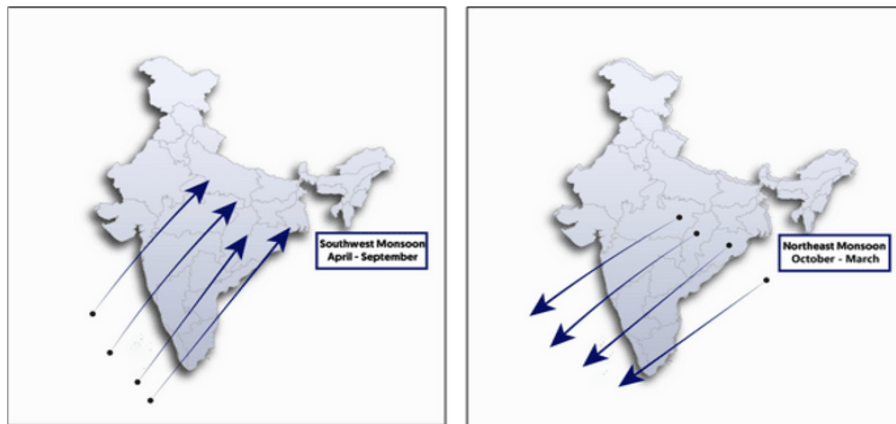


Ban on manja threads

- ❖ The Tamil Nadu government has issued a complete ban on the manufacture, sale, storage and use of kite flying threads popularly known as 'manja threads.'
- ❖ It may be made out of nylon, plastic or any other synthetic material.
- ❖ Order to this effect was issued by the government on October 6, 2023 which was further notified in the Tamil Nadu Government Gazette on October 30.
- ❖ Those found violating the ban shall be subjected to legal action under the provisions of the Environment (Protection) Act, 1986 (Central Act 29 of 1986).

Sixth Driest October in 123 years

- ❖ Kerala has received 1% excess rainfall during October 2023.
- ❖ Tamil Nadu, Karnataka, Andhra Pradesh and Telangana together experienced the sixth driest October in the past 123 years.
- ❖ These regions received only 74.9mm of rain in October, which was over 60 per cent below normal.
- ❖ Tamil Nadu received nearly 9.9 cm of rainfall this October.
- ❖ This is the ninth lowest rainfall in October since 1901.
- ❖ Kanniyakumari was the only district with a whopping excess of 116% of monsoon rainfall in October.
- ❖ The month ended with a shortfall in rain by nearly 42% against its normal share of 17.1 cm.
- ❖ Unlike the past few years, the southwest monsoon ended nearly on time after a 134-day season this year.
- ❖ Notably, 2023, 2016 and 1988, among the six driest October months over the southern peninsula, were El Nino years.



Tamil Nadu's Own Tax Revenue 2023-24

- ❖ Tamil Nadu's Own Tax Revenue grew 4.92% to ₹72,017.8 crore in the first half of 2023-24, from ₹68,637.7 crore in the comparable period last year.
- ❖ The State's Own Tax Revenue (SOTR) accounts for 70% of Tamil Nadu's total revenue.
- ❖ The State Goods and Services Tax (SGST) collection grew about 12.2% to ₹29,481.97 crore in the April-September, 2023 period.
- ❖ This was ₹26,285.31 crore in the same period last year.

- ❖ Revenue from Stamps and Registration Fees increased to ₹9,241.14 crore in the first half of 2023-24 from ₹8,662.15 crore in the comparable period of last year.
- ❖ Tamil Nadu's revenue deficit was ₹21,635.55 crore in the April-September, 2023 period.
- ❖ Fiscal deficit, which is the difference between total receipts and total disbursements, stood at ₹45,168.86 crore in the first half of 2023-24.

Budget at a glance				(in ₹ crore)
	2021-22 accounts	2022-23 Revised estimate	2023-24 Budget estimate	
Total revenue receipts	2,07,492	2,45,660	2,70,515	
Total revenue expenditure	2,54,030	2,76,136	3,08,055	
Revenue deficit	-46,538	-30,476	-37,540	
Capital expenditure	37,011	38,347	44,366	
Fiscal deficit as a % of GSDP	-3.38%	-3.00%	-3.25%	

Namma salai app

- ❖ Tamil Nadu Government launched a mobile application 'Namma Salai' that helps identify potholes in the city with public inputs.
- ❖ It aims to achieve the goal of an 'accident-free' Tamil Nadu and ensure pothole-free roads.
- ❖ Through this app, people can upload photos of potholes in highways along with their geographical coordinates.
- ❖ They will be sent to the engineer and the potholes will be repaired within a stipulated time period.
- ❖ Then, photos of the repaired roads will also be uploaded in the application.

Tamil Nadu Digital Transformation Strategy

- ❖ Tamil Nadu Government has released the Tamil Nadu Digital Transformation Strategy.
- ❖ It is expected to improve the efficiency of governance and administration.
- ❖ It aiming at improving accessibility, transparency, efficiency and accountability to citizens.
- ❖ It focuses on strengthening the ecosystem and developing talent pool and incubation centres to make Tamil Nadu a hub of innovation and entrepreneurship.

Dolphin conservation project

- ❖ Tamil Nadu government has issued orders to implement Project Dolphin under the Union government's Integrated Development of Wildlife Habitats scheme.
- ❖ The Gulf of Mannar, extends from Rameswaram to Kanniyakumari and has a chain of 21 uninhabited islands stretching along 140 km of the coast.
- ❖ This region is known to have more than four species of dolphins including *Steno bredanensis*, *Stenella attenuata*, *Stenella longirostris*, and *Delphinus delphis*.
- ❖ Project Dolphin activities will include strengthening of patrolling and surveillance, improving habitat through restoration of coastal ecosystems, removing ghost nets, and encouraging involvement of locals with incentives.
- ❖ 60% of the amount will be given by the Union government, the State will bear the remaining cost.



Online Games Act – 2022

- ❖ The Madras High Court refused to strike down the Tamil Nadu Prohibition of Online Gambling and Regulation of Online Games Act, 2022 entirely.
- ❖ But ruled that the prohibition would apply only to games of chance and not to games of skill such as rummy and poker.
- ❖ The games of rummy and poker, which are considered as games of skill, are now also sought to be played online.
- ❖ The judges recognised the right of the State government to frame regulations with respect to imposing age restrictions on the players of online games, fixing monetary and time limits within which the games could be played.
- ❖ The 2022 Act specifically deals only with online games and not offline games.



Menace of wild animals in agricultural fields

- ❖ A special panel, formed to address farmers' woes of wildlife conflict, met virtually to discuss the menace caused by wild animals in agricultural fields in Tamilnadu.
- ❖ In the 19-member committee's first meeting, farmers from Erode, Coimbatore, Dindigul, Krishnagiri, and Dharmapuri voiced their concerns about damages to crops caused by wild boars, peacocks, elephants and, in some cases, monkeys.
- ❖ The committee will make field visits to Kerala and Karnataka to assess their wildlife management strategies, particularly for wild boars.

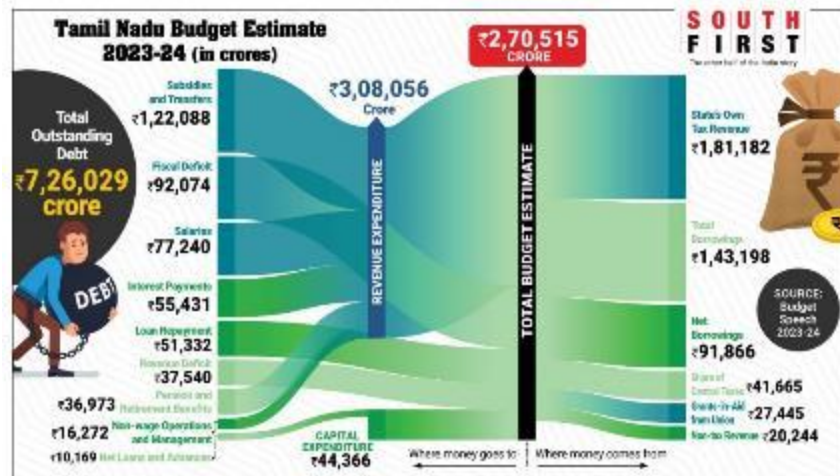
Women workers in industries - Tamilnadu

- ❖ There are nearly 15,80,000 women working in industries (manufacturing sector) in India.
- ❖ Of this, 6,79,000 women, or 43 per cent, are working in the state of Tamil Nadu.
- ❖ This data has been revealed in the Annual Survey of Industry (2019–20) by the Indian Labour Ministry.
- ❖ The Southern Indian state also ranks second in the share of women-owned enterprises in all proprietary micro, small, and medium enterprises (MSMEs).
- ❖ Notably, Tamil Nadu's population is around 6 per cent of the Indian population.

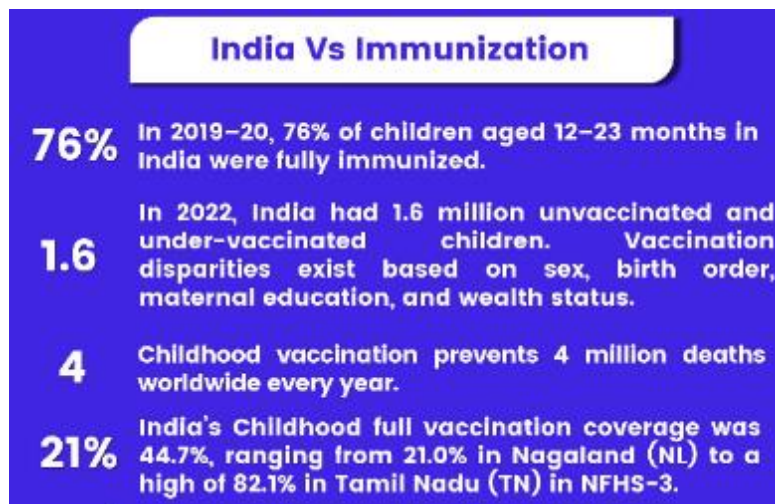
State's capital expenditure 2023-24

- ❖ Tamil Nadu's capital expenditure (capex) increased by nearly 31.7% to ₹17,773.80 crore in the first half of fiscal 2023-24.
- ❖ This was Rs.13,499.24 crore in the same period last year.
- ❖ The capex of these States grew in the range of 31.7% to 190.3% in the first half of 2023-24 from the previous year.

- ❖ Uttar Pradesh, Madhya Pradesh, Telangana, Gujarat and Tamil Nadu accounted for over half of the aggregate capex of ₹2.62 lakh crore incurred by 23 States.
- ❖ Madhya Pradesh, Telangana and Tamil Nadu have been able to meet over 40% of their budgeted capex target for fiscal 2024.
- ❖ However, Uttar Pradesh and Gujarat were able to meet only under 30%, which indicates that they might fall short of their target.



Overall immunization coverage 2023



- ❖ Tamil Nadu's overall immunization coverage has crossed 95%.
- ❖ Every year, 9.15 lakh children and 10 lakh pregnant women are covered under the Universal Immunisation Programme (UIP).
- ❖ 3.2 crore vaccines worth nearly ₹10 crore are provided in the State.
- ❖ Under the UIP, launched in 1985, 11 vaccines were administered to children and pregnant women against 12 vaccine-preventable diseases.

Silent Deepavali 2023



- ❖ Seven villages in Erode district of Tamil Nadu marked the festival with just lights, and no sound.
- ❖ It is a gesture considerate of the winged inhabitants of the bird sanctuary nearby.
- ❖ The villages are located around Vadamugam Vellode, 10 kms from Erode where the bird sanctuary is situated.
- ❖ Thousands of local bird species and migratory birds from other regions visit the sanctuary between October and January to lay eggs and hatch them.
- ❖ The villages of Sellappampalayam, Vadamugam Vellode, Semmandampalayam, Karukkankattu Valasu, Pungampadi and two other villages upheld the tradition of a silent Deepavali.

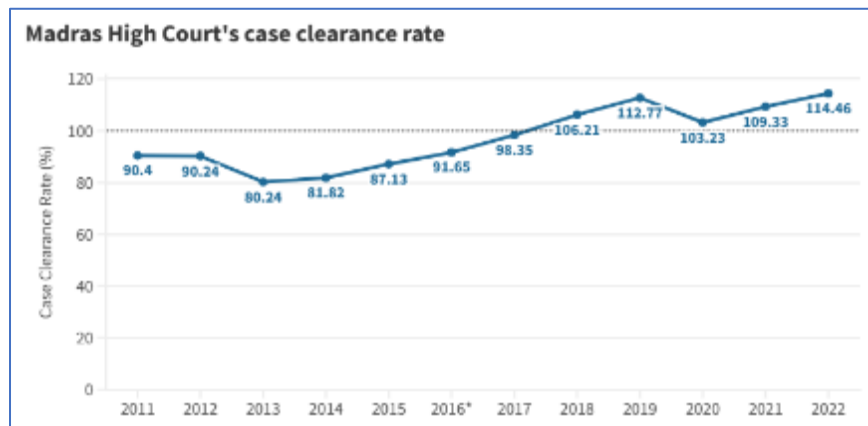
Justice Chandru panel recommendations

Justice K. Chandru submitting the one-man panel's report to Chief Minister M.K. Stalin at the Secretariat.

- The affairs of the homes should be monitored daily through a special monitoring room
- Each home should have a medical doctor, a psychologist and a qualified counsellor
- A training academy should be set up for staff
- Admission certificate should be given to parents of CCL
- Each home must have a de-addiction centre
- CCL should be provided with recreation facilities and allowed to play on open ground

- ❖ Justice Chandru was appointed as the one-man committee to study the state of juvenile homes, special homes and places of safety.
- ❖ This committee has submitted its report to the Tamil Nadu government on improving the condition and functioning of childcare homes in the state.
- ❖ He recommended measures like bifurcating the Directorate of Social Defence, establishing one childcare home per district, improving nutrition and facilities in the homes among others.

Highest disposal of cases - Madras High Court



- ❖ The Madras High Court has created a record in disposal of cases by registering its highest ever Case Clearance Rate (CCR) of 114% in 2022.
- ❖ 109% registered CCR recorded in 2021.
- ❖ A CCR beyond 100% signifies the court had not just matched the number of cases instituted in a particular year with the number that were disposed of in the same year but had also gone a step ahead by clearing considerable number of backlog cases accumulated over the years.
- ❖ 1,61,810 cases were instituted in the principal seat of the High Court in Chennai and its Madurai Bench between January 1, 2022 and December 31, 2022.
- ❖ The High Court had registered a CCR of 106.21% in 2018, 112.77% in 2019 and 103.23% in 2020 too.

Section 8 company Conversion

- ❖ The Tamil Nadu government is in the process of converting at least 14 government-controlled societies into companies registered under Section 8 of the Companies Act, 2013.
- ❖ It aims to improve their functions and make them available for scrutiny by various auditing mechanisms.

- ❖ The government-controlled societies have been functioning largely with the taxpayers' money, but “operate outside the treasury system” and “remain outside the legislative scrutiny” of their functioning.
- ❖ With the conversion, these companies will be available for CAG audit (supplementary audit), statutory audit, internal audit, tax audit, Secretarial audit and other necessary check mechanisms under the Companies Act.



SC on Tami Nadu Governor

Discretionary powers		Execution of discretion beyond the constitutional permissibility is considered an attack on the elected government of the State and people's mandate
CONSTITUTIONAL DISCRETION OF GOVERNORS INCLUDES	SITUATIONAL DISCRETION OF GOVERNORS	
<ul style="list-style-type: none"> When they have to reserve the Bill for the consideration of the President When he has to recommend for President's rule in the State When given additional charge as administrator of union Territory 	<ul style="list-style-type: none"> For appointing Chief Minister after no party get clear majority or when the incumbent dies in the office When he dismisses Council of Ministers on an inability to prove confidence in the legislative Assembly When he dissolves the Assembly when it loses its majority 	



- ❖ The Supreme Court held that, the Constitution does not provide Governor “discretion” to withhold the 10 Bills “re-passed” by the State Legislative Assembly.
- ❖ Once they have been re-passed, these Bills are put in the same footing as Money Bills.
- ❖ The Bills had been sent for approval to the Governor’s office in the period between January 2020 to April 2023.
- ❖ 182 Bills were given to the Governor by the House for approval.
- ❖ Of this, 152 have been approved, five were withdrawn by the government, and nine are reserved by the Governor for referral to the President.
- ❖ The Governor had withheld consent on 10 proposed laws and five were received in October 2023.

Crop loan 2023

- ❖ The Tamil Nadu government will give ₹14,000 crop loan to farmers through co-operative societies.
- ❖ ₹1,500 crore allocated for other allied activities such as goat rearing, dairying, poultry and fisheries, in 2023-24.
- ❖ In 2022-23 kharif marketing season, 27.23 lakh tonnes of paddy were procured from 3,73 lakh farmers and ₹5,778 was disbursed so far.

India’s first ‘Net Zero Carbon’ rating system

- ❖ Tamil Nadu plans to achieve Net Zero [emission] at least a decade ahead of 2070.
- ❖ The 21st Green Building Congress 2023 event was organised by the Confederation of Indian Industry’s (CII) in Chennai.
- ❖ In an effort to achieve the Net-Zero Carbon Emission goal, the Indian Green Building Council announced India’s first ‘Net Zero Carbon’ rating system in the event.

Re-adopted Bills in 2023

- ❖ In a special session on November 18, the Tamil Nadu Assembly re-adopted the 10 bills that were withheld by the governor.
- ❖ Most of these bills were pending with the governor’s office for more than two years.
- ❖ It includes provision which is dealing with the appointment of CM as chancellor of state universities in the place of governor.



- ❖ The Bills only seek to take away the power of the Governor with regard to appointment of Vice-Chancellors (V-Cs) and give it to the State government.
- ❖ In this regard, the expression “Governor” is substituted by the term, “government.”
- ❖ Through a new section, the Bills state that V-Cs can be removed only by the order of the government, apart from laying down the procedure for V-Cs’ removal.
- ❖ In addition, there is one Bill concerning the Chennai University which has also been drafted on similar lines.
- ❖ However, the Siddha Medical University Bill that has sought to replace the Governor with the Chief Minister as Chancellor.
- ❖ These Bills are reserved for the assent of President.
- ❖ At present, the Chief Minister is the Chancellor only of the Music and Fine Arts University.
- ❖ It was established through an Act of Legislature in November 2013.

The pieces of legislation cover Universities of

Madurai-Kamaraj
Anna
Bharathiar
Bharatidasan
Mother Teresa
Alagappa
Manomaniam Sundaranar
Periyar
Open
Thiruvalluvar
Teachers Education
Annamalai
Dr. Ambedkar Law
Dr. MGR Medical
Agricultural
Tamil
Veterinary and Animal Sciences
Fisheries

Merlinhawk Aerospace in Tamilnadu

- ❖ Merlinhawk Aerospace Pvt. Ltd. signed a joint venture agreement with Italy’s Vega Composites S.r.l.
- ❖ It aims to establish a manufacturing and design facility in the defence corridor in Tamil Nadu for advanced composites material-based products.



- ❖ The new entity will be called Merlinhawk Composites and Engineering Private Limited.
- ❖ The joint venture is the first such agreement signed between an Italian and Indian company, post the signing of the defense cooperation agreement between Italy and India

Health walk stretch

- ❖ Chief Minister launched the 'health walk' initiative in Chennai and 37 districts.
- ❖ Tamil Nadu is the first State to have an 8-km stretch in every district for walking.
- ❖ It is inspired by an eight-km walking track of Tokyo, Japan.
- ❖ Walking for eight kilometres everyday equals 10,000 steps.

NATIONAL

Ethics committee of Lok Sabha

- ❖ The Lok Sabha Ethics Committee will take up Nishikant Dubey's complaint against Mahua Moitra, last met on July 27, 2021.
- ❖ The members of the Ethics Committee are appointed by the Speaker for a period of one year.
- ❖ A Presiding Officers' Conference held in Delhi in 1996 first mooted the idea of ethics panels for the two Houses.
- ❖ Then Vice President (and Rajya Sabha Chairman) K R Narayanan constituted the Ethics Committee of the Upper House on March 4, 1997.
- ❖ The late Speaker, G M C Balayogi, constituted an ad hoc Ethics Committee of Lok Sabha in 2000.
- ❖ It became a permanent part of the House only in 2015.
- ❖ The work of the Ethics Committee and the Privileges Committee often overlap.

LOK SABHA ETHICS COMMITTEE: PROCEDURE FOR COMPLAINTS

- ▶ Any individual can file a complaint against a member via another Lok Sabha MP
- ▶ An affidavit must be given stating that the complaint is not "false, frivolous, or vexatious"
- ▶ Complaints based on media reports or matters that are sub-judice are not entertained by the Committee
- ▶ Committee conducts prima facie inquiry and then makes recommendations after evaluation

Vision India@2047

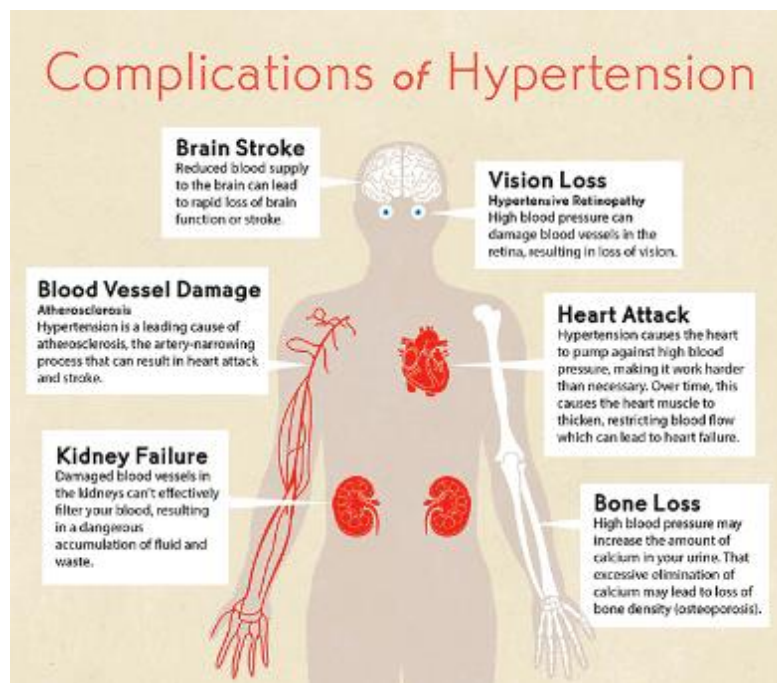


- ❖ Niti Aayog's is finalising the draft Vision 2047.
- ❖ It projects India to be \$30 trillion economy and will lay out a roadmap to help India escape the middle-income trap.
- ❖ India becomes a developed nation by 2047.

- ❖ The plan targets a per-capita income ranging from \$18,000 to \$20,000.
- ❖ This ambitious goal aims to position India as one of the world's leading economies.

Disparities in Hypertension Care

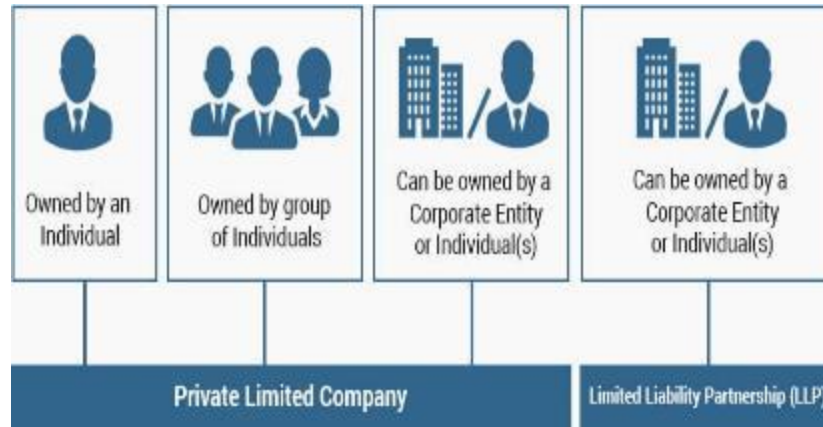
- ❖ According to a recent WHO report, 188.3 million people in India suffer from hypertension but only 37% get diagnosed.
- ❖ 30% of the people start treatment, and only 15% manage to keep their blood pressure under control.
- ❖ It estimated that at least 4.6 million deaths in India can be prevented by 2040 if half of those with the condition manage to keep their blood pressure under control.
- ❖ There were substantial variations across districts in blood pressure diagnosis (range: 6.3%-77.5%), treatment (range: 8.7%-97.1%) and control (range: 2.7%-76.6%).



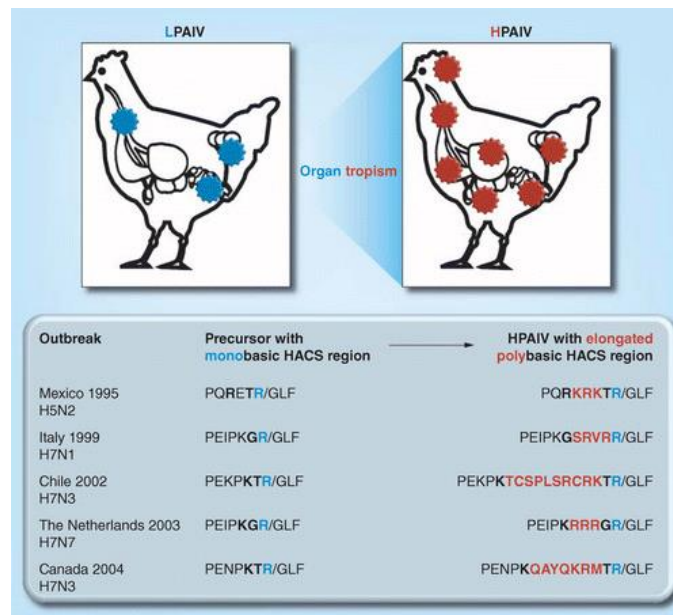
Limited Liability Partnerships

- ❖ The government has made the disclosure rules tougher for limited liability partnerships (LLPs).
- ❖ It will now be required to maintain a register of partners with details of their beneficial interests and both tangible and intangible contributions.

- ❖ The Ministry of Corporate Affairs notified the Limited Liability Partnership (Third Amendment) Rules, 2023.
- ❖ Even upcoming LLPs have to maintain such a register, at their registered offices, within 30 days of incorporation.



India's bird flu self-declaration



- ❖ The World Organisation for Animal Health (WOAH) has approved the country's self-declaration of freedom from Highly Pathogenic Avian Influenza (HPAI).
- ❖ HPAI commonly known as bird flu.
- ❖ This includes only specific poultry compartments (approved farms) in Maharashtra, Tamil Nadu, Uttar Pradesh, and Chhattisgarh.
- ❖ India submitted a self-declaration of freedom from (HPAI) in 26 poultry compartments in four states to the (WOAH).

- ❖ India is currently the third-largest producer of eggs (130 billion) and the fifth-largest producer of poultry meat (4.5 million tonnes) in the world.
- ❖ During the 2022-23 fiscal year, India exported poultry and poultry products to 64 countries, generating revenue of 134 million USD.
- ❖ Bird flu was first detected in India in Maharashtra in February 2006.

Fairwork India 2023 Report

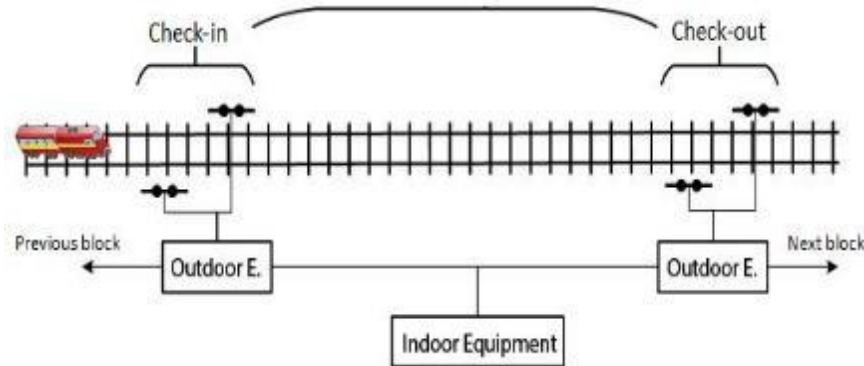
- ❖ The 'Fairwork India 2023' report was spearheaded by the Centre for IT and Public Policy (CITAPP).
- ❖ Seven out of 12 platforms ensure accessibility and comprehensibility of their contracts.
- ❖ And it has a protocol for data protection and management of worker data.
- ❖ BigBasket, Flipkart, and Urban Company were the only platforms with a minimum wage policy.
- ❖ Only BigBasket, Swiggy, Urban Company, Zepto and Zomato were awarded the second point for providing workers with accident insurance coverage at no additional cost.
- ❖ Digital platforms Ola and Porter have scored the lowest in terms of working conditions of gig workers on digital labour platforms.



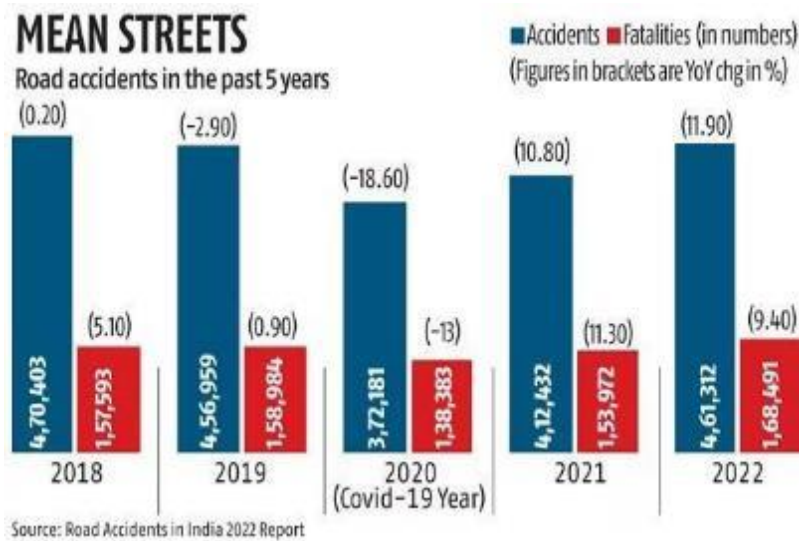
Block Proving by Axle Counter System

- ❖ The Central Railway has commissioned the block proving by axle counter (BPAC) system in the Vasind-Asangaon section of Mumbai Division.

- ❖ The BPAC system plays a pivotal role in maintaining the utmost safety of train operations.
- ❖ Specifically, it meticulously examines the last vehicle of a section, subsequently confirming the section’s clearance before granting authorization for another train to enter.
- ❖ Earlier, the BPAC system was exclusively deployed up to Vashind railway station within the Kalyan-Igatpuri section.



Road accidents in 2022



- ❖ India witnessed 53 accidents and 19 deaths every hour, or an average of 1,264 accidents and 42 deaths daily due to road crashes last year.
- ❖ There were a total 4,61,312 road accidents across the country, which claimed as many as 1,68,491 lives.
- ❖ The number of road accidents in 2022 increased by 11.9% and deaths rose by 9.4%.

- ❖ The severity of road crashes is measured by the number of people killed per 100 accidents.
- ❖ It has increased over the past decade from 28.2% in 2012 to 36.5% in 2022, with a consistent increase every year.
- ❖ With a crash severity of 38.15, India ranks among the 20 worst countries for road crashes.
- ❖ India was followed by China (with a crash severity of 25.22) and the United States of America (with a crash severity of 2.01).
- ❖ In terms of road crash fatalities, Uttar Pradesh registered the maximum share of deaths at 13.4%.
- ❖ This was followed by Tamil Nadu at 10.6% and Maharashtra at 9%.
- ❖ majority of the accidents occurred on national highways (1,51,997).
- ❖ In this category, Tamil Nadu saw the highest number of accidents (18,972, 12.5 per cent of the total accidents).

Mera Yuva Bharat Platform

- ❖ The Union Cabinet gave its approval for the establishment of an autonomous body known as "Mera Yuva Bharat (MY Bharat)."
- ❖ It envisions itself as a pivotal, technology-driven facilitator for youth development and youth-led progress.
- ❖ It aims to provide equitable opportunities for young individuals to realize their aspirations and contribute to the creation of a "Viksit Bharat" (developed India) across various aspects of government initiatives.

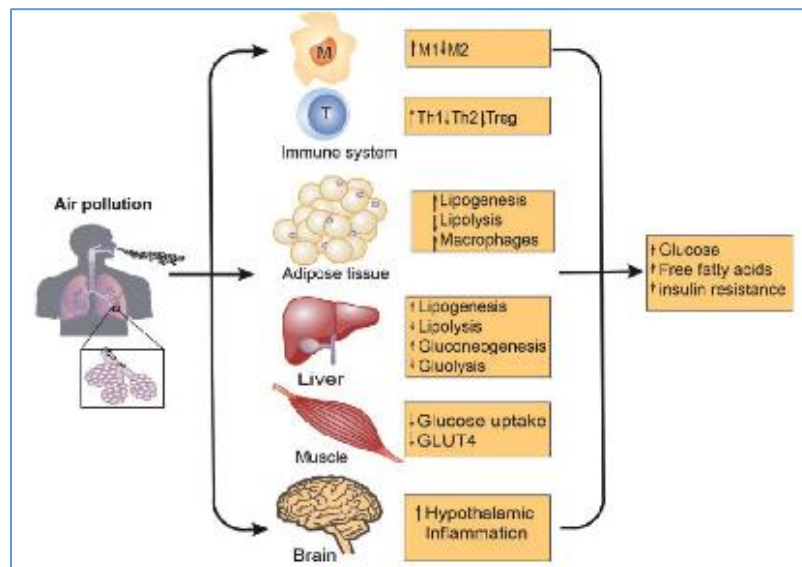


One Nation One Registration Platform

- ❖ The National Medical Commission (NMC) is all set to launch its “one nation, one registration platform’ for doctors across the country.
- ❖ It aims to eliminate duplication, red tape and allow the public to access information on any physician working in India.
- ❖ Each doctor will be allotted a unique identification number and then can also apply for their licence to work in any State depending on where they are.



Risk of type 2 diabetes and air pollution



- ❖ Two studies published in international journals have reported a link between air pollution levels and the incidence of type 2 diabetes in Chennai and Delhi.
- ❖ Indian cities have consistently dominated the tops of lists of places with the worst air for residents.

- ❖ Air quality of cities frequently several times higher than the limits set by the World Health Organisation.
- ❖ For every 10 µg/m³ increase a month in PM_{2.5} levels, fasting plasma glucose (FPG) increased by 0.21-0.58 mg/dL (milligrams per decilitre) and glycosylated haemoglobin (HbA1c) by 0.012-0.024 in Delhi.
- ❖ FPG increased -0.36-1.39 mg/dL and HbA1c 0.01-0.06 in Chennai.
- ❖ Over six months, a 10 µg/m³ change in PM_{2.5} levels resulted in a rough doubling of both ranges in Delhi.
- ❖ But it couldn't be associated with a statistically significant result in Chennai.
- ❖ In annual average "PM_{2.5}" could be related to a 9-36% higher risk of developing type 2 diabetes.

Appointment of State DGPs

- ❖ The Union Public Service Commission (UPSC) amended guidelines issued last month.
- ❖ Only police officers with at least six months of service left before retirement will be considered for appointment as the Director General of Police of a State.
- ❖ The guidelines were revised to discourage States from appointing "favourite officers" about to retire, in a bid to extend their tenure.
- ❖ Some States, choosing to appoint acting DGPs instead of regular DGPs, bypassing the requirement to go through the UPSC-selected panel of eligible officers.
- ❖ In fact, Uttar Pradesh has not had a full-time DGP since 2022.
- ❖ The UPSC had first framed guidelines for the preparation of a panel for appointment to the post of State DGPs in 2009, after the Supreme Court verdict in the police reforms case of 2006, also known as Prakash Singh case.

How to select DGP		
<p>How to select DGP</p> <p>The Supreme Court has issued seven directives to be followed by the States when appointing the Director General of Police</p>	<ul style="list-style-type: none"> ▪ Proposals should be sent to the UPSC, three months before incumbent's retirement ▪ UPSC to prepare a panel of names as per Prakash Singh judgment. It should try and choose within the zone of consideration who have got two years of service ▪ States shall appoint 	<p>one of the panel's choices</p> <ul style="list-style-type: none"> ▪ States shall not appoint DGP on an 'acting basis' ▪ The selected person can continue despite his date of superannuation, but the extension should <div style="text-align: center;">  </div> <p>be reasonable</p> <ul style="list-style-type: none"> ▪ Appointing persons on their retirement day is not in conformity with the Prakash Singh verdict ▪ State's and Centre's rules running counter to the SC directions will remain in abeyance
OLD RULE (AS PER PRAKASH SINGH JUDGMENT OF 2006)		
<ul style="list-style-type: none"> ▪ DGP shall be selected by the State government from among three senior-most officers of the department empanelled for promotion 	<ul style="list-style-type: none"> ▪ The promotion should be based on their length of service, very good record and range of experience for heading the police force 	<ul style="list-style-type: none"> ▪ Once the officer is selected for the job, he or she should have a minimum tenure of at least two years irrespective of their date of superannuation

NECP and EEFP Programs


- ❖ The National Efficient Cooking Program (NECP) and Energy Efficient Fans Programme (EEFP) were launched under the Ministry of Power.
- ❖ The NECP focuses on the introduction of induction-based cookstoves, which offer a cost advantage of 25-30% compared to traditional cooking methods.
- ❖ The Energy Efficient Fans Programme (EEFP) focuses on deploying energy-efficient BLDC fans, with the goal of distributing 1 crore ceiling fans.

World Food India 2023

- ❖ The three-day “2nd World Food India 2023” was held in New Delhi.
- ❖ It aims to showcase India as the “food basket of the world” and celebrate 2023 as the International Year of Millets.
- ❖ The Netherlands was served as the partner country, while Japan was the event's focus country.
- ❖ The first edition of the event was held in 2017.

Free Ration Scheme for 5 More Years

LAUNCHED DURING PANDEMIC	
<p>➤ Centre launched PMGKAY to provide 5kg extra free foodgrain every month to 80cr people under National Food Security Act during pandemic. This was in addition to 5kg grain at subsidised rate</p>	<p>months. In Dec last year, govt amalgamated PMGKAY with NFSA and announced making the subsidised foodgrain free for the poor</p>
<p>➤ Though initially meant for only 3 months, govt extended scheme 6 times to provide free grain for 28</p>	<p>➤ With One Nation One Ration Card in place, those entitled to get free 5kg foodgrain, including migrant workers, can avail of them anywhere in the country, the PM said Saturday</p>



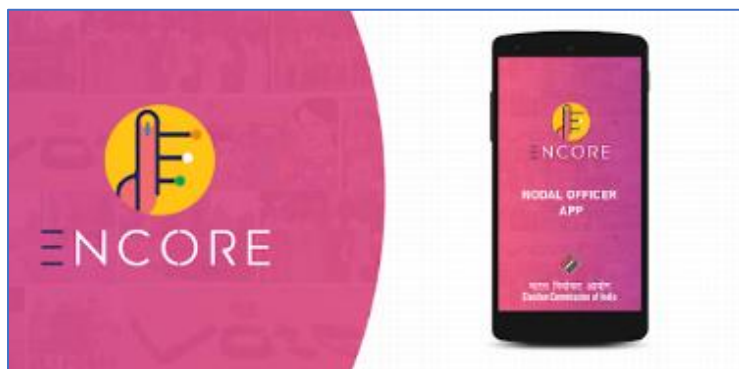
- ❖ Centre announced the extension of the free foodgrain scheme, the PM Garib Kalyan Ann Yojna (PMGKAY) for the next five years.
- ❖ The extension of the free ration scheme will benefit around 80 crore people.
- ❖ The announcement is expected to cost Rs 2 lakh crore in subsidy annually.
- ❖ The NFSA covers 50 per cent of the urban population and 75 per cent of the rural population.
- ❖ There are two categories of beneficiary households under the NFSA – Antyodaya Anna Yojana (AAY) and Priority Households.

State Food Safety Index 2022-2023

- ❖ Four years after the Food Safety and Standards Authority of India (FSSAI) published a state-wise index to spur food safety improvement.
- ❖ 19 out of 20 large states — including Maharashtra, Bihar, Gujarat and Andhra Pradesh — recorded a drop in their 2023 scores from 2019.
- ❖ After adjusting for a new parameter included in the 2023 index, 15 out of 20 states recorded lower 2023 scores compared to 2019.
- ❖ Gujarat and Kerala were the top performers in Food Testing Infrastructure category.
- ❖ Punjab and Himachal Pradesh received the highest scores in Compliance parameter
- ❖ Tamil Nadu emerged as the leading state in consumer empowering initiatives, followed by Kerala and Madhya Pradesh.

STATES WITH STEEPEST INDEX FALL			SAFETY MEASURE	
State	2019	2023	Parameter	Weight
Maharashtra	74	45	Compliance	28
Bihar	46	20.5	Consumer Empowerment	19
Gujarat	73	48.5	Human Resources and Institutional Data	18
Andhra Pradesh	47	24	Food Testing Infrastructure	17
Chhattisgarh	46	27	Improvement in SFSI Rank (added in 2023)	10
Source: SFSI reports; all scores out of 100			Training and Capacity Building	8
			TOTAL	100

ENCORE - Election Commission of India



- ❖ The Election Commission of India has designed in-house software for complete Candidate and election management through 'ENCORE'.
- ❖ 'ENCORE' stands for Enabling Communications on Real-time Environment.

- ❖ This provides a seamless facility for Returning Officers to process candidate nomination, affidavit, Voter turnout, counting, results and data management.

Dayapar Wind Project

- ❖ NTPC Renewable Energy Limited, commenced the commercial operation of its first wind project of 50 MW at Dayapar in Kachch, Gujarat.
- ❖ Dayapar Wind is the first project of NTPC REL and the first capacity in India to be declared commercial.
- ❖ With this, the total installed capacity of NTPC group has risen to 73,874 MW and the total renewable energy capacity of the group now stands at 3,364 MW.
- ❖ Apart from Dayapar Wind, there are 15 others RE projects under different stages of execution, totalling to a capacity of 6,210 MW.



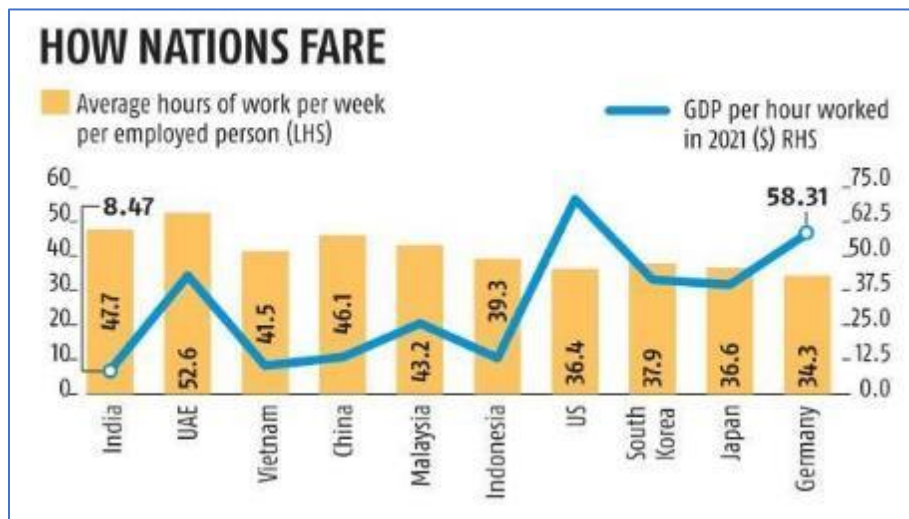
Maternity leave for women in Armed Forces

- ❖ Defence Ministry has approved a proposal for an extension of the rules for maternity, child care and child adoption leaves for women soldiers, sailors, and air warriors in the armed forces on a par with their officer counterparts.
- ❖ Women officers in the three services currently are eligible for 180 days of maternity leave, with a provision for extension of a month of leave without pay in exceptional cases.
- ❖ 30 days of leave available in the instance of a miscarriage or abortion.

- ❖ Women officers are eligible for 180 days of leave in case they adopt a child below the age of one year.
- ❖ So far, there were no women air warriors or sailors in the Indian Air Force or Navy.
- ❖ Both started inducting women in their ranks after the government brought in the Agnipath military recruitment scheme last year.



6th Most hard-working country



- ❖ The data from the International Labour Organization (ILO) reveals that Indians are among the hardest workers globally.
- ❖ They dedicating an average of 47.7 hours per week per employed individual as of 2023.
- ❖ This is higher than the U.S. (36.4), the UK (35.9), and Germany (34.4).
- ❖ They also work more than other Asian countries such as China (46.1), Singapore (42.6), and Japan (36.6).

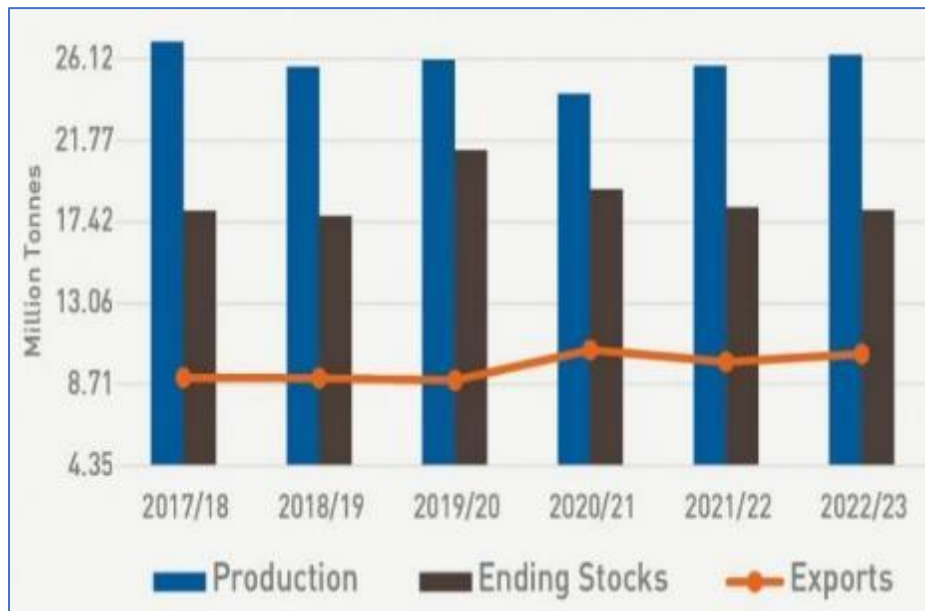
Bharat Atta



- ❖ The Central government has launched a new wheat flour scheme called 'Bharat Atta' at a subsidised price of Rs 27.50 per kg.
- ❖ The scheme is aimed at providing affordable wheat flour to the poor and vulnerable sections of the society.
- ❖ Bharat Atta is a fortified wheat flour that is made with a blend of wheat, rice, and pulses.
- ❖ It is a good source of protein, iron, and other essential nutrients.
- ❖ The scheme will be implemented through the Public Distribution System (PDS), ensuring easy access to affordable wheat flour for the target population.

Cotton Production 2023-2024

- ❖ Cotton production during 2023-2024 cotton season is expected to be 6% lesser than the season that ended on September 30.
- ❖ The Committee on Cotton Production and Consumption estimated cotton production in the current season (October 2023 to September 2024) to be 316.57 lakh bales (170 kg each).
- ❖ This was 336.60 lakh bales in 2022-2023.
- ❖ The total consumption by textile mills is expected to be 294 lakh bales compared with 295 lakh bales last season.
- ❖ Exports are likely to be 25 lakh bales and imports 12 lakh bales.



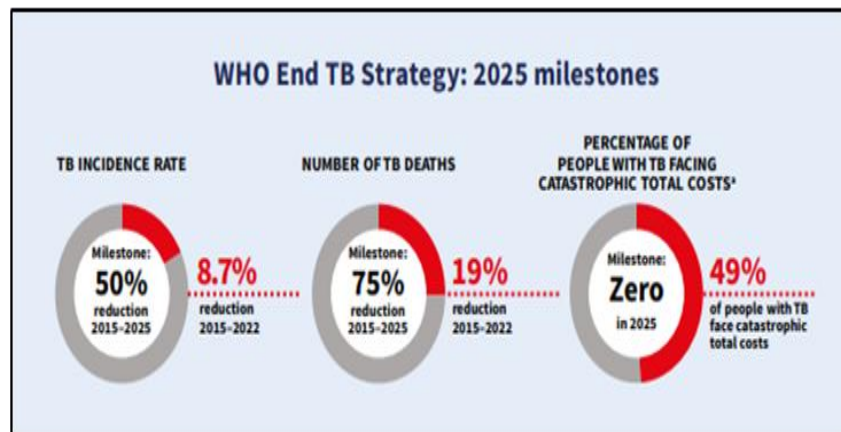
Krishi 24/7



- ❖ The Department of Agriculture and Farmers Welfare (DA&FW) in collaboration with Wadhvani Institute for Artificial Intelligence (Wadhvani AI) developed Krishi 24/7.
- ❖ This is the first-ever AI-powered solution for automated agricultural news monitoring and analysis, with support from Google.org.
- ❖ Krishi 24/7 will aid DA&FW to identify relevant news, generate timely alerts, and take prompt action to protect farmers' interests and promote sustainable agricultural growth through improved decision-making.

India's TB incidence

- ❖ India's success in reducing the incidence of tuberculosis by 16 per cent and mortality due to it by 18 per cent since 2015.
- ❖ It has been acknowledged by the World Health Organisation (WHO) in its Global TB Report 2023.
- ❖ The treatment coverage has improved to 80 per cent of the estimated TB cases.
- ❖ The TB mortality rates falls from 4.94 lakhs in 2021 to 3.31 lakhs in 2022, a reduction of over 34 per cent.



Disposal of Criminal Cases Against Legislators

- ❖ The Supreme Court issued guidelines to monitor the speedy disposal of criminal cases against Members of Parliament (MPs) and Members of Legislative Assemblies (MLAs).
- ❖ The SC said that it would be difficult for it to form a uniform guideline for trial courts relating to speedy disposal of cases against MP/MLAs.
- ❖ It also asked the high courts to set up a special bench to monitor criminal trials against lawmakers.
- ❖ High Courts may call upon special lower courts for reports on the status of trials against lawmakers in criminal cases.
- ❖ The district judges have been asked to ensure sufficient infrastructure and technological facilities for designated special courts trying lawmakers.
- ❖ Further, the top court has asked High Courts to register a Suo motu cases for effective monitoring and disposal of cases involving MPs/MLAs.

Indian students in USA 2022-23

Indian students in the US			
	2021/22	2022/23	%increase
Indian international students in the United States	199,182	268,923	35%
Undergraduate students	27,545	31,954	16%
Graduate students	102,024	165,936	62.6%
Optional Practical Training	68,188	69,068	1.3%

- ❖ India registered a 35% rise in the number of students travelling to the U.S. in the past year.
- ❖ About 25% of the over 10 lakh foreign students enrolled in colleges in the U.S. this academic year are from India.
- ❖ For the first time since 2009-10, India is set to surpass China in the number of students travelling to the U.S. for higher education.
- ❖ 10,57,188 international students enrolled in U.S higher education institutions in 2022-23.
- ❖ In 2021-22, a total of 9,48,519 students had travelled to the U.S. for higher education.
- ❖ The U.S. also registered an 8% growth in students pursuing optional practical training (OPT).

Rules for Senior Citizen's Savings Scheme and PPF

- ❖ The government made several important changes in the popular Senior Citizen's Savings Scheme (SCSS), Public Provident Fund (PPF) and 5-year post office time deposit.
- ❖ A retired individual of more than 55 years of age but below 60 years of age will now have three months' from earlier one month time.
- ❖ The new rules allow the spouse of a government employee to invest the financial assistance amount in the scheme.

- ❖ The account holder can continue to extend the account for n number of block - the block being of three years each.
- ❖ Earlier, the extension was allowed only once.
- ❖ The closure of the existing account or accounts, new accounts or accounts may be opened again as required by the depositor subject to the maximum deposit limit.

Broadcasting Services (Regulation) Bill 2023



- ❖ It aims to bring in a new regulatory framework in keeping with the technological advancements in the sector.
- ❖ This pivotal legislation modernises our broadcasting sector's regulatory framework, replacing outdated Acts, Rules, and Guidelines with a unified, future-focused approach.
- ❖ It adapts to the dynamic world of OTT, Digital Media, DTH, IPTV, and more, promoting technological advancement and service evolution.
- ❖ It seeks to replace the existing Cable Television Networks (Regulation) Act, 1995.

Digital Advertisement Policy, 2023

- ❖ The government of India approved a new Digital Advertisement Policy, 2023.
- ❖ It will be allowing the Central Bureau of Communication (CBC), to undertake advertisement campaigns on social media, OTT platforms and other digital media.
- ❖ This is a significant move to connect the potential of digital media for government communication.
- ❖ The policy will also encompass campaigns to be run on mobile applications, apart from websites.

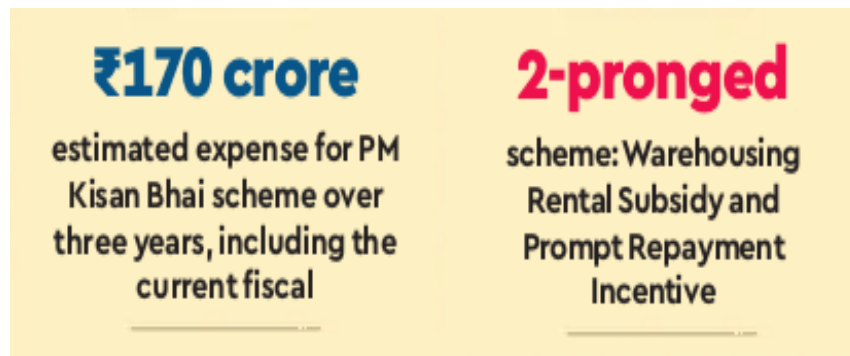
- ❖ It mandates that the websites, mobile apps, OTT platforms and digital audio platforms need to be at least a year old to be eligible to apply under the scheme.



ATACH - The Alliance

- ❖ The World Health Organization (WHO) has introduced an Operational Framework for constructing climate-resilient and low-carbon health systems.
- ❖ This Framework is important to implement the Alliance for Transformative Action on Climate and Health (ATACH) goals.
- ❖ ATACH was established in 2022 by WHO.
- ❖ It is an informal voluntary network which works to realize the ambition set at COP26 to build climate-resilient and sustainable health systems.

PM Kisan Bhai (Bhandaran Incentive) scheme



- ❖ This scheme aims to incentivize farmers to retain their produce for a minimum of three months post-harvest.
- ❖ It is granting them the autonomy to decide when and where to sell their crops.
- ❖ It seeks to break the monopoly of traders in setting crop prices, giving farmers greater control over their produce.
- ❖ The storage incentive will be provided for a maximum of three months.

- ❖ Besides, produce stored for 15 days or less will not be eligible for the subsidy.
- ❖ The scheme may be piloted in states such as Andhra Pradesh, Assam, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu, and Uttar Pradesh.

PM-PVTG Development Mission



- ❖ This was launched on birth anniversary of tribal freedom fighter Birsa Munda - November 15.
- ❖ This scheme is meant for the overall development of around 28 lakh people from Particularly Vulnerable Tribal Groups.
- ❖ It aims to bring critical infrastructure like power, water, road connectivity, housing, education, and healthcare to the 75 PVTG communities living in remote villages.
- ❖ PVTG communities living in over 22,000 remote villages across 18 States and Union Territories.

India - CITES RST

- ❖ India has been removed from Review of Significant Trade (RST) for Red Sanders, under Convention on International Trade in Endangered Species (CITES).
- ❖ This can be a major boost to farmers who grow Red Sanders for export.
- ❖ India was under the Review of Significant Trade (RST) process for Red Sanders since 2004.
- ❖ The CITES RST process enables disciplinary action in the form of trade suspensions directed at countries that do not meet their obligations.

- ❖ Red sander (*Pterocarpus santalinus*) is a high market value tree, endemic to few districts in Andhra Pradesh.
- ❖ India has been a party to the CITES since 1976.



Parliamentary Panel reports on the Indian Criminal Law bills

<p>Indian Penal Code (IPC), 1860</p> <p>TO BE REPLACED BY</p> <p>Bharatiya Nyaya Sanhita Bill, 2023</p> <ul style="list-style-type: none">• It will have 356 sections (instead of 511 sections in IPC)• 175 sections have been amended• 8 sections have been added, and 22 sections have been repealed	<p>Code of Criminal Procedure (CrPC), 1973</p> <p>TO BE REPLACED BY</p> <p>Bharatiya Nagarik Suraksha Sanhita, 2023</p> <ul style="list-style-type: none">• It will have 533 sections (instead of 478 sections in CrPC)• 160 sections have been changed• 9 sections have been added, and 9 sections have been repealed
<p>Indian Evidence Act, 1872</p> <p>TO BE REPLACED BY</p> <p>Bharatiya Sakshya Bill, 2023</p>	<ul style="list-style-type: none">• It will have 170 sections (instead of 167 sections in IEA)• 23 sections have been changed• 1 section has been added, and 5 sections have been repealed

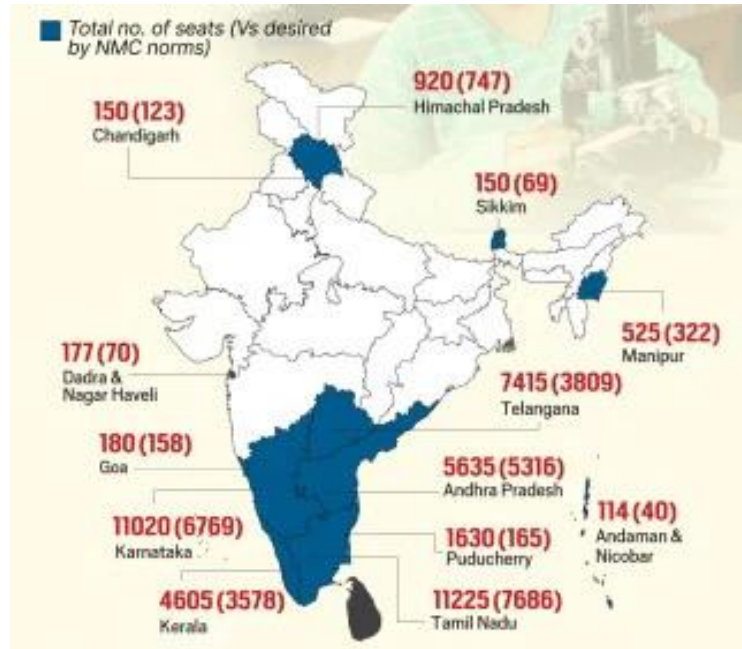
- ❖ Reports on the three bills which seek to replace the criminal and procedural laws were submitted to the Rajya Sabha Chairman.
- ❖ The three new criminal codes — Bharatiya Nyaya Sanhita (BNS) Bill, 2023, Bharatiya Nagarik Suraksha Sanhita (BNSS) Bill, 2023 and Bharatiya Sakshya (BS) Bill, 2023 — will replace the Indian Penal Code, 1860, Code of Criminal Procedure, 1898, and the Indian Evidence Act, 1872 respectively.
- ❖ The Bills were introduced on August 11 in Parliament and were sent to the parliamentary standing committee on Home Affairs for examination.
- ❖ The BNS Bill, 2023 has increased the number of crimes which can attract the death penalty from 11 to 15, according to a parliamentary panel report.
- ❖ Section 353 of the Indian Penal Code provides for a maximum of two years of prison term and the committee may seek to slash it to one year.
- ❖ It has suggested a minimum imprisonment of six months for individuals selling adulterated food or drinks, coupled with a minimum fine of Rs 25,000.

AINA Dashboard for Cities

- ❖ The ‘AINA Dashboard for Cities’ portal www.aaina.gov.in has been made live by Ministry of Housing and Urban Affairs (MoHUA).
- ❖ Urban Local Bodies (ULBs) across the country can submit their key data on a regular basis, through a simple data entry form on the portal.
- ❖ It aims to create a robust database of the key performance metrics of Urban Local Bodies.
- ❖ It could be accessed by all stakeholders, and subsequently would open for public view once it gets populated.



Limiting MBBS Seats in States



- ❖ The National medical Commission (NMC) has deferred the decision of re-examining the provisions of the ratio of 100 MBBS seats for 10 lakh population in the state.
- ❖ The Undergraduate Medical Education Board (UGMEB) of the NMC has now notified that the clause will now come into force from the 2025-26 academic cycle.
- ❖ The National Medical Commission had earlier restricted the number of undergraduate seats in each state to 100 per million population.
- ❖ The limit to the number of seats was introduced to limit crowding of medical colleges in a state.
- ❖ The move aimed at reducing regional disparities in availability of healthcare professionals and ensure effective quality of education.
- ❖ With this ratio there would have been a potential for addition of about 40,000 MBBS seats in country if the medical colleges are evenly distributed.

Selling Agreement and ownership

- ❖ An agreement to sell does not confer any title or transfer ownership to the intended purchaser, the Supreme Court reiterated in a recent order.
- ❖ The agreement to sell is not a conveyance; it does not transfer ownership rights or confer any title.
- ❖ As per the case, the intended purchaser had agreed to buy a property from the proposed seller and also paid the full amount.

- ❖ The possession was also handed over to the purchaser. However, when the seller refused to execute it.
- ❖ The intended purchaser filed a suit for specific performance in October 2001.

Sale	Agreement to sell
<ul style="list-style-type: none"> ● In the contract of sale, the buyer buys the product from the seller at the same time title of the good is transferred immediately. ● There are no such conditions to fulfil in the sale. ● Sales are like the completed contract. ● The buyer can recover the goods in the case when the seller sells the goods to another person. ● The buyer is responsible for the loss. ● The buyer does not have the right to sue for damages against the seller 	<ul style="list-style-type: none"> ● In agreement to sell the title of goods is not immediately transferred. It remains on the seller itself, the title of goods is transferred on the future. ● Only by fulfilling the conditions, the title of goods is transferred. ● Agreement to sell is a nature of the contract which has to be complete ● when the seller sells the product to the other party the buyer cannot recover the goods. But he can claim for damages. ● The seller is responsible for the loss ● The seller cannot sue for the price but he can sue for damages.

Patents in 2023-24



- ❖ The Indian patent office has granted "highest" number of 41,010 patents till November 15 this fiscal year.
- ❖ In 2013-14 fiscal year, 4,227 patents were granted.
- ❖ According to a World Intellectual Property Organization report, patent applications by Indians grew 31.6 per cent in 2022

Measles Vaccination Gaps in India

- ❖ In 2022, an estimated 11 lakh children missed their first dose of the measles vaccine in India.

- ❖ WHO is placing the country among the ten nations with the highest measles vaccination gap.
- ❖ This WHOS's report also highlights India as one of the 37 countries that experienced outbreaks, recording 40,967 cases in 2022.
- ❖ Measles is a highly contagious viral infection, which most commonly affects children.
- ❖ The infection itself usually causes high fever, cough, runny nose, and red rashes all over the body, complications may lead to death.



4th Anti-Submarine Warfare Craft

- ❖ The Indian Navy launched its most advanced and state-of-the-art anti-submarine warfare shallow watercraft, named Amini.
- ❖ The vessel is named after a strategically important island in the Lakshadweep archipelago on India's western coast.
- ❖ This is the fourth in the series of eight anti-submarine warfare shallow watercrafts.

Nayi Chetna – 2.0

- ❖ Nayi Chetna – 2.0' will be launched on the International Day for the Elimination of Violence against Women-25 November.

- ❖ It aims to advance the rights of women and gender-diverse individuals, promote a life free from fear and gender-based discrimination and violence.
- ❖ It will be observed across 34 Indian states and UTs till 23 December.
- ❖ More than 77% women still do not report or talk about their experience of violence in India.

Innovation Handshake agenda

- ❖ The “Innovation Handshake” agenda was officially launched between the United States and India.
- ❖ The concept of the Innovation Handshake, developed under the US-India Commercial Dialogue.
- ❖ It aims to bring together the two governments with venture capital leaders, entrepreneurs, and other industry and institutional stakeholders.

Tantalum deposit



- ❖ Researchers from IIT Ropar, Punjab, has discovered the presence of a rare metal called Tantalum, in the Sutlej River.
- ❖ Tantalum is widely used in electronics and semiconductors.
- ❖ Tantalum is a rare metal and is grey, heavy, very hard, and is known for being one of the most corrosion-resistant metals.
- ❖ It can be stretched, pulled and drawn into a thin wire or thread without breaking.
- ❖ It has an extremely high melting point.
- ❖ Tantalum was discovered first by a Swedish scientist named Anders Gustaf Ekenberg in 1802.

LEAP AHEAD initiative

- ❖ Ministry of Electronics & Information Technology (MeitY) has launched the LEAP AHEAD initiative at the LEAP AHEAD summit.
- ❖ It is a joint collaboration of Software Technology Parks of India (STPI) and The Indus Entrepreneurs (TiE) Delhi-NCR.
- ❖ It aims to support and accelerate the success of tech startups in the scaling stage, growth stage, product diversification or planning expansion into new geographical locations.
- ❖ It provides funding support of up to Rs.1 Crore and a comprehensive three-month mentorship program.

Gyanodaya express



- ❖ Jammu and Kashmir Lt Governor flagged off 'Gyanodaya Express - College on Wheels' train from Katra Railway Station in Reasi district.
- ❖ The Gyanodaya Express, carrying 700 girl students from across universities of the Union Territory, will travel through several states for education purposes.
- ❖ It is aimed at comprehensive empowerment of the students by endowing them with hands-on knowledge of the world outside their classrooms.

Committee for Madiga community

- ❖ The union government ordered to expedite the process of sub-categorisation in reservation for the Madigas.
- ❖ The Madiga community is a Telugu caste, mainly living in the southern states of Telangana, Andhra Pradesh, and Karnataka.
- ❖ However, Madigas also live in Tamil Nadu, Maharashtra and Odisha.



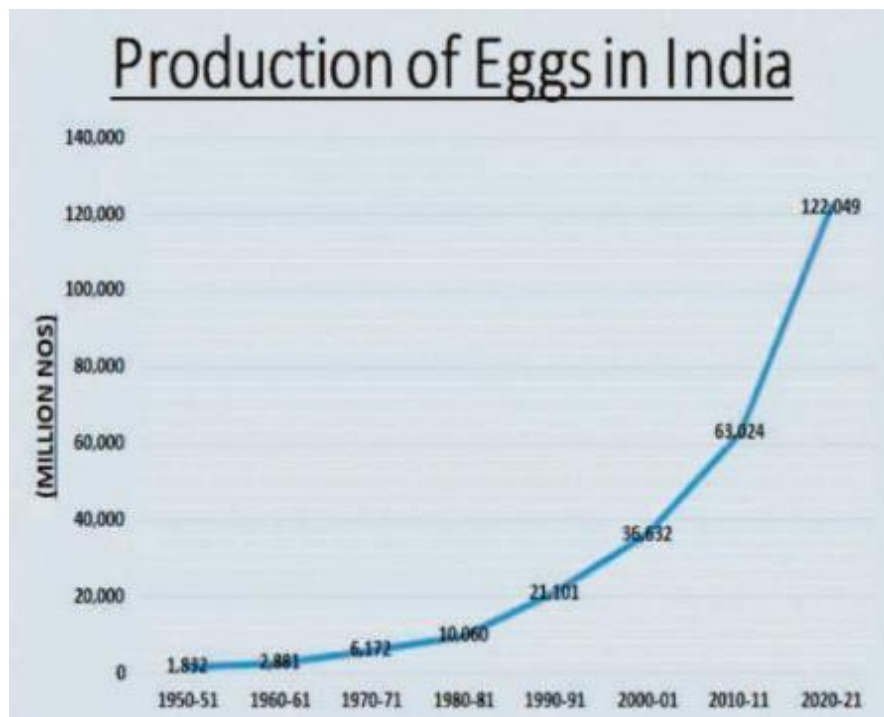
- ❖ The community has historically worked in handicraft, leatherwork, tannery, and agriculture.
- ❖ The Indian government categorises the community within the SC category.
- ❖ There are various sub-castes within Madigas.
- ❖ As per the 2011 census, the Madiga community in the undivided Andhra Pradesh (before the creation of Telangana) constituted more than 48 per cent of the SC population.
- ❖ The Madiga Reservation Porata Samithi (MRPS) was established in July 1994 in Edumudi village, Prakasam district of Andhra Pradesh, under the leadership of Manda Krishna Madiga and others.

NARROWING DIVIDE
54L SC population in T
11% of there are Madigas and 5% Malas
➤ Justice Ramachandra Raju Commission had divided sub-castes in four groups - A,B, C, and D in undivided Andhra Pradesh
➤ Division based on backwardness
➤ The categorisation was then struck down by SC

Basic Animal Husbandry Statistics 2023

- ❖ On the occasion of the National Milk Day, the basic animal husbandry statistics for 2022-23 was released in Guwahati, Assam.
- ❖ The milk production in the country is increased by 22.81% in the past five years.
- ❖ The total milk production in the country is estimated as 230.58 million tonnes during 2022-23.
- ❖ It is registering a growth of 22.81% over the past 5 years from 2018-19.
- ❖ The production has increased by 3.83% during 2022-23 over the estimates of 2021-22.
- ❖ Uttar Pradesh was followed by Rajasthan (14.44 %), Madhya Pradesh (8.73 %), Gujarat (7.49 %), and Andhra Pradesh (6.70 %) as leading milk producing states in the country.

- ❖ Total meat production in the country is estimated as 9.77 million tonnes during 2022-23
- ❖ The major contribution in the total meat production comes from Uttar Pradesh, with 12.20% share.
- ❖ It is followed by West Bengal (11.93 %), Maharashtra (11.50 %), Andhra Pradesh (11.20 %) and Telangana (11.06 %).
- ❖ The total wool production in the country is estimated as 33.61 million kg during 2022-23.
- ❖ The major contribution in the total wool production comes from Rajasthan with a share of 47.98%.
- ❖ It is followed by Jammu and Kashmir (22.55%), Gujarat (6.01%), Maharashtra (4.73%) and Himachal Pradesh (4.27%).



INTERNATIONAL

Sponge Bombs

- ❖ The Israeli forces are reportedly making "sponge bombs" to tackle the Hamas challenge.
- ❖ These are the chemical weapon and are different from traditional explosives.
- ❖ The "sponge bombs" are encased within a protective plastic container, which has a metal barrier that divides two distinct liquids.
- ❖ Once activated, these liquids merge and advance toward their intended destination.
- ❖ They do not explode in the traditional sense, instead they trigger a sudden explosion of foam.



Turkish Republic's 100th Anniversary



- ❖ This year 29th October marks 100th anniversary of the Turkish Republic.
- ❖ Turkey has a secular government and was founded as a secular republic by Mustafa Kemal Atatürk in 1923.
- ❖ This modern government replaced the Ottoman Empire.

Passenger-carrying flying taxi



- ❖ China approved the world's first airworthiness "type certificate" for EH216-S AAV.
- ❖ It is a fully autonomous drone taxi designed to carry two passengers.
- ❖ They are powered by 16 electric rotors and can fly at speeds of up to 80 mph and distances of up to 18 miles.

International Humanitarian Law on Human Shields

- ❖ The United States accused Palestinian militant group Hamas of using innocent Palestinians as human shields.
- ❖ Meanwhile, protests rage on in the Arab world and beyond, condemning the forced displacement of Gazans and other Palestinians by Israel.
- ❖ The term 'human shields' is used in IHL with respect to civilians or other protected persons, whose presence or movement is aimed, or used to render military targets immune from military operations.
- ❖ The use of human shields is considered a war crime and is banned as per Rule 97 of the International Humanitarian Law (IHL).
- ❖ The International Committee of the Red Cross and the Norwegian Refugee Council described the order to "forcibly transfer" civilians as unlawful.

Rafah border crossing – Egypt

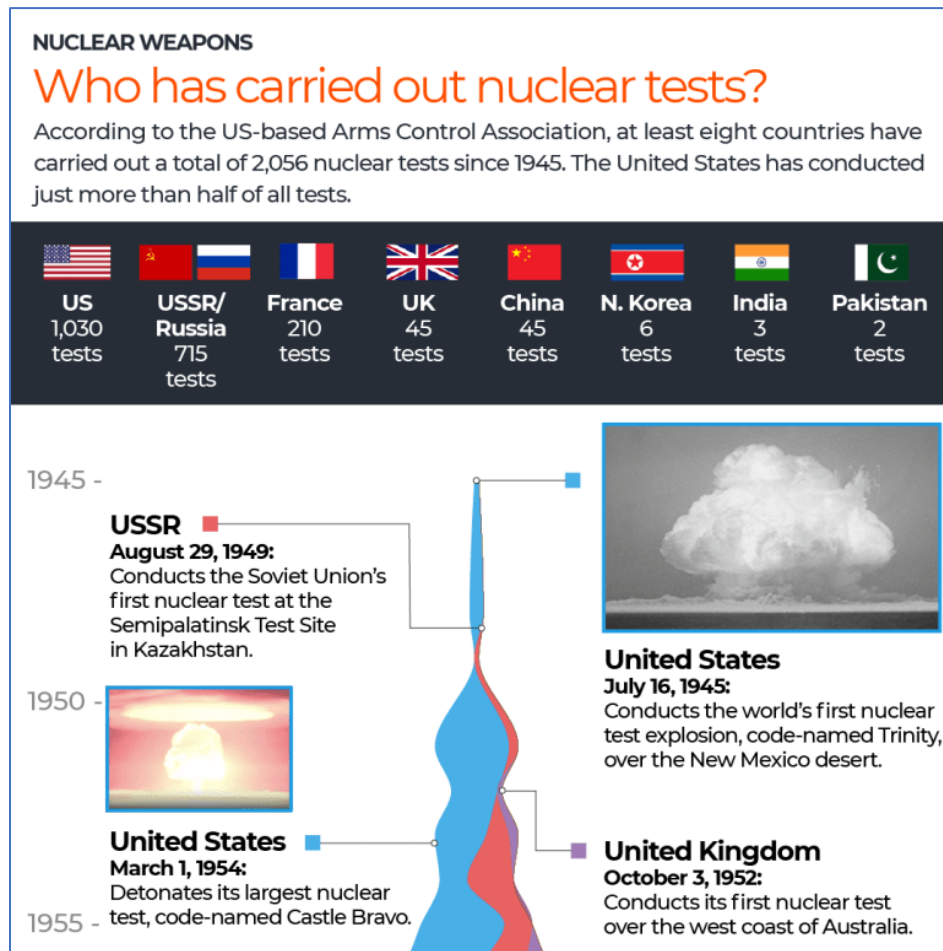
- ❖ The Rafah crossing between Gaza and Egypt is opened to limited evacuations from the besieged Palestinian territory to Egypt.

- ❖ The Rafah border crossing is connecting Gaza with Egypt's Sinai Peninsula.
- ❖ The border, located at the southern tip of the strip, is the only crossing that isn't controlled by Israel and allows humanitarian aid as the situation in Gaza worsens.
- ❖ The crossing falls along a 12.8-kilometre fence that separates Gaza from the Sinai desert.
- ❖ The deal among Egypt, Israel, and Hamas to partially open the Rafah border crossing was mediated by Qatar.



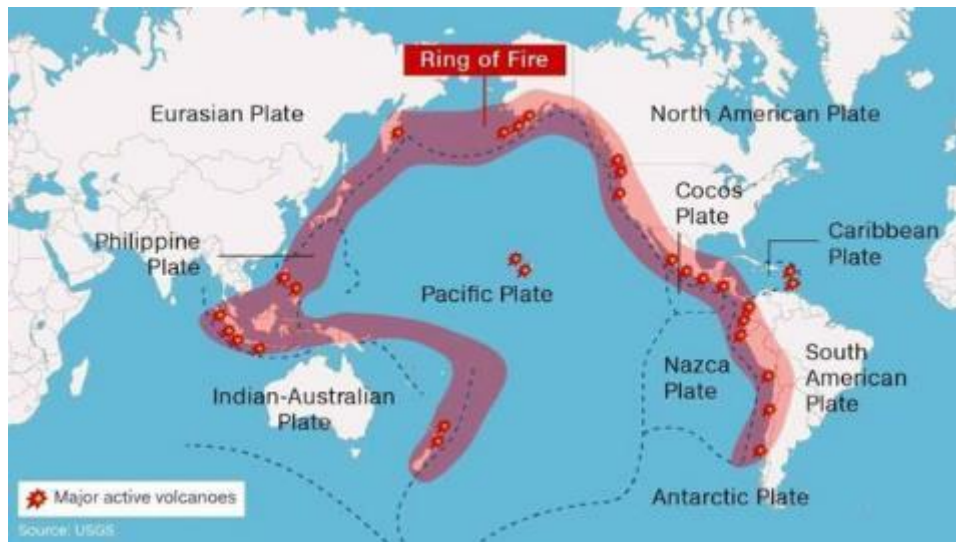
Global nuclear test ban treaty

- ❖ Russian President Vladimir Putin signed a bill revoking Russia's ratification of a global nuclear test ban.
- ❖ It is rescinding the ratification of the Comprehensive Nuclear Test Ban Treaty, also known as the CTBT.
- ❖ It would “mirror” the stand taken by the U.S., which has signed but not ratified the nuclear test ban.
- ❖ The CTBT, adopted in 1996, bans all nuclear explosions anywhere in the world, but the treaty was never fully implemented.
- ❖ In addition to the U.S., it has yet to be ratified by China, India, Pakistan, North Korea, Israel, Iran, and Egypt.



New Earthquake Threat in Pacific region

- ❖ A series of shallow earthquakes has the potential to strike the Pacific Northwest of the US with similar devastating force to the San Francisco quake of 1906.
- ❖ This newfound earthquake threat poses a substantial risk to over 4 million residents in the Pacific Northwest.
- ❖ It is encompassing major cities like Seattle, Tacoma, and Olympia.
- ❖ The research harnesses tree ring science and state-of-the-art radiocarbon dating methods to bridging the years 923 C.E. and 924 C.E.
- ❖ The study revealed that similar shallow faults, located less than 18 miles beneath the surface, ruptured approximately 1,000 years ago.
- ❖ It is known as the millennial cluster that occurred either simultaneously to produce an estimated 7.8 magnitude quake and devastated parts of the Middle East.



Bletchley Declaration

- ❖ The United Kingdom hosted the world's first AI Security Summit.
- ❖ The “Bletchley declaration” on AI was unveiled at the summit.
- ❖ It encompasses not only avoiding catastrophe or threats to life and limb, but also priorities such as securing human rights and the UN Sustainable Development Goals.
- ❖ The declaration was signed by all 27 countries attending, including the UK, the US, China, and India, as well as the European Union.
- ❖ The Bletchley Park Declaration aims to establish a shared understanding of the risks and opportunities posed by “frontier AI.”
- ❖ The Frontier AI refers to highly advanced generative AI models with potentially dangerous capabilities that can pose significant risks to public safety.

Poppy cultivation and opium production

- ❖ Poppy cultivation and opium production have plunged more than 90 percent in Afghanistan since Taliban authorities banned the crop.
- ❖ Poppy cultivation has dropped by around 95 percent – from 233,000 hectares at the end of 2022 to 10,800 in 2023.
- ❖ Opium production has taken the same path, falling from 6,200 tonnes to 333 tonnes over the same period.
- ❖ Afghanistan was previously the world's top opium producer – responsible for over 80 percent of global supply.



New session of the Britain's parliament

- ❖ King Charles III Tuesday gave the United Kingdom's first King's Speech in more than 70 years.
- ❖ He outlined the legislative agenda scheduled by Prime Minister Rishi Sunak for the next parliamentary session.
- ❖ The last session of Parliament opened in May 2022, when Boris Johnson was the prime minister of the UK and Queen Elizabeth II sat on the throne.

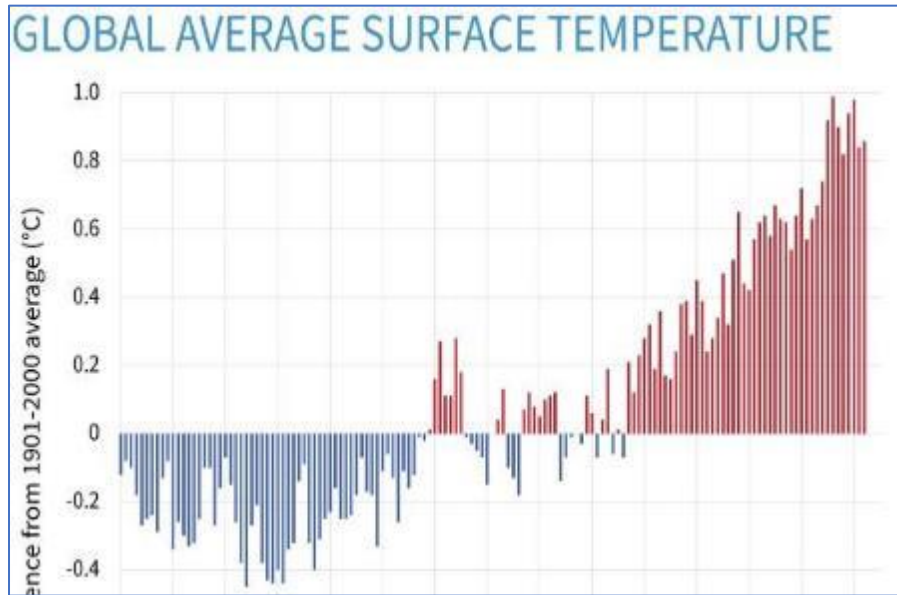
Treaty of Conventional Armed Forces

- ❖ NATO announced the formal suspension of a key Cold War-era security treaty in response to Russia's pullout from the deal.
- ❖ Most of NATO's 31 allies have signed the Treaty of Conventional Armed Forces in Europe.
- ❖ It is aimed at preventing Cold War rivals from massing forces at or near mutual borders.
- ❖ It was signed in November 1990 at Paris, but not fully ratified until two years later.
- ❖ Russia's foreign ministry also announced last week that Moscow had finalised its withdrawal.

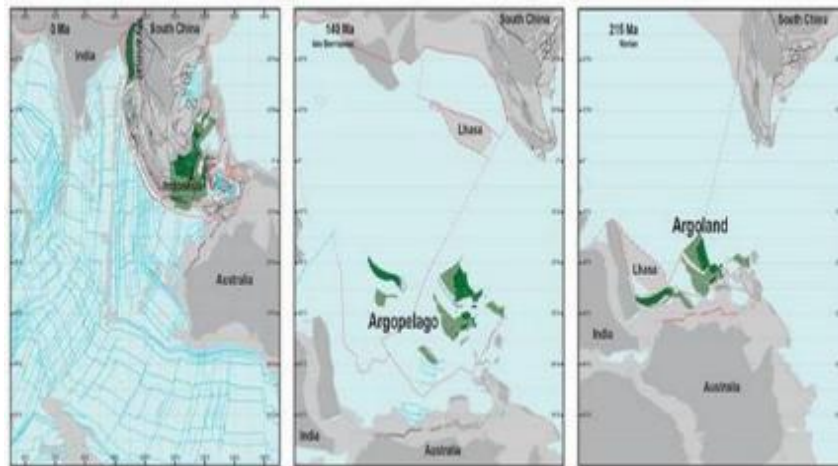
Record-Breaking Global Temperatures

- ❖ The year 2023 is predicted to be the hottest year in the last 125,000 years, as stated by European Union scientists.
- ❖ October 2023 has set a new record as the hottest October recorded during this period.
- ❖ The previous record from October 2019 was surpassed by a significant margin of 0.4 degrees Celsius.

- ❖ October's average global surface air temperature was 1.7 degrees Celsius higher than in the pre-industrial era of 1850-1900.



Lost Continent of Argoland



- ❖ Scientists have recently uncovered the mystery surrounding the lost continent known as Argoland.
- ❖ This ancient landmass, believed to have separated from western Australia approximately 155 million years ago,
- ❖ It was thought to have vanished as it drifted towards Southeast Asia.
- ❖ However, new research has revealed that Argoland did not simply disappear.
- ❖ Instead, it fragmented due to tectonic forces that stretched and pulled it apart, scattering its remnants across Southeast Asia.

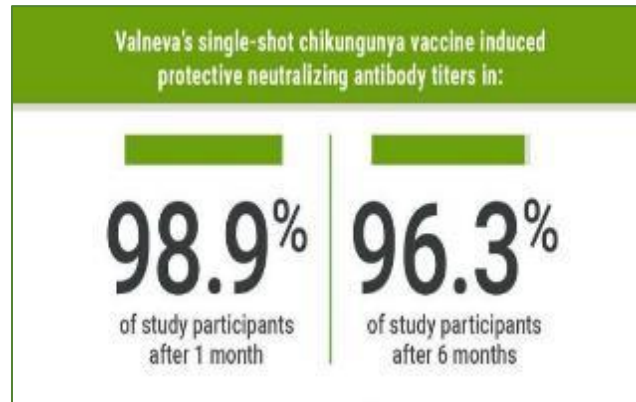
List of 'safe states'

- ❖ The UK government has tabled plans to add India and Georgia to an expanded list of safe states.
- ❖ It is aimed at strengthening the country's immigration system and help prevent abuse by people making unfounded protection claims.
- ❖ It would speed up the process of returning Indians who travel from the country illegally and rule out their chance of seeking asylum in Britain.
- ❖ Other countries deemed safe by the UK include Albania and Switzerland, as well as the European Union (EU) and European Economic Area (EEA) states.
- ❖ Under this rule, UK could detain illegal immigrants or order their prompt return to a safe third country or their country of origin.



Valneva's Chikungunya Vaccine

- ❖ The US Food and Drug Administration (FDA) has granted approval to Valneva's single-shot vaccine, Ixchiq.
- ❖ Now, this can be used for the prevention of chikungunya virus in adults aged 18 and older.
- ❖ This marks a major milestone as the first preventive shot approved in the United States for adults suffering from chikungunya, a mosquito-borne disease.
- ❖ Chikungunya virus is primarily transmitted to humans through the bite of infected mosquitoes.
- ❖ At least 5 million cases reported in the past 15 years.



Humanoid robot CEO

- ❖ The Polish rum company Dictador announced that it has appointed AI-powered humanoid robot 'Mika' to lead the firm.
- ❖ As the first CEO female robot, Mika is a board member who steers operations on Dictador's behalf.
- ❖ Meanwhile, according to Dictador, Mika has been hailed an honorary professor.
- ❖ The female humanoid robot was given the award at the 2023/24 Collegium Humanum University inauguration in Warsaw.
- ❖ She gave a speech on stage and highlighted the strengths of artificial intelligence.



New Volcanic Island – Japan

- ❖ Recently, an undersea volcano eruption led to the creation of a new island near Japan's Ogasawara island chain.
- ❖ The new island, which has not been named yet, is about 100 meters in diameter and was created due to phreatomagmatic eruptions.
- ❖ It happens when magma comes into contact with seawater and creates explosive bursts of ash and steam.

- ❖ Iwo Jima is an active volcano to the south of Ogasawara Island.
- ❖ It is also about 60 km north of the Fukutoku-Okanoba underwater volcano.



Ben Gurion Canal Project

- ❖ The 205 m width Suez Canal connects the Red Sea and the Mediterranean Sea.
- ❖ After the construction of this canal, trade between South Asia, Southeast Asia and Europe increased.
- ❖ The 260-kilometer Ben Gurion Canal Project was conceived in the 1960s.
- ❖ It will be connecting Red Sea-Mediterranean Sea via Negeva Desert.
- ❖ Most of the Negewa Desert is under Palestinian occupation

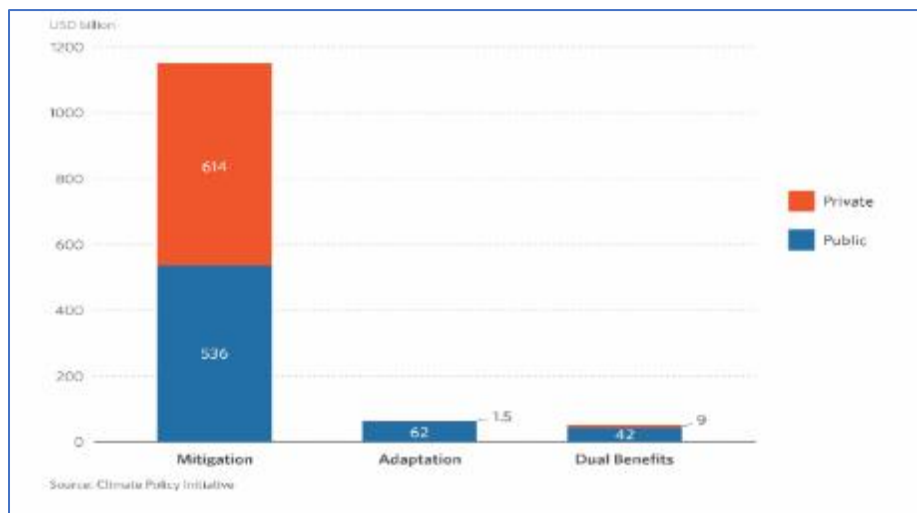


World Local Production Forum

- ❖ The 2nd World Local Production Forum was held at the Hague, the Netherlands.
- ❖ It aims to promote sustainable local production capacity to improve access to quality, safe and effective health products and technologies.
- ❖ It is an initiative of the World Health Organisation.
- ❖ The first WLPF was organised virtually in 2021.



Global Landscape of Climate Finance 2023



- ❖ Average annual flow of climate finance in 2021 and 2022 was \$1.3 trillion, twice the \$653 billion of 2019 and 2020.
- ❖ Renewable energy (RE) and transport continue to display most growth, with the former comprising 44 per cent of total mitigation finance and the latter 29 per cent of it.
- ❖ The United States, Europe, Brazil, Japan, China and India received 90 per cent of the funds for clean energy.
- ❖ Adaptation finance has reached an all-time high of US \$63 billion.
- ❖ But still does not measure up to the estimated needs of \$212 billion per year by 2030 just for developing nations.
- ❖ East Asia and the Pacific, US and Canada and Western Europe accounted for a total of 84 per cent of all the climate finance.

- ❖ Developing and low-income countries continue to face a paucity of funds. Less than 3 per cent of a total \$30 billion went to or within least developed countries.
- ❖ The 10 countries most affected by climate change between 2000 and 2019 received just \$23 billion; less than 2 per cent of total climate finance.

Tuvalu pact with Australia

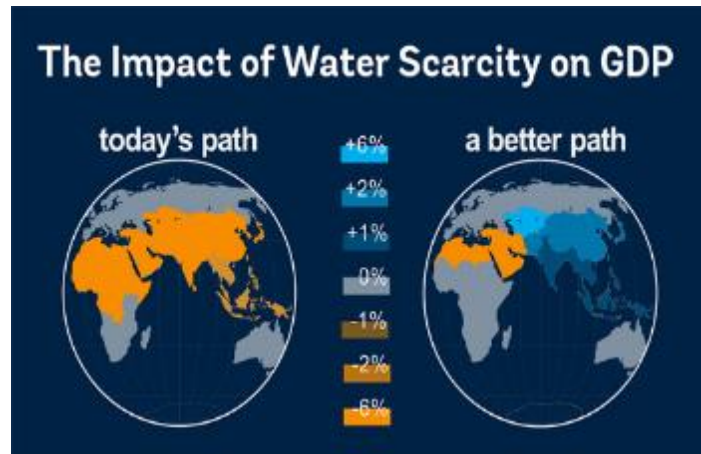
- ❖ Australia announced a security guarantee to the Pacific Islands nation of Tuvalu to respond to military aggression.
- ❖ It will protect the Island from climate change and boost migration in a pact aimed at countering China's influence in the Pacific.
- ❖ Under the treaty, Australia will implement a special visa arrangement to allow Tuvaluans to work, study and live in Australia.
- ❖ This is not a refugee visa, but rather will allow up to 280 Tuvaluans (from a population of around 11,200) to migrate to Australia each year — presumably on a permanent basis.



Climate change and water scarcity

- ❖ Nearly 350 million children are struggling with “high or extremely high-water scarcity” in South Asia.
- ❖ This is the highest number among all regions in the world.
- ❖ Severe water scarcity has also worsened due to the impacts of climate change.
- ❖ The eight-nation region – Afghanistan, Bangladesh, Bhutan, India, Nepal, Maldives, Pakistan and Sri Lanka – is home to more than one-quarter of the world’s children.

- ❖ But it has only four per cent of global renewable water.
- ❖ Last year, 45 million children lacked access to basic drinking water services in South Asia.
- ❖ South Asia, was followed by Eastern and Southern Africa and West and Central Africa where 130 million and 102 million children, respectively, are at risk from severe water scarcity.



Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA)

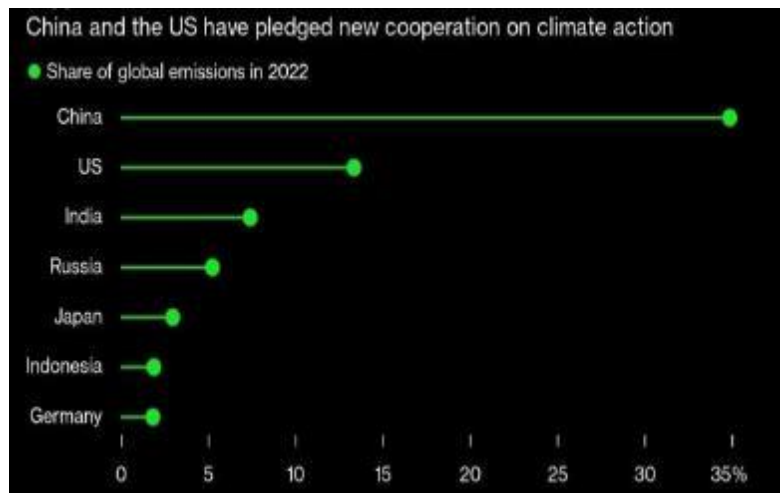


- ❖ India stressed that building networks and partnerships like the IPMDA would be instrumental in ensuring the security and stability of the Indian Ocean Region (IOR).
- ❖ The IPMDA was introduced by the Quad group (consisting of India, Australia, Japan, and the US) at the Tokyo summit, 2022.
- ❖ It aims to monitor "dark shipping" and create a more comprehensive and precise real-time maritime overview of partner nations' waters.
- ❖ It focuses on integrating the Pacific Islands, Southeast Asia, and the Indian Ocean region (IOR) in the Indo-Pacific.

- ❖ Dark shipping is a term used to describe a vessel operating with its Automatic Identification System (AIS) turned off.

USA - China Climate Deal

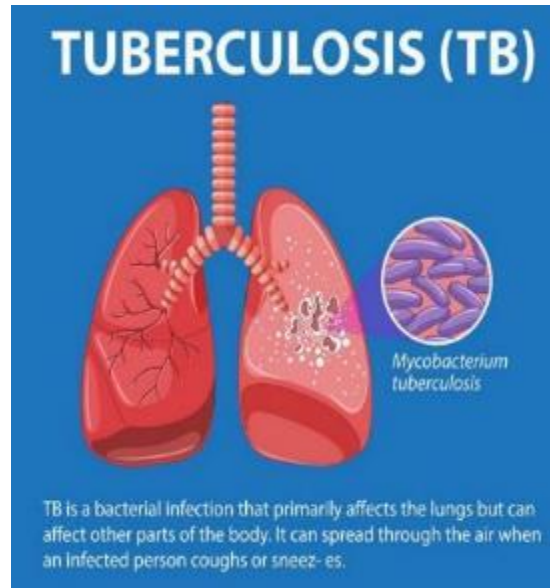
- ❖ The United States and China have agreed to jointly tackle global warming by ramping up wind, solar and other renewable energy with the goal of displacing fossil fuels.
- ❖ But China not promised to phase out its heavy use of coal, the dirtiest fossil fuel, or to stop permitting and building new coal plants.
- ❖ But both countries agreed to “pursue efforts to triple renewable energy capacity globally by 2030.”
- ❖ This is the first time China has agreed to specific emissions targets in any part of its economy.



WHO's 2023 Roadmap to End Maternal Tuberculosis

- ❖ The World Health Organization said in its revised 2023 roadmap toward ending tuberculosis among children and adolescents.
- ❖ The roadmap tells countries to provide 90 per cent of people at high risk of developing TB with access to preventive treatment by 2027.
- ❖ About 90 per cent of people living with TB should be diagnosed and treated by 2027.
- ❖ This translates to providing life-saving treatment for up to 45 million people between 2023 and 2027.
- ❖ It will be including up to 4.5 million children and up to 1.5 million people with drug-resistant tuberculosis.

- ❖ Only 19 per cent of the target to provide treatment for 115,000 children and young adolescents with multidrug-resistant tuberculosis (MDR-TB) and rifampicin-resistant TB (RR-TB) was met.
- ❖ Of the 1.3 million TB deaths in 2022, 214,000 TB deaths were of children 14 years old and below.
- ❖ As much as 96 per cent of deaths occurred in children who did not access TB treatment.



BDS Movement



- ❖ Boycott, Divestment, Sanctions (BDS) is a Palestinian-led movement for freedom, justice and equality.
- ❖ BDS upholds the simple principle that Palestinians are entitled to the same rights as the rest of humanity.
- ❖ Inspired by the South African anti-apartheid movement, the BDS call urges action to pressure Israel to comply with international law.

Operation 1027

- ❖ “Operation 1027” was launched by the Three Brotherhood Alliance (3BTA).
- ❖ This Alliance comprises the Myanmar National Democratic Alliance Army (MNDAA), the Ta’ang National Liberation Army (TNLA), and the Arakan Army (AA).
- ❖ Its goal is to combat the junta’s armed forces and allied militias in northern Shan State, close to the Myanmar-China border.



APEC Summit 2023

- ❖ The Asia-Pacific Economic Cooperation (APEC) Leaders' Summit 2023 took place in San Francisco, United States.
- ❖ Theme of the event is "Creating a Resilient and Sustainable Future for All".
- ❖ The summit adopted the ‘Golden Gate Declaration’.
- ❖ The APEC is a regional economic forum established in 1989 to leverage the growing interdependence of the Asia-Pacific.
- ❖ The APEC has its permanent secretariat in Singapore.
- ❖ India currently has the 'observer' status.

Voice of Global South Summit

- ❖ India has hosted the 2nd Voice of Global South Summit (VOGSS) in a virtual format.
- ❖ The theme of the inaugural Leaders’ Session was "Together, for Everyone’s Growth, with Everyone’s Trust”.

- ❖ The theme of Concluding Session was "Global South: Together for One Future".
- ❖ This unique initiative brought together 125 countries of the Global South to share their perspectives and priorities on a common platform.



30 Years of India-China Border Agreement



- ❖ Thirty years ago, officials from both sides signed the Border Peace and Tranquillity Agreement (BPTA).
- ❖ The treaty named as "Agreement on the Maintenance of Peace and Tranquility along the Line of Actual Control (LAC) in the India-China Border Areas".
- ❖ This was the first time both sides legally commit to respecting the status quo and reduce the risk of an unplanned confrontation.
- ❖ It committed both sides to respecting the status quo, reducing the risk of unplanned confrontations, and minimizing military forces along the LAC.

- ❖ The LAC separates Indian-controlled territory from Chinese-controlled territory.
- ❖ It is divided into three sectors:
 - Eastern Sector (Arunachal Pradesh and Sikkim)
 - Middle Sector (Uttarakhand and Himachal Pradesh)
 - Western Sector (Ladakh).

CII India-Nordic-Baltic Business Conclave

- ❖ The 2nd edition of the CII India Nordic Baltic Business Conclave took place in New Delhi.
- ❖ It aimed at foster collaboration between India and the NB8 countries, known for their prowess in innovation and technology.
- ❖ The Nordic Baltic Eight (NB8) countries, comprising Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway, and Sweden.

USI Annual UN Forum 2023



- ❖ The United Service Institution of India organised its Annual UN Forum 2023 in New Delhi.
- ❖ USI is the country's oldest think-tank established in 1870 for research and debate on national security and military affairs.
- ❖ The forum on 'International Humanitarian Law and Peacekeeping' was organised in collaboration with the International Committee of the Red Cross and the Centre for UN Peacekeeping Operations.
- ❖ The forum aims to discuss the applicability and limitations of implementing International Humanitarian Law frameworks in UN peace operations.

59th International Tropical Timber Council (ITTC) 2023

- ❖ The 59th Session of the International Tropical Timber Council (ITTC-59) was held in Pattaya, Thailand.
- ❖ The IITC is the governing body of the International Tropical Timber Organisation (ITTO).
- ❖ It aims to promote sustainable management and conservation of tropical forests.
- ❖ The EU assured that its consumption does not drive further decline in the EU or beyond our borders.

Same sex marriages in Thailand



- ❖ Thailand's Cabinet approved an amendment to its civil code to allow same-sex marriage.
- ❖ The law would guarantee the right to form a family in a relationship between same-sex couples.
- ❖ Their next step would be an amendment to the pension fund law to recognize same-sex couples as well.
- ❖ Private, adult, consensual, and non-commercial gay sex was decriminalized in Thailand in 1956 itself.
- ❖ Bangkok was named the second-most gay-friendly city in Asia in 2017.
- ❖ Other Asian countries that legalized same-sex marriages were Taiwan and Nepal.

8th wonder of the world

- ❖ Angkor Wat, in the heart of Cambodia, has beaten Pompeii in Italy to become the eighth Wonder of the World.
- ❖ Eighth Wonder of the World is an unofficial title given to new buildings or projects or designs, among others.

- ❖ Built in the 12th century by King Suryavarman II, Angkor Wat was originally dedicated to the Hindu deity Vishnu.
- ❖ However, overtime, it was transformed into a Buddhist temple.
- ❖ The transition from Hinduism to Buddhism is evident in the intricate carvings that adorn the temple walls, depicting scenes from Hindu and Buddhist mythology.



World's Largest Single-Site Solar Power Plant

- ❖ The United Arab Emirates has inaugurated the world's largest single-site solar power plant.
- ❖ The 2-gigawatt Al Dhafra Solar Photovoltaic Independent Power Project (IPP) is located 35 kilometers from Abu Dhabi city.
- ❖ It will generate enough electricity to power almost 200,000 homes.
- ❖ The plant is expected to displace 2.4 million tonnes of carbon emissions annually.



World's first 'Near-space command'



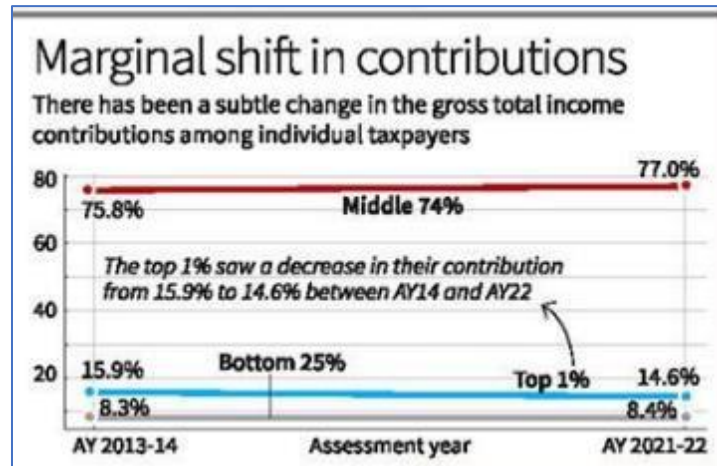
- ❖ China has reportedly built the world's first 'near-space command' equipped with deadly hypersonic weapons.
- ❖ The new force will now act as the People's Liberation Army's fifth force.
- ❖ The four current branches—Army, Navy, Air Force and Rocket Force.
- ❖ China's near-space command will be equipped with modern hypersonic missiles to target critical military assets of enemies.

ECONOMY

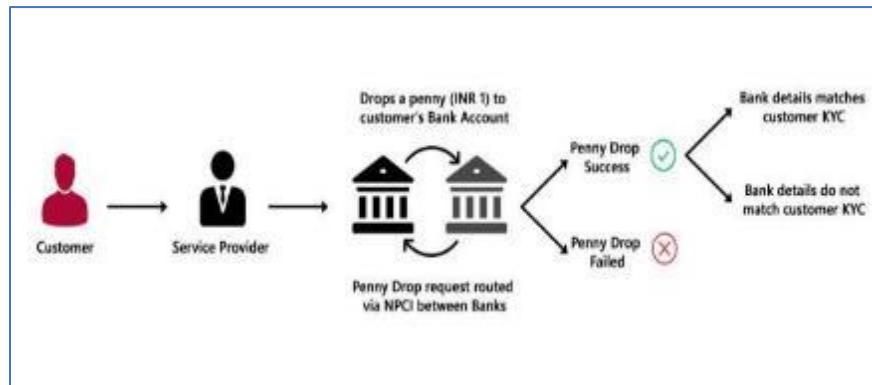
Shifting Trends and Income Inequality

- ❖ The Income tax return statistics for the assessment years 2019-20 to 2021-22 released by the Income Tax Department.
- ❖ During the financial year 2020-21, a total of 6.75 crore taxpayers filed their income tax returns.
- ❖ It is marking a 5.6 percent increase from the previous year's 6.39 crore filings.
- ❖ Additionally, around 2.1 crore taxpayers paid taxes but did not file returns, indicating a persistent issue.
- ❖ The total number of taxpayers has shown a consistent increase, rising from 5.87 crore in AY 2018-19 to 6.75 crore in AY 2021-22.
- ❖ The top 1 percent of income tax payers went from earning 17 percent of all income in 2013-14 to 23 percent in 2021-22.

- ❖ The income growth of the ultra-rich outpaced that of the middle class.
- ❖ The top 1 percent are seeing their income grow 60 percent faster than the lowest 25 percent of taxpayers.
- ❖ Around 7.41 crore returns were filed for AY 2023-24, including 53 lakh first-time filers.



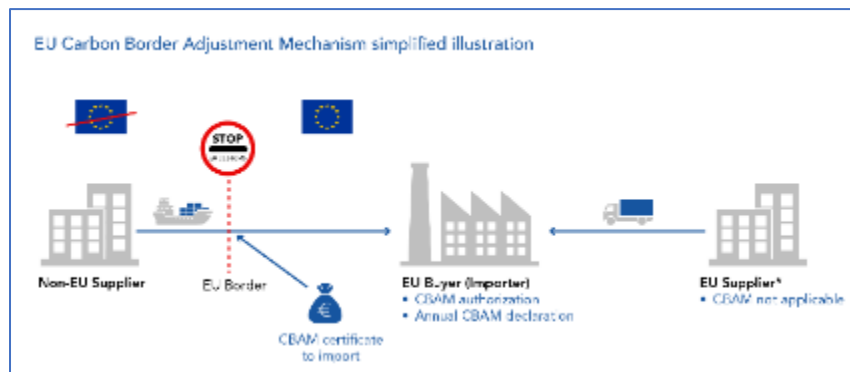
‘Penny drop’ verification



- ❖ The Pension Fund Regulatory and Development Authority (PFRDA) has made ‘penny drop’ verification.
- ❖ It is mandatory for the withdrawal of funds by subscribers of the National Pension System (NPS) for the timely transfer of money.
- ❖ Through the ‘penny drop’ process, Central Recordkeeping Agencies (CRA) check the active status of the savings bank account.
- ❖ It matches the name in the bank account number with the name in the PRAN (Permanent Retirement Account Number), or according to the documents submitted.

Carbon Border Adjustment Mechanism

- ❖ The European Union’s proposed Carbon Tax on imports is an ‘ill-conceived’ move that would become the “death knell” for its manufacturing sector.
- ❖ It Initially covers iron and steel, cement, aluminium, fertilisers, and electric energy production
- ❖ India would counteract it by imposing its own carbon tax.
- ❖ India is considering a strategy to impose domestic taxes on high-carbon goods and utilize the generated revenue to facilitate its transition towards green energy.
- ❖ This approach aims to circumvent the European Union’s carbon tax on imports.



India finance report 2023

Key Takeaways

Due to increased regulations and net owned funds criteria, there were 3110 cancellations compared with 685 registrations of NBFCs in past 8 years

Overall CRAR (capital to total assets ratio) for NBFCs is 27.6% compared with stipulated 15%

Gross NPA ratio was 5.8% and net NPA ratio was 2.3% in FY 2022

53% of total loans are disbursed by NBFCs through digital mode vis-à-vis 6% in case of Banks

Top 5 sectors for NBFCs in respect of credit are **Industry, retail loans, other non-food credit, services and agriculture**

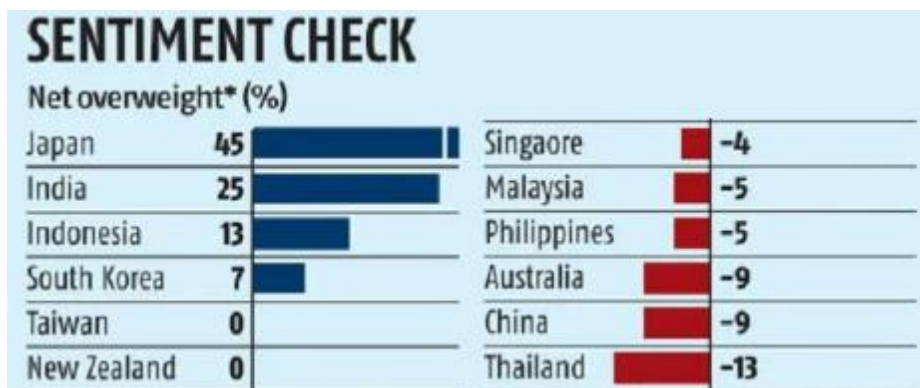
- ❖ The first edition of the India Finance Report was published by the Centre for Advanced Financial Research and Learning (CAFRAL), an independent body set up by the RBI.

- ❖ The report points out that there are 9,666 non-banking financial institutions (NBFIs), classified into different categories.
- ❖ The phase from 2013 to 2018, was high growth, with NBFCs' credit-GDP ratio increasing from 8.6 percent to 11.5 percent.
- ❖ The credit-GDP ratio of banks declined from 59.1 percent to 51.2 percent in the same period.
- ❖ In 2022-23, NBFCs witnessed a notable improvement with the CRAR rising to 27.6 per cent from 22.9 per cent in 2019-2020.
- ❖ Similarly, gross and net non-performing asset (NPA) ratios continue trending downwards.
- ❖ The RBI has discouraged deposit-taking NBFCs and their number has declined from 784 in 2002 to 49 now.

India Microfinance Review FY 2022-23

- ❖ The report is the third edition of Micro Matters: Macro View, a report conceived in 2021 to provide a holistic view of the sector.
- ❖ India could hold its ground and grow by 7% in 2022-23.
- ❖ The share of micro under MSME credit by Scheduled commercial banks has risen to 17.9% by March 2023.
- ❖ Insurance penetration is now 4.2% of GDP and bank account ownership is now ubiquitous with no gender gap.
- ❖ Microfinance sector (NBFC-MFIs, Banks, SFBs and NBFC) added 87 lakh new women clients during 22-23.
- ❖ Its credit outstanding reaching 3.48 lakh crore across 729 districts to 6.64 crore low-income women clients.

BofA survey





- ❖ The fund manager survey (FMS) was conducted by Bank of America (BofA).
- ❖ Japan and India are the most favoured markets in the Asia Pacific region.
- ❖ While Thailand (net 13 per cent underweight), China, and Australia (net 9 per cent underweight, each) remain unloved.

IPEF Clean and Fair Economy Agreement

- ❖ Indo-Pacific Economic Framework for Prosperity (IPEF) Ministerial Meeting was held in San Francisco.
- ❖ The IPEF member countries, including India and the US, have concluded negotiations on the clean and fair economy agreement.
- ❖ They aim to strengthen the implementation of effective anti-corruption and tax measures and promote sustainable trade.
- ❖ IPEF was launched jointly by the US and other partner countries of the Indo-Pacific region in 2022.

SCIENCE AND TECHNOLOGY

CAIPEEX phase-4

- ❖ The experiment — Cloud Aerosol Interaction and Precipitation Enhancement Experiment (CAIPEEX phase-4) — was a scientific investigation conducted in Solapur city.
- ❖ The primary objective was to investigate the efficacy of hygroscopic seeding in deep convective clouds and to develop a cloud seeding protocol.
- ❖ The study found that cloud seeding is an effective strategy for enhancing rainfall in a region under suitable conditions.
- ❖ The seeded clouds produced more rainfall than the unseeded clouds.
- ❖ It can help produce 18% more rainfall and partially address water requirements.
- ❖ Calcium chloride flare was used for seeding the clouds.
- ❖ The approximate cost of producing water through cloud seeding was 18 paise per litre.

Cloud seeding works if done correctly

Cloud seeding experiments were carried out in Solapur city, which gets less rainfall, from June to September in 2018 and 2019

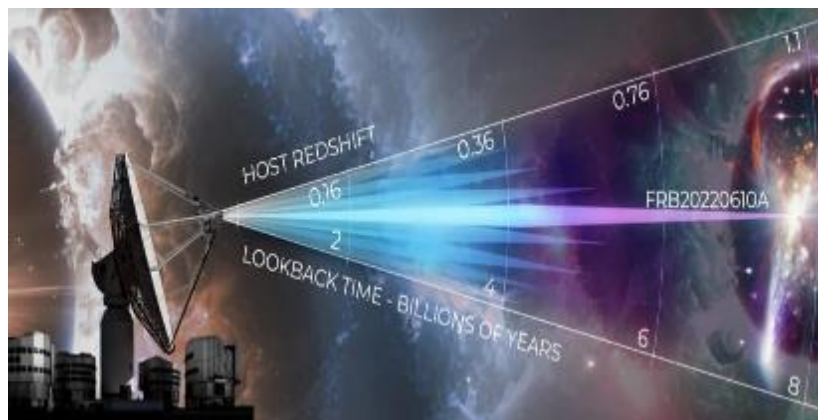
- There was 18% increase in rainfall over a 100 sq.km area in Solapur city due to cloud seeding
- Approximate cost of producing water through cloud seeding was 18 paise per litre. The cost can drop by over 50% if indigenous seeding aircraft are used
- 20-25% of cumulus clouds produce rainfall if cloud seeding is done correctly
- Cloud seeding alone cannot mitigate droughts but can help produce additional rainfall that can partially address water requirements

Not all:
As microphysics of clouds vary widely, not all clouds produce rainfall through cloud seeding

- Calcium chloride flare was used for seeding the clouds. The seeding was done at the base of the warm convective clouds and at a time when the clouds were growing
- The study was carried out for two years to understand the microphysics and characteristics of convective clouds that can be targeted to enhance rainfall
- The work provides elaborate protocols and technical guidance to plan and conduct cloud seeding in India



FRB 20220610A



- ❖ Astronomers have detected a mysterious blast of radio waves that have taken 8 billion years to reach Earth.
- ❖ The fast radio burst is one of the most distant and energetic ever observed.
- ❖ The burst, named FRB 20220610A, lasted less than a millisecond.
- ❖ But in that fraction of a moment, it released the equivalent of our sun's energetic emissions over the course of 30 years.
- ❖ Fast radio bursts, or FRBs, are intense, millisecond-long bursts of radio waves with unknown origins.
- ❖ The first FRB was discovered in 2007.

INFUSE Mission

- ❖ NASA launched the Integral Field Ultraviolet Spectroscope Experiment (INFUSE) mission.
- ❖ This mission aims to study the Cygnus Loop, a supernova remnant located about 2,600 light years away from Earth.
- ❖ NASA believes the original blast happened 20,000 years ago.
- ❖ Since the event, matter has blown out at a speed of 930,000 mph (1.5 million kilometers).
- ❖ It is a rate of speed which enough to travel from Earth to the Moon in just minutes.
- ❖ It spanned three times the size of a full moon back in 2012 and is now thought to be 120 light-years across.



Breaking Newton's laws of motion

- ❖ Newton's third law of motion is one of the most well-known laws of physics, which states, "For every action, there is an equal and opposite reaction."
- ❖ But the biological swimmers such as sperm, this may not be the case.
- ❖ The human sperm and Chlamydomonas algae can swim by deforming their bodies in a way that does not elicit a response from their surroundings.
- ❖ Both sperm cells and Chlamydomonas algae employ hair-like appendages known as flagella to facilitate movement.
- ❖ They go against Newton's third law because they don't trigger an equal and opposite reaction from their environment.



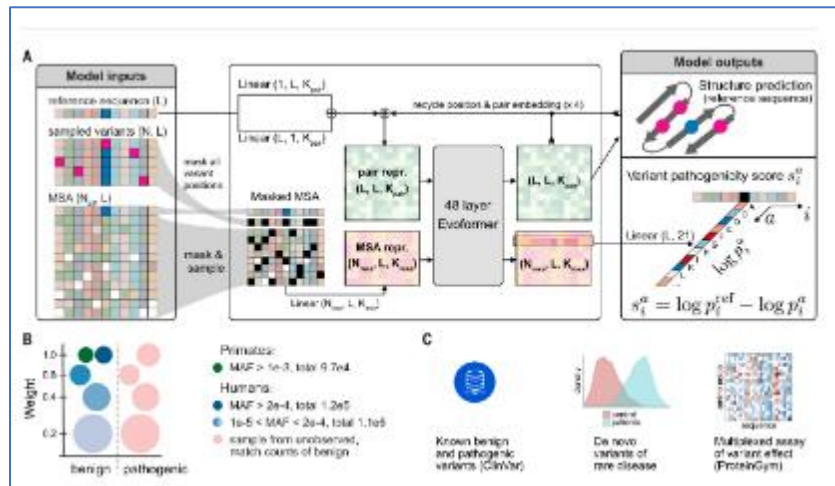
Subsurface Water Ice Mapping project



- ❖ The NASA-funded Subsurface Water Ice Mapping (SWIM) project released its fourth and most recent map of where on Mars.
- ❖ This map will help mission planners decide where on Mars to actually send the first humans to traverse the planet.
- ❖ The recently released fourth set of maps is the most detailed and accurate since the project started in 2017.
- ❖ The new map includes sightings of so-called “polygon terrain.”
- ❖ There are the seasonal expansion and contraction of subsurface ice causes the ground to form polygonal cracks, indicating more ice hidden beneath the surface.

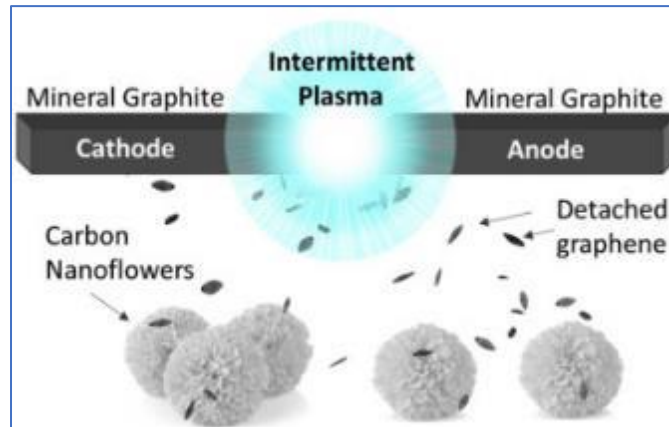
DeepMind's AlphaMissense

- ❖ Scientists at Google DeepMind have developed an AI program called AlphaMissense.
- ❖ It can predict the potential harm or harmlessness of genetic mutations, particularly missense mutations that involve single-letter changes in the DNA code.
- ❖ These mutations can lead to disorders such as cystic fibrosis, cancer, and brain development issues.
- ❖ AlphaMissense assessed 71 million single-letter mutations in human proteins.
- ❖ It achieved a 90% precision rate, categorizing 57% as likely harmless and 32% as potentially harmful, leaving some uncertainty.

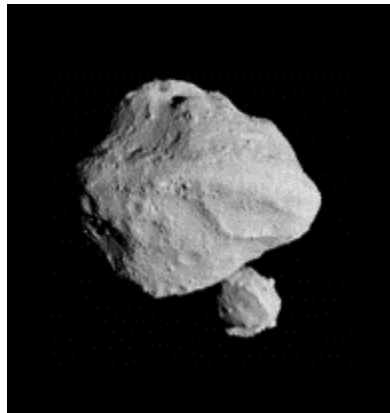


Carbon nanoflorets

- ❖ Indian Institute of Technology (IIT) Bombay have created carbon nanoflorets that can efficiently convert sunlight into heat.
- ❖ Carbon nanoflorets are a unique nanostructure composed of carbon atoms arranged in a distinctive floret-like morphology.
- ❖ These nanoflorets can absorb light at multiple frequencies, including infrared, visible light, and ultraviolet, making them highly efficient at converting sunlight into thermal energy.
- ❖ Additionally, their unique shape ensures minimal light reflection and efficient heat retention.
- ❖ It can provide ecologically sustainable heating and has potential uses in various sectors, including construction and healthcare.



Asteroid 'Dinkinesh' / Lucy spacecraft

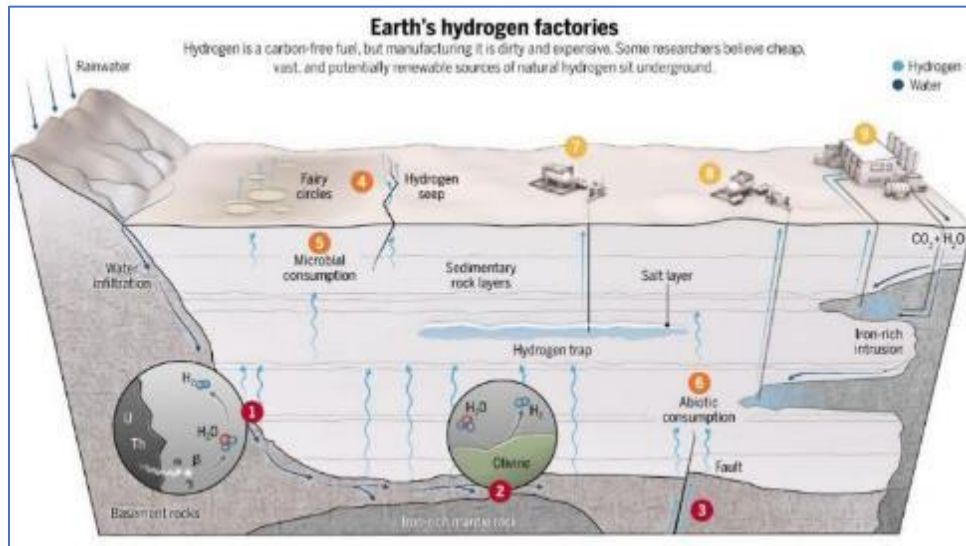


- ❖ The Lucy spacecraft, launched in 2021 successfully completed a flyby of the small asteroid Dinkinesh.
- ❖ It discovered it is not one single asteroid, but a system of two, with a small 220m-wide satellite spinning around it.
- ❖ Dinkinesh is barely a half-mile (790 meters) across.
- ❖ Its closely circling moon is a mere one-tenth-of-a-mile (220 metres) in size.
- ❖ The mission's main targets are a group of eight asteroids known as the Trojans.
- ❖ The spacecraft will reach the first of these so-called Trojan asteroids in 2027 and explore them for at least six years.
- ❖ The original target list of seven asteroids now stands at 11.

White Hydrogen

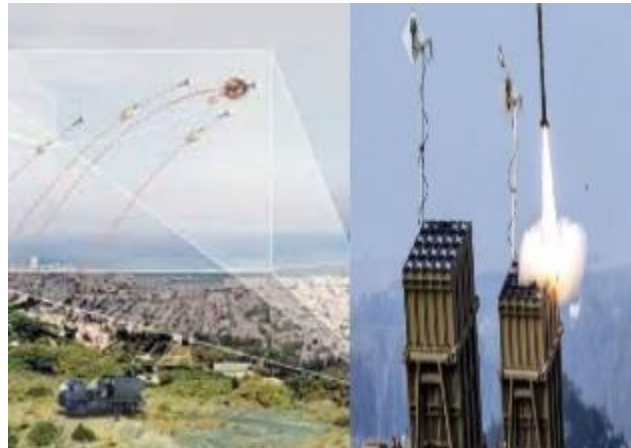
- ❖ White hydrogen, also known as "natural," "gold," or "geologic" hydrogen, is a naturally occurring form of hydrogen found in the Earth's crust.

- ❖ Until recently, significant quantities of hydrogen gas in its pure form were not thought to be present within the earth.
- ❖ But the recent findings indicated a vast reservoir of hydrogen, potentially one of the largest deposits of white hydrogen ever discovered.
- ❖ They estimated the deposit could contain between 6 million and 250 million metric tons of hydrogen.
- ❖ White hydrogen Causes no CO₂ emissions when used as a fuel.



Project Kusha

- ❖ India's own long-range air defence system, titled 'Project Kusha', is being developed by the Defence Research and Development Organisation (DRDO).
- ❖ It will be capable of detecting and destroying enemy projectiles and armour, including cruise missiles, stealth fighter jets, and drones at long range.
- ❖ The ambitious project is believed to not only perform better than Israel's Iron Dome system, but also rival the effectiveness of Russia's S-400 system and the 'Patriot' system of the United States.
- ❖ The indigenous long-range surface-to-air defence system (LR-SAM) includes long-range surveillance and fire control radars, along with interceptor missiles.
- ❖ These missiles can detect and strike hostile targets at the ranges of 150 km, 200 km, and 350 km.
- ❖ It will also be effective in providing strategic and tactical cover.
- ❖ The system reportedly has a single-shot kill chance of at least 80% and over 90% when two missiles are fired after each other.



Pralay Tactical Ballistic Missile

- ❖ India successfully test fired 'Pralay', short-range tactical ballistic missile (TBM).
- ❖ The missile was developed by the Defense Research and Development Organisation.
- ❖ Pralay is a surface-to-surface TBM with a range of 350-500 kilometres and with a payload capacity of 500 to 1,000 kilograms.
- ❖ This missile is specifically designed for deployment along the Line of Actual Control opposite China.
- ❖ It flies lower than a ballistic trajectory and maintains high speed throughout the flight.
- ❖ The missile comes in a canisterised configuration.

PRALAY: Surface-to-Surface Missile

Pralay is a canisterised tactical, surface-to-surface, and short-range ballistic missile for battlefield use developed by the Defence Research and Development Organisation of India

It has the capability to defeat interceptor missiles

ENGINE: Two stage rocket motor with third stage MaRV

SPEED: Mach 1 to 1.6

RANGE: 150-500 km

TRAJECTORY: low

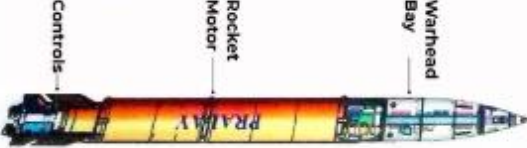
GUIDANCE SYSTEM: Inertial navigation system

LAUNCH PLATFORM: 8x8 BEML-Tatra transporter erector launcher

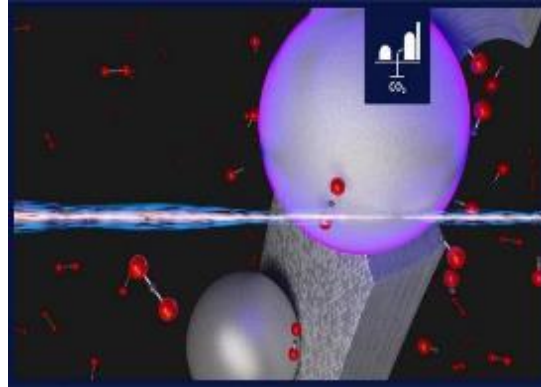
MASS: 5 tonnes (4.9 long tons; 5.5 short tons)

OPERATIONAL RANGE: 150-500 km (93-311 mi)

Controls Rocket Motor Warhead Bay



CO₂ to CO Conversion



- ❖ Researchers demonstrated a room-temperature method that could significantly reduce carbon dioxide levels in fossil-fuel power plant exhaust.
- ❖ In this reaction, solid carbon latches onto one of the oxygen atoms in carbon dioxide gas, reducing it to carbon monoxide.
- ❖ The conversion normally requires significant amounts of energy in the form of high heat — a temperature of at least 700 degrees Celsius.
- ❖ Instead of heat, the team relied on the energy harvested from traveling waves of electrons, known as localized surface plasmons (LSPs), which surf on individual aluminium nanoparticles.

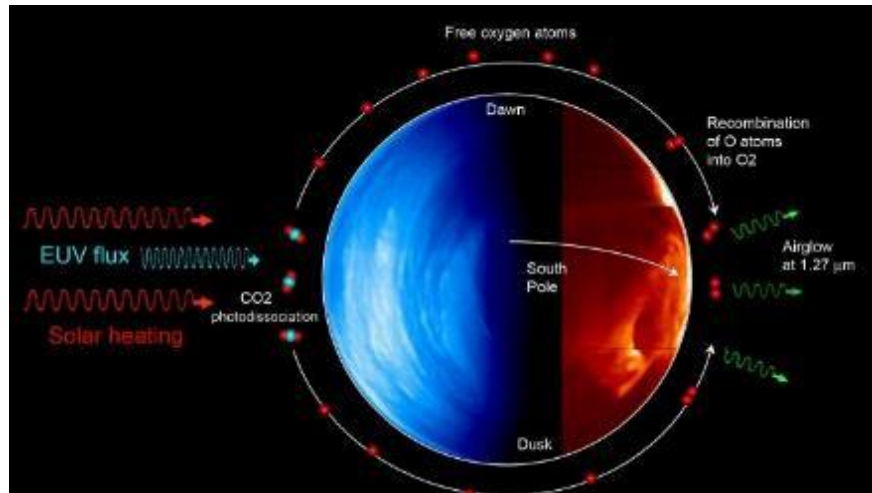
High energy X-ray glimpse of solar flares



- ❖ India's solar mission spacecraft, Aditya-L1 captured the first high-energy X-ray glimpse of solar flares.
- ❖ The High Energy L1 Orbiting X-ray Spectrometer (HEL1OS) on board Aditya-L1 spacecraft has recorded the impulsive phase of solar flares.
- ❖ The instrument is set to monitor the Sun's high-energy X-ray activity with fast timing and high-resolution spectra.

- ❖ A solar flare is a sudden brightening of the solar atmosphere.
- ❖ Flares produce enhanced emission in all wavelengths across the electromagnetic spectrum – radio, optical, UV, soft X-rays, hard X-rays and gamma-rays.

Venus's Atmospheric Composition

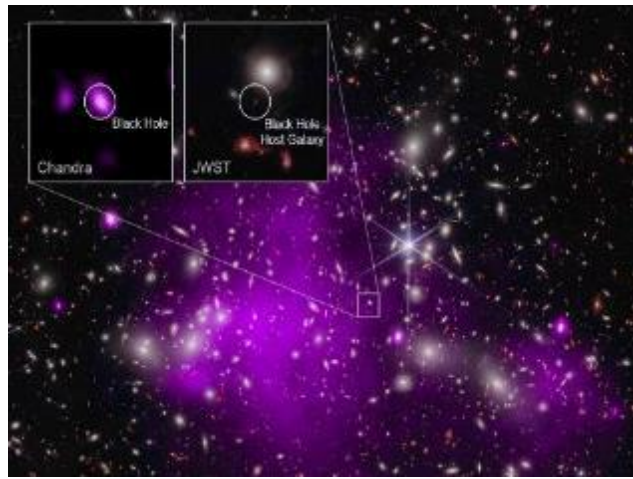


- ❖ Scientists have detected atomic oxygen in the atmosphere of Venus, Earth's neighbouring planet.
- ❖ The detection was made using an instrument aboard the SOFIA airborne observatory.
- ❖ Unlike Earth, Venus has a thick and noxious atmosphere dominated by carbon dioxide (96.5%).
- ❖ The detected atomic oxygen, consisting of a single oxygen atom, differs from molecular oxygen, which consists of two oxygen atoms and is breathable.
- ❖ The oxygen was found concentrated between two layers of the Venusian atmosphere, at an altitude about 60 miles (100 km) above the surface.
- ❖ The temperature of the oxygen ranged from about minus 184 degrees Fahrenheit (- 120 degrees Celsius) on the planet's day side to minus 256 degrees Fahrenheit (- 160 degrees Celsius) on its night side.

Oldest Black Hole

- ❖ Scientists have discovered the oldest black hole yet.
- ❖ The huge object formed about 470 million years after the Big Bang.
- ❖ If the universe is 13.7 billion years old, the age of this black hole would be 13.2 billion years.

- ❖ This oldest black hole is extremely massive — 10 times bigger than the black hole in our own Milky Way galaxy.



Rare Red Aurora – Ladakh

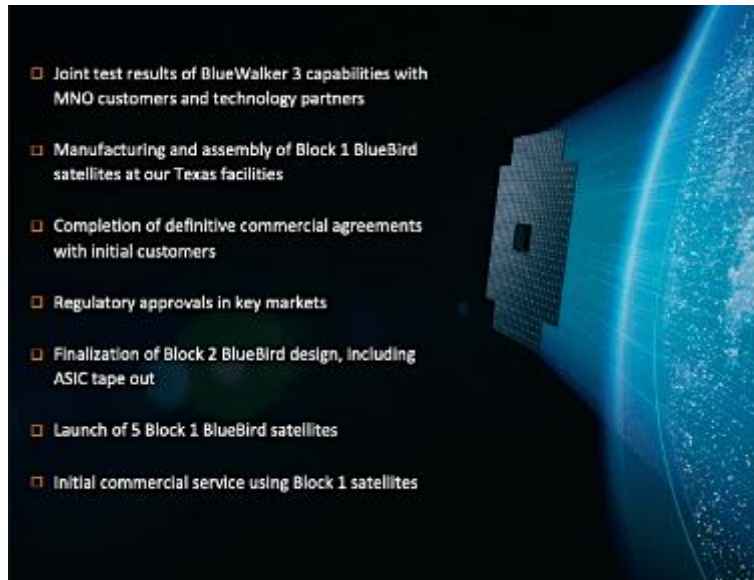
- ❖ The Hanle and Merak observatories in Ladakh spotted a phenomenon uncommon in India, an intense red aurora.
- ❖ Auroras are patterns of bright lights in the sky that are seen when particles ejected by the Sun interact with the magnetic field around the Earth.
- ❖ The phenomenon is usually visible closer to the poles.
- ❖ This is the second aurora event captured by the Hanle observatory this year.



Blue Walker satellite

- ❖ Blue Walker 3 was a test satellite launched on September 10, 2022.
- ❖ It is as bright as the brightest stars in the 89 constellations of Canis Minor and Eridanus.

- ❖ Blue Walker 3 is 693 square feet in size.
- ❖ It uses its large phased-array antenna to generate power from space and deliver cellular broadband directly to mobile phones.
- ❖ Its brightness makes it hard for astronomers using ground-based telescopes to peer into the night sky.



PET46 enzyme

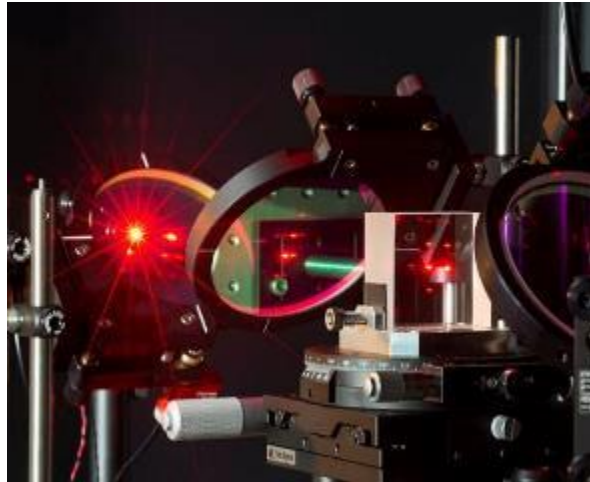


- ❖ The research team has identified and biochemically described the PET-degrading enzyme PET46 from a deep-sea microorganism for the first time.
- ❖ Polyethylene terephthalate (PET) is a common type of plastic used to make bottles, containers, and synthetic fibres.
- ❖ PET46 has many unusual properties and adds to the scaffold diversity of PET-active enzymes.

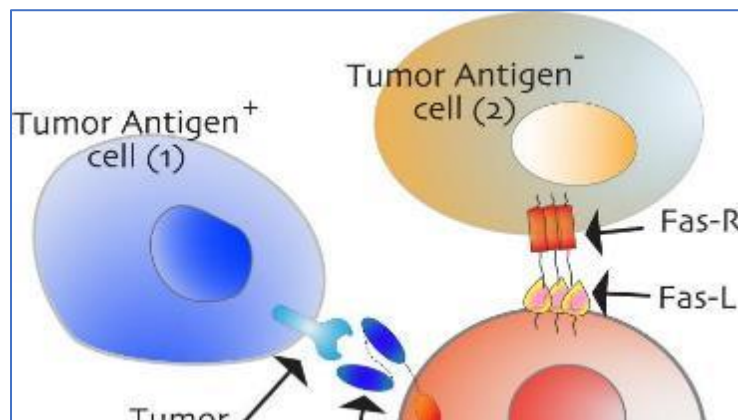
- ❖ It has the ability to degrade both very long-chain PET molecules, known as polymers, and short-chain PET molecules, known as oligomers, which means that degradation can be continuous.

Vulcan 20-20 Project

- ❖ The UK is set to build the world's most powerful laser, which is said to be a "million, billion, billion" times brighter than the sun.
- ❖ The device known as the Vulcan 20-20, is being built at the Science and Technology Facilities Council, England.
- ❖ It will generate a main laser beam with an energy output of 20 Petawatts (PW) alongside eight high-energy beams with an output of up to 20 Kilojoules (KJ).



'Kill Switch' for Cancer Cells

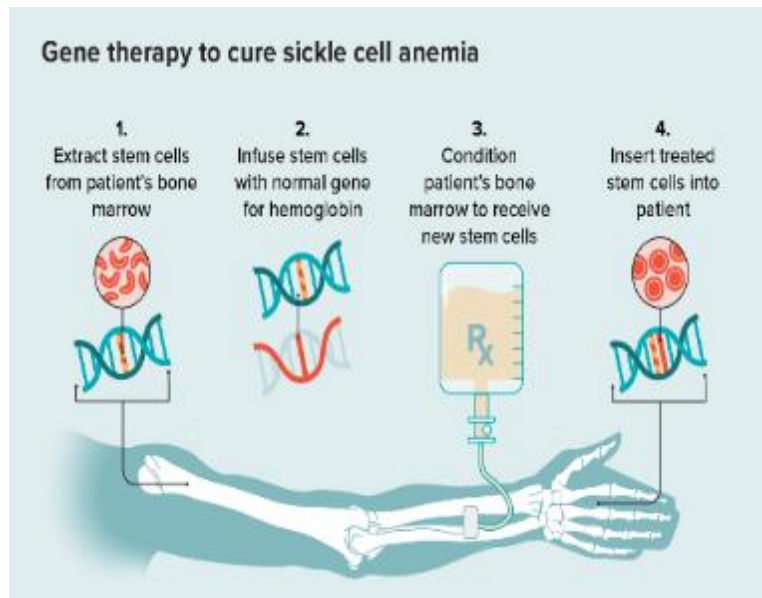


- ❖ The Scientists have reportedly discovered a 'kill switch' that triggers the death of cancer cells.
- ❖ They identified a protein on a receptor that can be designed to kill cancer cells.

- ❖ CD95 receptors, also known as Fas, are called death receptors.
- ❖ These protein receptors reside on cell membranes.
- ❖ When activated, they release a signal that causes the cells to self-destruct.
- ❖ As of now, the therapy has shown promising efficacy against liquid cancer, leukaemia and other blood cancers.

Gene therapy for Sickle cell Disease

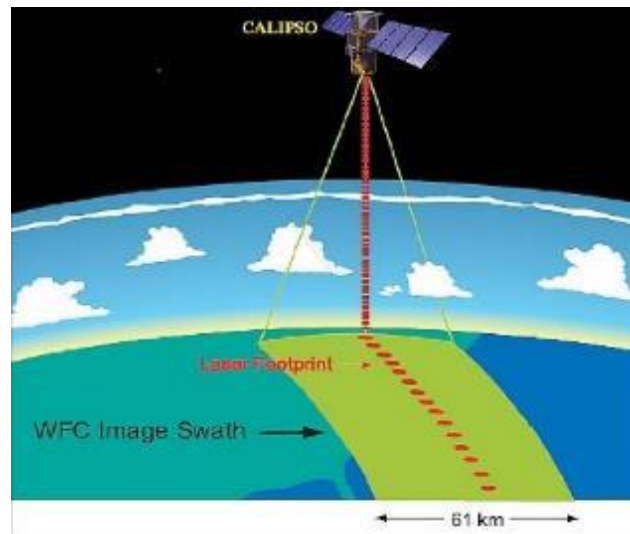
- ❖ The United Kingdom has approved the world's first gene therapy treatment for sickle cell disease and thalassemia.
- ❖ It approved Casgevy for patients with sickle cell disease and thalassemia who are 12 years old and over.
- ❖ Casgevy is made by Vertex Pharmaceuticals (Europe) Ltd. and CRISPR Therapeutics.
- ❖ Both sickle cell disease and thalassemia are caused by errors in the genes that carry haemoglobin, the protein in red blood cells that carry oxygen.



CALIPSO Science Mission

- ❖ The CALIPSO mission that analysed climate, weather, and air quality ended its work recently.
- ❖ The CALIPSO (Cloud-Aerosol Lidar and Infrared Pathfinder Satellite Observation) mission recorded more than 10 billion LIDAR measurements.
- ❖ It helped create thousands of scientific reports over its 17 years of operation.

- ❖ It was launched jointly by NASA and France’s CNES along with the cloud-profiling radar system on the CloudSat satellite.



Jupiter-sized objects in Orion Nebula

- ❖ Scientists of European Space Agency (ESA) have discovered free-floating objects the size of Jupiter in the Orion Nebula, the nearest star-forming region to Earth.
- ❖ These objects are termed “Jupiter-mass binary objects” or “Jumbos.”
- ❖ They do not fit the conventional definitions of stars or planets as they are not in orbit around a parent star.
- ❖ The discovery challenges existing theories of star and planetary formation.
- ❖ Jumbos exhibit planet-like characteristics in their composition, with atmospheres containing steam and methane.
- ❖ Despite their composition, they do not qualify as planets due to their free-floating nature.
- ❖ The Orion nebula is approximately 1,344 light-years away from Earth



Perseverance Speed Record



- ❖ NASA's Perseverance rover used its smart navigation system to safely pass through a tricky part of the Martian terrain setting a new record.
- ❖ Perseverance ventured into the boulder-filled area is known as "Snowdrift Peak" from the eastern side.
- ❖ The AutoNav holds the single-day drive distance record of 1,140.7 feet (347.7 meters).
- ❖ Moreover, it claims the record for the longest Martian navigation without human assistance, covering 2,296.2 feet (699.9 meters).

Melting Moon Dust



- ❖ Lunar dust is composed of volcanic rock and dark Gray in colour.
- ❖ It poses hazards to space exploration due to its sharp-edged particles and adhesive properties.
- ❖ By harnessing concentrated sunlight through large lenses, researchers successfully melted lunar dust into solid rock slabs, creating tiles.

- ❖ These tiles could interlock to create solid surfaces across extensive lunar soil areas for use in constructing roads and landing pads.

Igla-S anti-aircraft missiles



- ❖ Russia has signed a contract to supply the Igla-S hand-held anti-aircraft missiles to India and allow its production under licence.
- ❖ The Igla-S is a man-portable air defence system (MANPADS) that can be fired by an individual or crew to bring down an enemy aircraft.
- ❖ The hand-held defence system has a capability of bringing down low flying aircraft.
- ❖ It can also identify and neutralise air targets such as cruise missiles and drones.
- ❖ Russia accounted for 45% of India's arms imports between 2018 and 2022, with France providing 29% and the United States 11%.

IISR Chandra

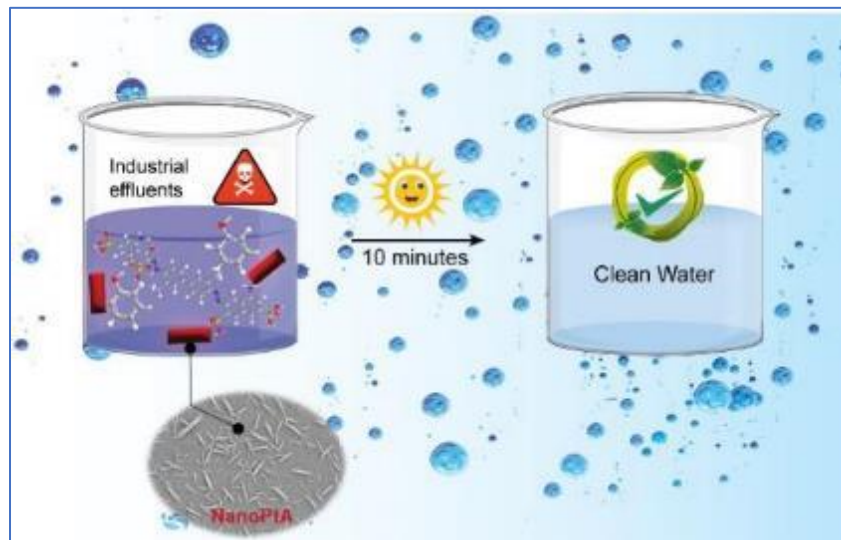


- ❖ The Indian Institute of Spices Research (IISR), Kozhikode, has successfully developed a new high-yielding variety of black pepper.
- ❖ The variety has named as 'IISR Chandra'.
- ❖ Two pepper varieties- Choramundi and Thommankodi - were crossed to produce a hybrid variety.

- ❖ It was again back-crossed with Thommankodi by ensuring the retention of all the desired parental traits.

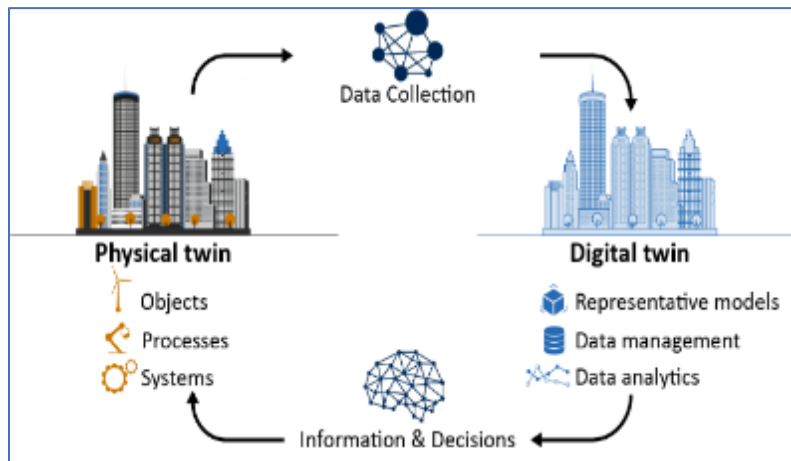
NanoPtA

- ❖ IISc Scientists have developed a new type of enzyme mimetic that can degrade toxic chemicals in industrial wastewater effectively in the presence of sunlight.
- ❖ The IISc team synthesised a platinum-containing nanozyme called NanoPtA, which can be converted into powder form for industrial use.
- ❖ The team found that the nanozyme could degrade even small (micromolar) quantities of common effluents like phenols and dyes within ten minutes when placed under sunlight.
- ❖ Also, the NanoPtA complex was quite stable, lasting for up to 75 days at room temperature.



Digital Twins

- ❖ The Survey of India has signed an agreement with a Mumbai-based company, Genesys International, to prepare three-dimensional maps of several cities and towns.
- ❖ This is known as 'Digital Twins,' and it is a first-of-its-kind initiative.
- ❖ These maps are three-dimensional representations of cities and when coupled with high-resolution images, can be used in a variety of planning applications.
- ❖ So far, the company has built digital twins of Ayodhya, the Dharavi slum cluster in Mumbai, Kochi and Kanpur among other applications.



“Sun goddess” cosmic ray

- ❖ Scientists have detected an extremely rare ultra-high-energy particle believed to have come from beyond the Milky Way.
- ❖ The particle has been nicknamed as 'Amaterasu' particle after the sun goddess in Japanese mythology.
- ❖ The Amaterasu particle has an energy exceeding 240 exa-electron volts (EeV).
- ❖ This is equal to millions of times more than particles produced in the Large Hadron Collider.
- ❖ It comes only second to the Oh-My-God particle, another ultra-high-energy cosmic ray that came in at 320 EeV, detected in 1991.
- ❖ Cosmic rays pose potential hazards to astronauts in space and high-altitude flights, as they can penetrate spacecraft and aircraft.
- ❖ Prolonged exposure to cosmic rays can lead to increased risks of cancer and other health issues.



25 years of the International Space Station



- ❖ November 20 marks the 25th anniversary of the launch of the International Space Station (ISS).
- ❖ This is the largest man-made object in the solar system launch on November 20, 1998.
- ❖ ISS has stood as a testament to the power of international cooperation and has played a pivotal role in advancing our understanding of space, microgravity, and fostering groundbreaking scientific research.
- ❖ ISS is a joint project involving space agencies from the United States (NASA), Russia (Roscosmos), Europe (ESA), Japan (JAXA), and Canada (CSA).
- ❖ In 2022, Russia announced that it will pull out of ISS after 2024 and focus on building its own orbiting outpost.
- ❖ It travels at 8 kilometers (5 miles) per second.

ENVIRONMENT

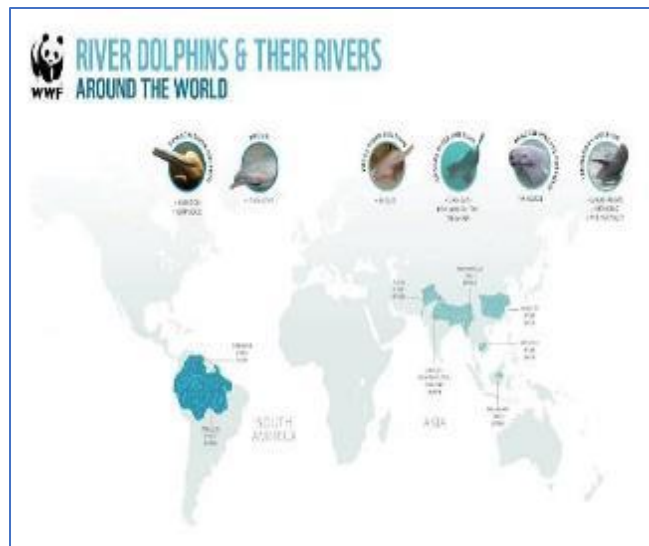
New Mushroom Species in Western Ghats

- ❖ A tiny, fragile-looking mushroom sporting a honey-yellow 'cap' was found at Palode, Kerala.
- ❖ The discovery also gives fresh impetus to the study of the region's fungal diversity.
- ❖ The new species, which is quite cute in appearance, has been named *Candolleomyces albosquamosus*.
- ❖ The Western Ghats region in Kerala is rich in fungi.
- ❖ Many of which could also be described as endemic to the region.



Global Declaration for River Dolphins

- ❖ 11 Asian and South American countries recently signed a global declaration, the "Global Declaration for River Dolphins."
- ❖ It is aimed at preserving the world's six remaining river dolphin species.
- ❖ This declaration is designed to guide 14 nations where river dolphins inhabit, with a focus on responsible freshwater dolphin conservation.
- ❖ It aims to halt the decline of all river dolphin species and increase the most vulnerable populations.
- ❖ A seventh river dolphin species, the Chinese river dolphin, or baiji, was declared extinct in 2007.



New species of gecko

- ❖ A new species of gecko has been discovered in the Western Ghats near Rajapalayam in Tamil Nadu.

- ❖ So far, 93 species of gecko have been documented and this is the 94th species.
- ❖ The new species is also called Rashid's dwarf gecko as it is the smallest among the genus.
- ❖ The new species was found at an altitude of 1,245 metres at Kottamalai estate near Rajapalayam.



Artificial Rains to Tackle Air Pollution

ARTIFICIAL RAIN COMETH!

WHAT IS ARTIFICIAL RAIN?
It is achieved by cloud seeding, a technology that alters weather to help induce rain in drought-affected areas or to clean air.

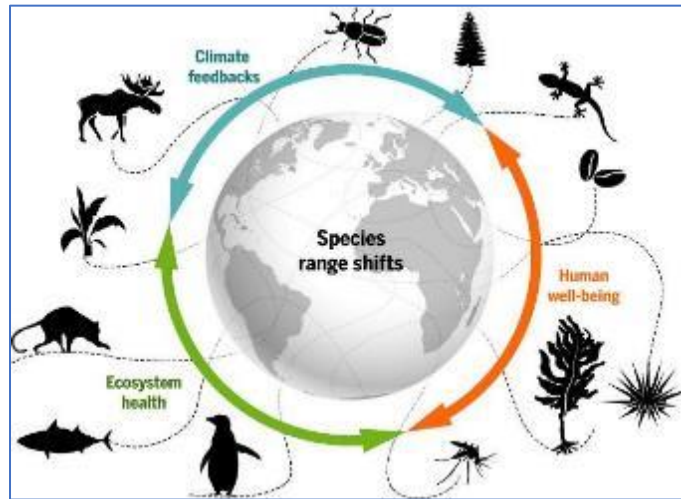
HOW IT WORKS
Rockets and aircraft are deployed to inject silver iodide or similar substance into the atmosphere to mimic ice particles

WHAT HAPPENS NEXT?
The process makes the cloud more efficient at generating ice crystals that either fall as snowflakes or melt to produce raindrops, depending on temperatures in and around the cloud. This technique is also used to disperse fog banks near airport.



- ❖ The government of National Capital Territory of Delhi announced its plans for artificial rain in the city to tackle the air pollution crisis.
- ❖ It aims to enhance rainfall and subsequently clear the air of pollutants, thereby reducing pollution levels in a particular area.
- ❖ This innovative approach, supported by a comprehensive plan submitted by Indian Institute of Technology-Kanpur.
- ❖ This is not the first time that a country has given cloud seeding a trial.
- ❖ Previously, China fired chemical rods into the sky to bring more rainfall to its dried-up parts.
- ❖ The United States, the United Arab Emirates, Russia, Saudi Arabia, South Africa, Thailand, and Mexico are just some of the countries developing the method.

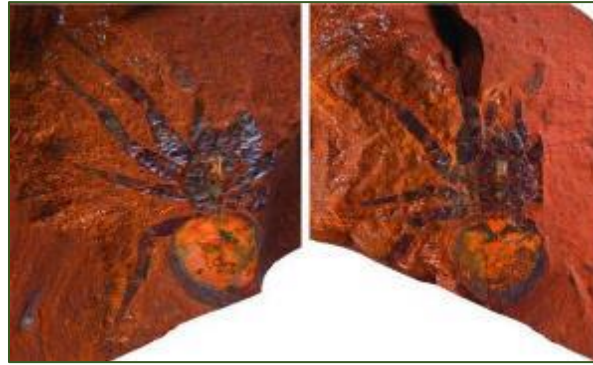
Climate Change Displacing Animals



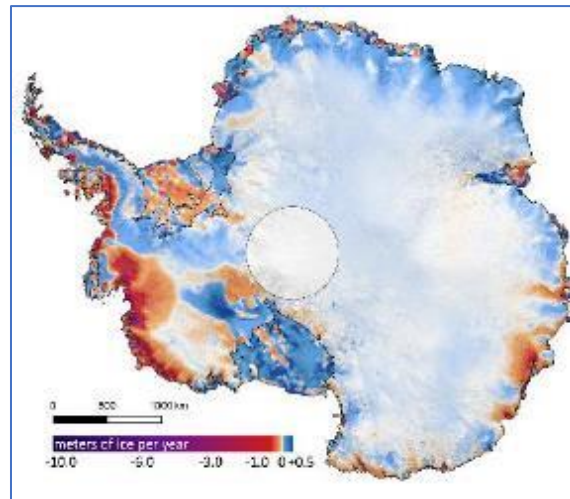
- ❖ A new analysis suggests that extreme weather linked to climate change might be much harder on native species than on nonnative ones.
- ❖ Non-native species tend to fare better than Native species under extreme weather events such as heat waves, cold spells, droughts, and floods.
- ❖ They can rapidly establish populations in new environments and thrive when native species are adversely affected.
- ❖ Native terrestrial animals were particularly vulnerable to heatwaves, cold spells, and droughts.
- ❖ Native freshwater animals proved susceptible to most extreme events, except cold spells.
- ❖ But the non-native terrestrial animals were primarily affected by heatwaves, and non-native freshwater animals mainly suffered from storms.

Megamonodontium mccluskyi

- ❖ Scientists have discovered the fossil of a large spider, named Megamonodontium mccluskyi, in Australia.
- ❖ This is one of the few spider fossils found in the country.
- ❖ And it is the world's first fossil of a spider from the Barychelidae family.
- ❖ The fossil provides insights into the extinction of spider species and fills gaps in understanding Australia's past.
- ❖ The spider is believed to have gone extinct as the continent became more arid.
- ❖ Megamonodontium mccluskyi measures 23.31 millimeters in body length.
- ❖ It is making it the second-largest spider fossil found globally.



Melting Ice and Heavier Snowfall: An Antarctic Paradox



- ❖ A new study has revealed that the reduction in sea ice in the continent is linked to heavier snowfall in the region.
- ❖ They found that ice-free ocean surface leads to more precipitation and snowfall in the region.
- ❖ But, the increased rate of snowfall was not enough to completely offset the impact of climate change and ice melting.
- ❖ This new trend can partially counteract the impact of melting ice, thus slowing down the increase in global sea levels.

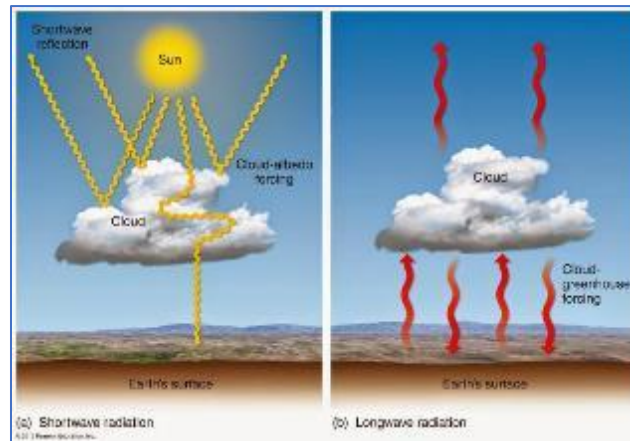
IQAir's AQI Data 2023

- ❖ This ranking was released by Swiss air purifier company, IQAir.
- ❖ Delhi was the most polluted city in the world with an air quality index (AQI) of 287.
- ❖ It is followed by Lahore, Pakistan, at 195.

- ❖ Mumbai, at 153, and Kolkata, 166, were also present among the top 10 of the most polluted cities.
- ❖ The IQAir's AQI measures data from 109 countries, and readings change hourly.
- ❖ Air pollution in parts of Delhi was 30 times the safe limits prescribed by the World Health Organisation (WHO).

	US AQI Level	PM2.5 (µg/m ³)	Health Recommendation (for 24 hour exposure)
	Good 0-50	0-12.0	Air quality is satisfactory and poses little or no risk.
	Moderate 51-100	12.1-35.4	Sensitive individuals should avoid outdoor activity as they may experience respiratory symptoms.
	Unhealthy for Sensitive Groups 101-150	35.5-55.4	General public and sensitive individuals in particular are at risk to experience irritation and respiratory problems.
	Unhealthy 151-200	55.5-150.4	Increased likelihood of adverse effects and aggravation to the heart and lungs among general public.
	Very Unhealthy 201-300	150.5-250.4	General public will be noticeably affected. Sensitive groups should restrict outdoor activities.
	Hazardous 301+	250.5+	General public at high risk of experiencing strong irritations and adverse health effects. Should avoid outdoor activities.

Marine cloud brightening



- ❖ The “marine cloud brightening” is being seriously considered as a way to shield parts of the ocean from extreme heat.
- ❖ Water cannons are used to spray seawater into the sky.
- ❖ This causes brighter, whiter clouds to form.
- ❖ These low marine clouds reflect sunlight away from the ocean's surface, protecting the marine life below from the worst of climate change.

- ❖ Modelling studies are encouraging and suggest it could delay the expected decline in coral cover.
- ❖ British cloud physicist John Latham originally proposed cloud brightening in 1990 as a way to control global warming by altering Earth's energy balance.

New Species of Seer Fish



- ❖ Scientists have discovered two new species of seer fish in Indian waters.
- ❖ One of the newly discovered species, previously unknown to science, has been named the Arabian Sparrow Seer Fish (*Scomberomorus avirostrus*).
- ❖ The second achievement of the team was the successful reestablishment of the Russell's Spotted Seer Fish (*Scomberomorus leopardus*) as a distinct species.
- ❖ Earlier, it was believed to be similar to the Spotted Seer Fish.
- ❖ Seer fishes are of considerable commercial importance, and this discovery is seen as a major breakthrough in the field of marine fisheries.

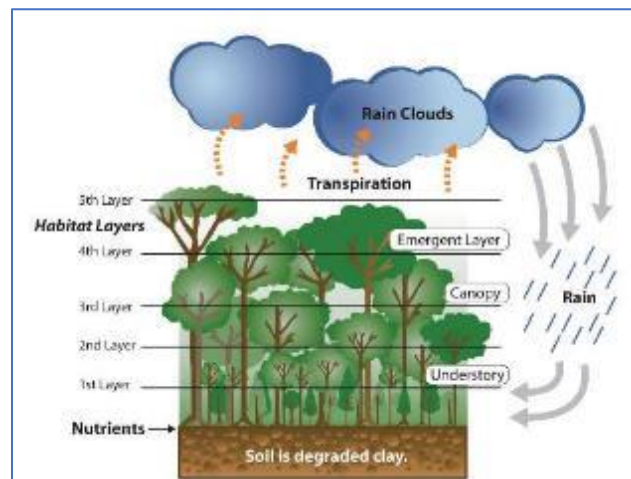
World's first sperm whale reserve

- ❖ The Caribbean Island of Dominica is creating the world's first marine protected area for one of Earth's largest animals: the endangered sperm whale.
- ❖ Nearly 300 sq miles (800 sq km) of royal blue waters on the western side of the island nation will be designated as a reserve.
- ❖ Fewer than 500 sperm whales are estimated to live in the waters surrounding Dominica.
- ❖ Sperm whales can produce a single calf every five to seven years.
- ❖ In the pre-whaling days, an estimated 2 million sperm whales roamed the Earth's deep waters but now, some 800,000 are left.



High Rainfall: A Lifesaver for Equatorial Rainforests

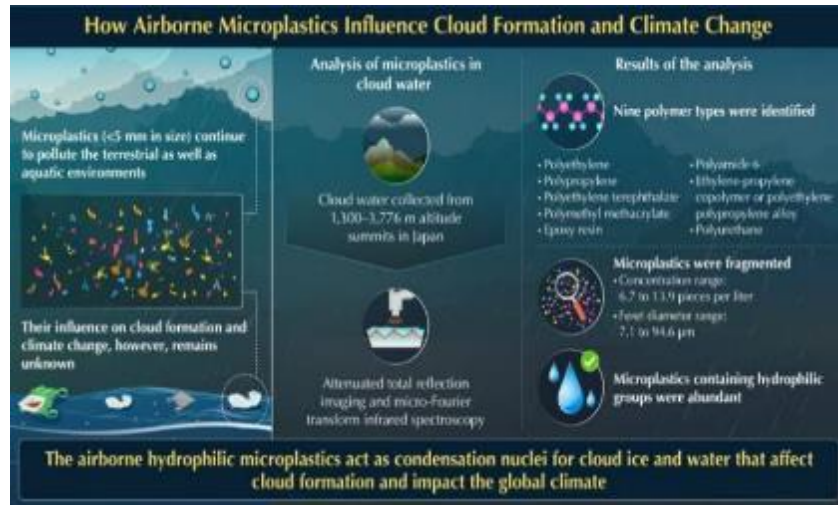
- ❖ High rainfall helped the survival of equatorial rainforests at a time when Earth was globally warm, around 50 million years ago.
- ❖ The Earth was around 13°C warmer than present and carbon dioxide concentration was more than 1000 ppmv during this time.
- ❖ The existing paleoclimate data of mid and high latitudes suggest the large fluctuations in rainfall at around 50 million years ago.
- ❖ The mechanism in which biota survives adverse conditions is still poorly known.



Microplastics in Clouds

- ❖ Recent studies have shown not only Microplastics are in oceans but also the rain, snow, and even clouds.
- ❖ The low-altitude and denser clouds had more amount of microplastics.

- ❖ They include polyethylene terephthalate (otherwise known as PET), polypropylene, polyethylene and polystyrene.
- ❖ All these particles commonly found in synthetic fibres, clothing and textiles, as well as packaging and face masks.
- ❖ Microplastics in clouds may affect the weather and climates of the region.
- ❖ Microplastics have been defined as tiny chunks of less than five millimetres long pieces of plastic.



Swiss Glaciers Lose 10 per cent Volume

- ❖ Glaciers in Switzerland are shrinking, have lost a total of ten per cent of their ice volume over a period of two years.
- ❖ This level of melting is second only to the record set in 2022 when six per cent of glaciers were destroyed.
- ❖ These glaciers have lost as much ice over this two-year period as was lost over the three decades between 1960 and 1990.



Kadalundi mudflat shrink

- ❖ Kadalundi, on the south-west coast in Kerala, had about 8 hectares of nutrient-rich inter-tidal mudflats in the early 2000s.
- ❖ Now, the expanse of mudflats in the estuary of the Kadalundipuzha river has reduced to just about 1 hectare.
- ❖ This too is gradually being covered with sand, depriving prey to thousands of shorebirds that migrate from colder climes in winter to Kadalundi village in Kozhikode district.
- ❖ Kadalundi is in the global map as a prominent destination of migrant shorebirds.



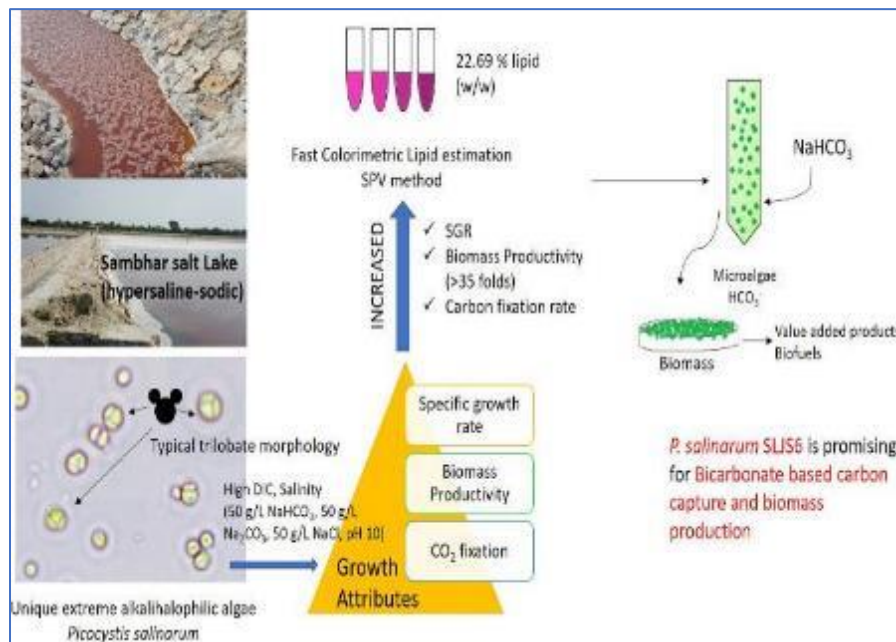
Mont Blanc

- ❖ Mont Blanc, the tallest mountain in France, has shrunk in the last two years.
- ❖ The mountain's peak has been measured at 4,805.59 metres, which is 2.22 metres shorter than in 2021.



- ❖ Mont Blanc is measured by climate scientists every two years to track the impact of climate change on the Alps.
- ❖ In 2021, the height of the summit was recorded at 4,807.81 metres, which was in turn almost a metre less than the measurement taken in 2017.
- ❖ The highest recorded height of the mountain was 4,810.90m (15,783ft 79in) in 2007.

Picocystis Salinarum



- ❖ Researcher discovered the survival mechanism of one of the smallest green algae *Picocystis Salinarum* in harshest of conditions.
- ❖ The algae resort to physiological adaptation to highly saline-alkaline and hyperosmotic conditions.
- ❖ *P. salinarum* is a globally widespread picoplanktonic green algae of saline lakes.
- ❖ Though the algae had been widely found in saline-soda lakes around the world, it was spotted for the first time in India only in the Sambhar Lake, Rajasthan.

Nugu Wildlife Sanctuary

- ❖ The National Tiger Conservation Authority (NTCA) has recommended to the authorities that the Nugu Wildlife Sanctuary adjoining the Bandipur Tiger Reserve be declared as a core critical tiger habitat.
- ❖ It is situated north of Bandipur National Park in Mysore District.

- ❖ In 1974, Nugu was declared as Wildlife Sanctuary.
- ❖ In 2003-2004, the area of Nugu Wildlife Sanctuary was added to the Nilgiri Biosphere Reserve.



New 'Music Frog' Species

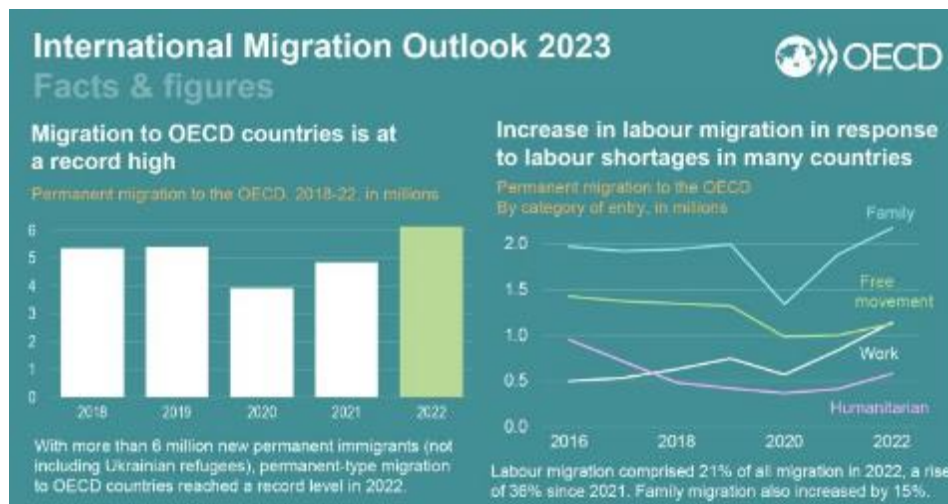


- ❖ Scientists have discovered a new species of 'music frog' in Arunachal Pradesh.
- ❖ The speciality of this new species of frog, *Nidirana noadihing*, is that both the male and female are vocal.
- ❖ This newly discovered frog has a unique call pattern consisting of two-three notes.
- ❖ The new species was named after the Noa-Dihing River, which is near where the specimens were discovered and collected.

REPORTS AND INDICES

OECD International migration outlook 2023

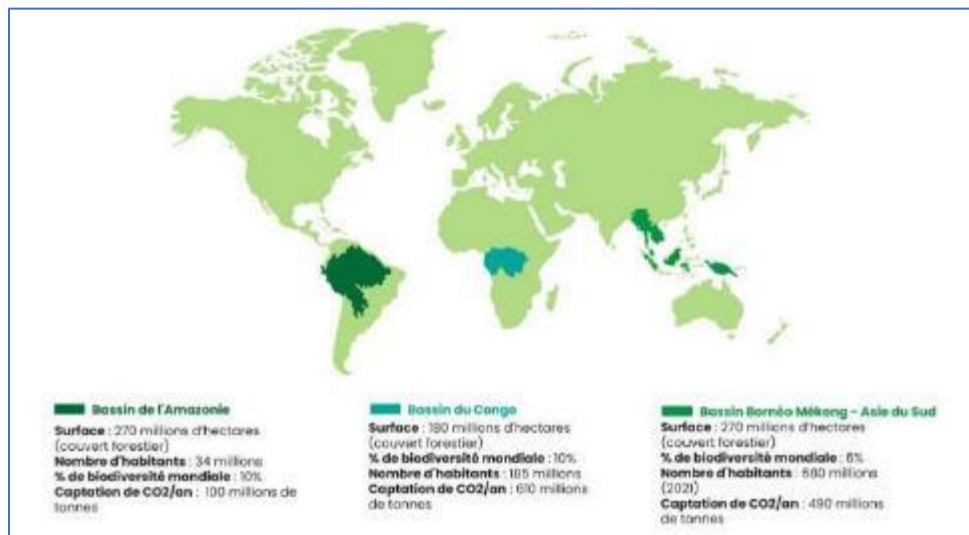
- ❖ India saw the highest migration flows to Organisation for Economic Co-operation and Development (OECD) countries in 2021 and 2022.
- ❖ India replaced China as the main country of origin of new migrants to OECD countries in 2020.
- ❖ In 2021, for the second consecutive year, India, with 0.41 million new migrants, was the top country of origin.
- ❖ China, with 0.23 million new migrants, was at a distant second, followed by Romania with around 200,000 new migrants.
- ❖ OECD is an association of 38 member countries, most being rich developed nations that attract migrant workers and students.
- ❖ India has been the main origin country of new citizens in OECD countries since 2019.
- ❖ This was despite a recent drop of 15 per cent, compared to 2019.
- ❖ 1.3 lakhs Indian citizens acquired the nationality of an OECD country in 2021.



The Three Basins Threat Report

- ❖ The Summit of the Three Basins took place in Brazzaville, Republic of Congo.
- ❖ It is aimed at strengthening governance for three vital ecosystems: the Amazon, Congo, and Borneo-Mekong/Southeast Asia.
- ❖ The Three Basins Threat Report: Fossil Fuel, Mining, and Industrial Expansion Threats to Forests and Communities' was released recently.

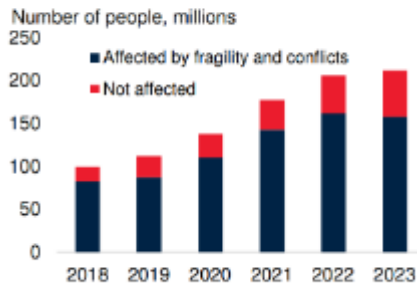
- ❖ In Southeast Asia, nearly 20% of undisturbed Tropical Moist Forests are within oil and gas blocks designated for production or exploration.
- ❖ Nearly 20 per cent of intact tropical forests in the three basins are now in active and potential oil and gas concessions.
- ❖ The first Summit of the Three Tropical Forest Basins took place in Brazzaville in 2011.
- ❖ It led to the Declaration of the Summit of the Three Tropical Forest Basins.



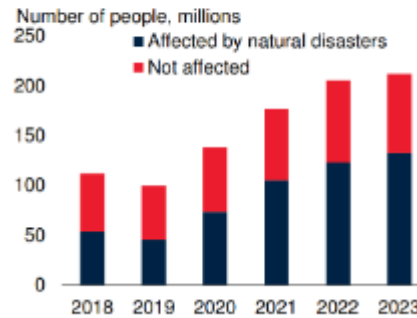
Commodity Market Outlook Report

- ❖ The World Bank released a report named Commodity Markets Outlook.
- ❖ The Russian invasion of Ukraine, has resulted in limited impact on commodity prices.
- ❖ It could bring “dual shock” to commodity markets as energy market turmoil could intensify food insecurity.
- ❖ The ban on exports of non-basmati rice by India has “roiled global markets since mid-July.
- ❖ Higher oil prices, if sustained, inevitably mean higher food prices.
- ❖ If a severe oil-price shock materialises, it would push up food price inflation that has already been elevated in many developing countries.
- ❖ At the end of 2022, more than 700 million people—nearly a tenth of the global population—were undernourished.
- ❖ India accounts for nearly 40 per cent of the world’s rice exports.

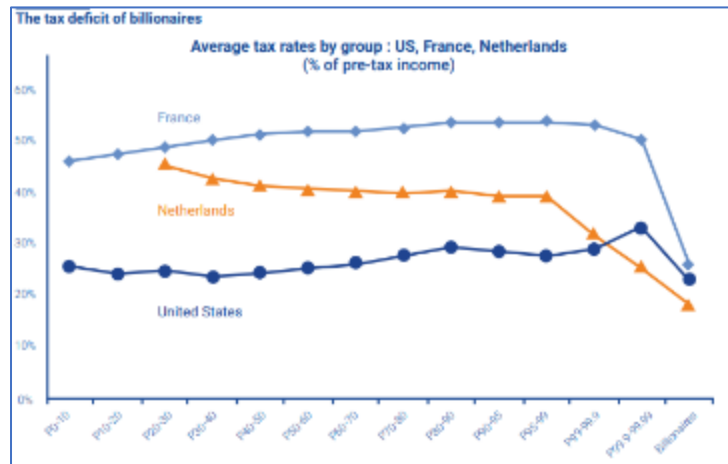
A. Number of people with food insecurity by fragility and conflict situations



B. Number of people with food insecurity by occurrence of natural disasters



EU Global Tax Evasion Report 2024

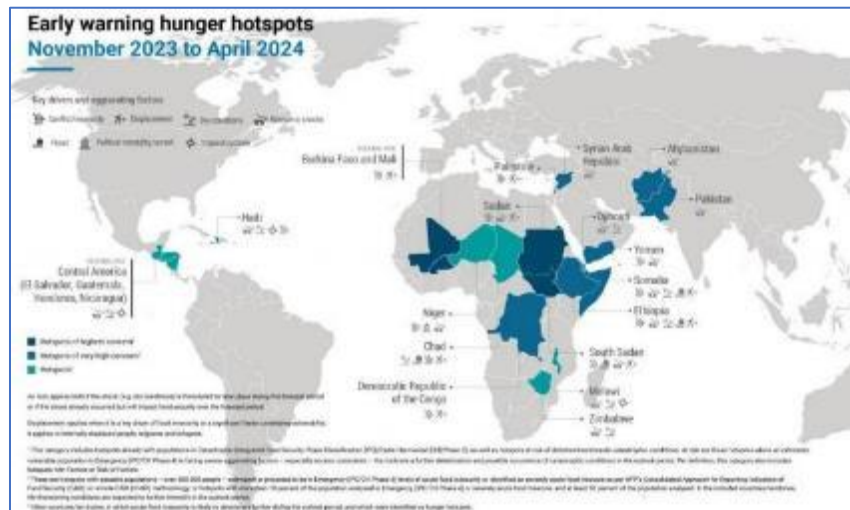


- ❖ The European Union Tax Observatory released the 'Global Tax Evasion Report 2024'.
- ❖ It has called for a global minimum tax on billionaires equal to 2% of their wealth.
- ❖ This would both address evasion and generate nearly \$250 billion from less than 3,000 individuals.
- ❖ In the United States, billionaires' personal tax is estimated to be close to 0.5 percent.
- ❖ It can even be as low as zero in high-tax countries such as France.
- ❖ The wealth of billionaires has grown at 7% a year annually on average since 1995.

FAO and WFP Report 2023

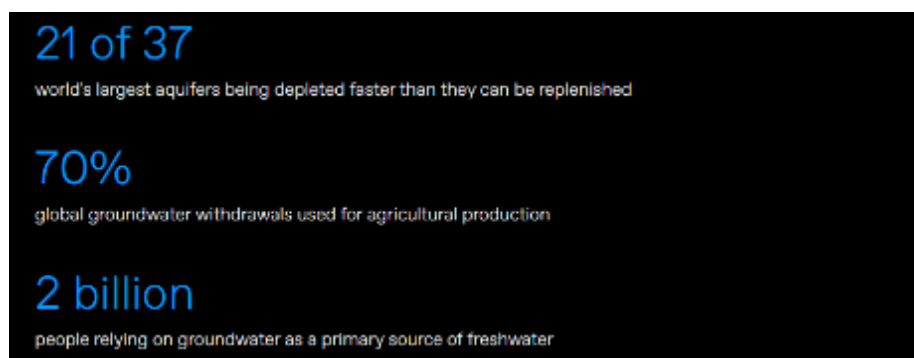
- ❖ The new report released by the Food and Agriculture Organization of the United Nations (FAO) and the World Food Programme (WFP).

- ❖ Acute food insecurity is likely to worsen in 18 hunger hotspots through April 2024.
- ❖ These hotspots comprise 22 countries or territories, including two regional clusters.
- ❖ Afghanistan, Congo Republic, Ethiopia, Haiti, Pakistan, Somalia, the Syrian Arab Republic, and Yemen are identified as high-risk areas in the report.



Interconnected Disaster Risks Report 2023

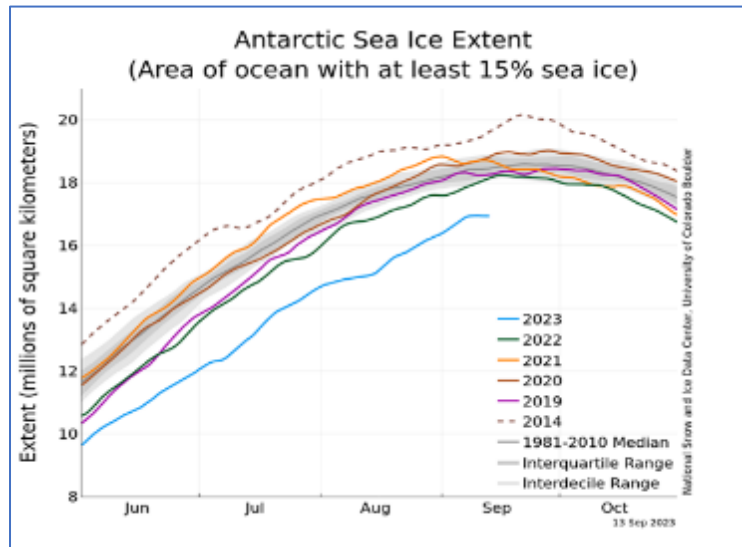
- ❖ The UN Interconnected Disaster Risks Report released by the United Nations University- Institute for Environment and Human Security (UNU-EHS).
- ❖ The report analyses several examples of disasters each year and explains how they are inter- connected with each other and with human actions.
- ❖ India is close to reaching its groundwater depletion tipping point.



- ❖ According to the report, 78% of wells in Punjab are considered overexploited.
- ❖ These aquifers supply drinking water to over two billion people, and around 70% of withdrawals are used for agriculture.

- ❖ Between 2000 and 2019, glaciers lost 267 gigatons of ice per year.
- ❖ Nearly 90,000 glaciers of the Himalayas, Karakoram and Hindu Kush mountains are at risk, and so are the nearly 870 million people that rely on them.
- ❖ Frequent severe weather is causing a sevenfold increase in damages since the 1970s, with USD 313 billion in losses in 2022.

2023 State of the Climate Report

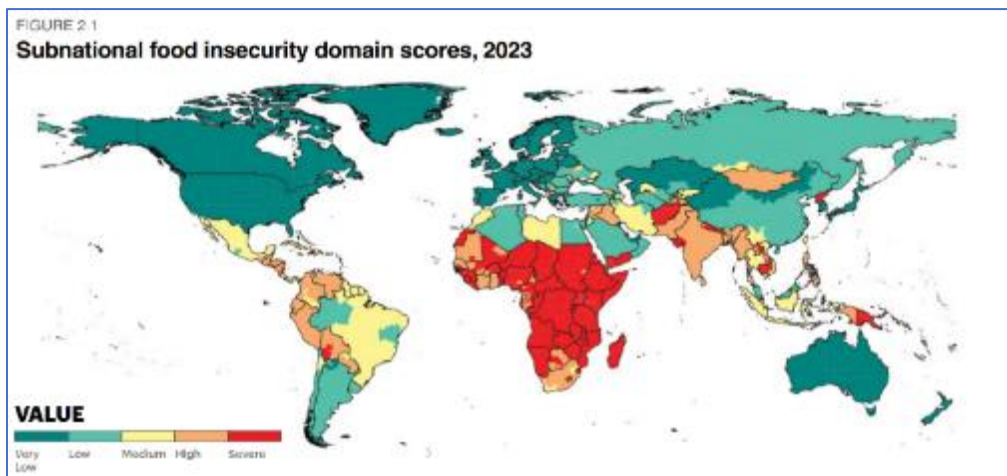


- ❖ This report was released by World Meteorological Organization (WMO).
- ❖ 2023 has already seen 38 days with global average temperatures above 1.5°C by 12 September.
- ❖ This was more than any other year and the total may continue to rise.
- ❖ Antarctic sea ice reached its lowest daily relative extent since the advent of satellite data, at 2.67 million square kilometers below the 1991–2023 average.

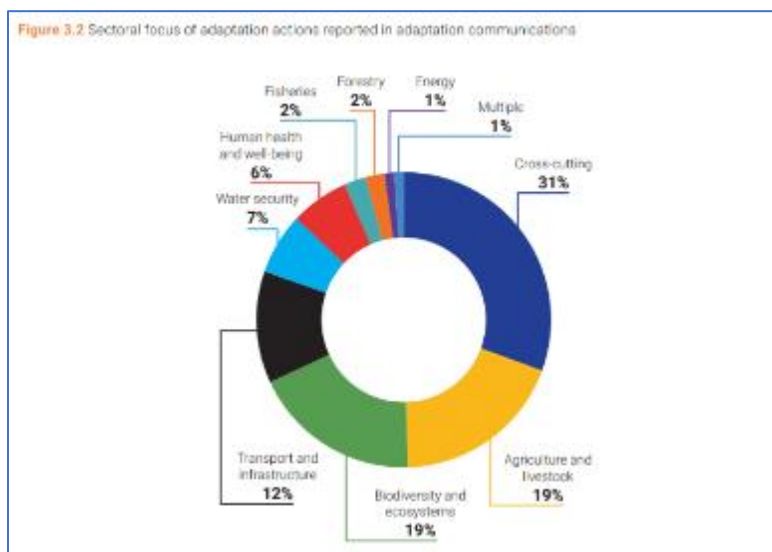
Ecological Threat Report 2023

- ❖ The report focuses on four categories of threat: Food insecurity, natural disasters, demographic pressure and water risk.
- ❖ The number of people residing in countries facing severe ecological threats will go up to 2.8 billion by 2050.
- ❖ More than half of the hotspot countries facing a severe threat are in sub-Saharan Africa.
- ❖ The report covered 221 countries and independent territories, which were divided into 3,594 sub-national areas.

- ❖ It is accounting for 99.99 percent of the world’s population.
- ❖ Of these countries and territories, 66 face at least one severe ecological threat.
- ❖ Of the 30 hotspot countries that face severe ecological threats and have low levels of societal resilience, 19 are in sub-Saharan Africa.
- ❖ The most at risk countries are Ethiopia, Niger, Somalia and South Sudan, of which Ethiopia and Niger have recently emerged as hotspots.
- ❖ Europe and North America are the only two regions where no country currently faced a severe ecological threat.
- ❖ There are currently 42 countries experiencing severe food insecurity, and nearly four billion people live in areas experiencing high or severe food insecurity.



Adaptation Gap Report - 2023



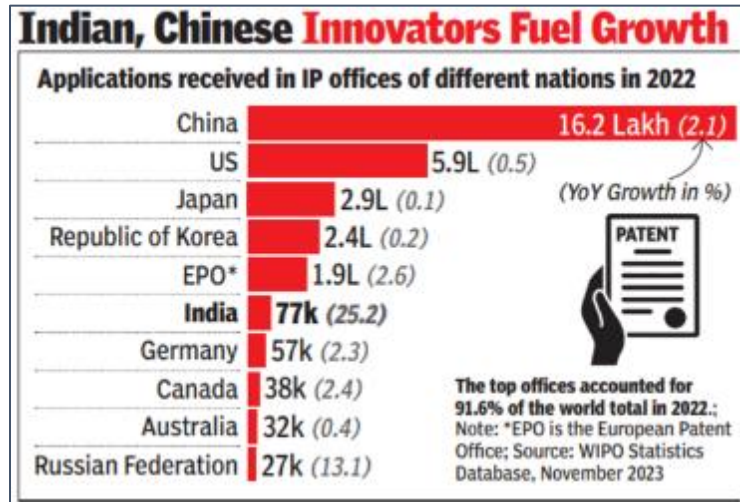
- ❖ Climate adaptation finance flows from public multilateral and bilateral source declined by 15 per cent to around \$21 billion in 2021.
- ❖ The finance needs of developing countries are now 10-18 times as big as international public finance flows.
- ❖ For developing countries, the total cost of adaptation amounts to \$215 billion per year.
- ❖ Modelled adaptation costs for Least Developing Countries and Small Island Developed nations are estimated at \$25 billion per year (2 per cent of GDP) and \$4.7 billion per year (0.7 per cent of GDP), respectively.

2023 McKinsey Health Institute survey



- ❖ According to the McKinsey Health Institute's 2023 survey, India topped the rank in workplace burnout.
- ❖ India respondents reported the highest rates of burnout symptoms at 59%.
- ❖ Cameroon, a country in Central Africa, reported the lowest rates of burnout symptoms at workplaces at 9%.
- ❖ The global average of burnout was 20% but cognitive, exhaustion, and emotional impairment varied.
- ❖ Indian employees reported the highest level of workplace exhaustion at 62%, followed by Japan (61%).
- ❖ Switzerland reported the least level of workplace exhaustion at 22%.
- ❖ India ranked 2nd in holistic health of employees after Turkey in McKinsey Health Institute's 2023 survey.

World Intellectual Property Indicators Report 2022

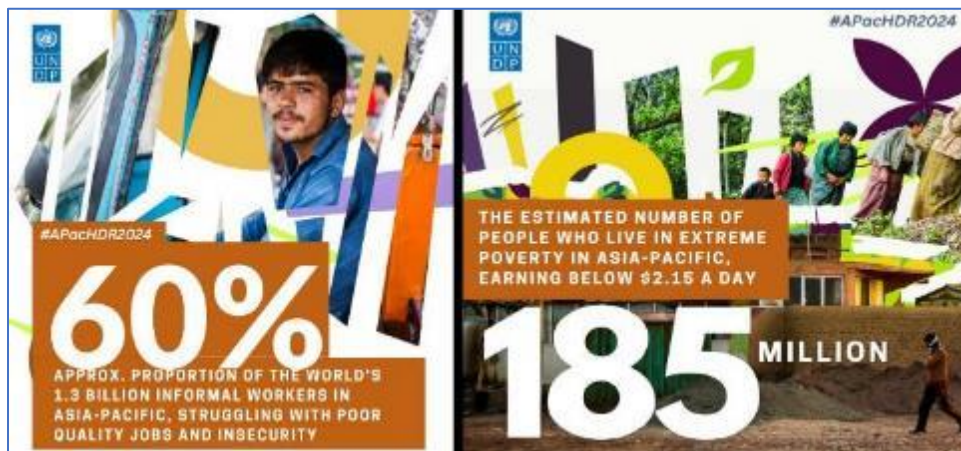


- ❖ This report was released by World Intellectual Property Organization (WIPO).
- ❖ Patent filings by Indians surged by 31.6% in 2022, the sharpest increase globally, reflecting the country's growing innovation ecosystem.
- ❖ Innovators worldwide filed 3.46 million patent applications in 2022.
- ❖ It is 1.7% higher when compared with the previous year.
- ❖ The Indian innovators filed 15,495 more patent applications in 2022 than in the previous year.
- ❖ This is the 11th consecutive year of increase in patent applications by Indians.
- ❖ China received 33,605 more applications than in 2021.
- ❖ In absolute terms, India accounts for the sixth largest number of patent applications globally.
- ❖ China is by far the largest followed by the US, Japan, South Korea and European Union.
- ❖ China's share of the world total has risen from 27.7% in 2012 to 46.8% in 2022.
- ❖ In contrast, the US share has declined from 23% to 17.2% over the past decade.
- ❖ The bulk of intellectual property (IP) filing activity occurs in Asia, which accounted for 67.9% of global patent filing activity in 2022.
- ❖ China accounts for nearly half of the intellectual property filing activity globally.

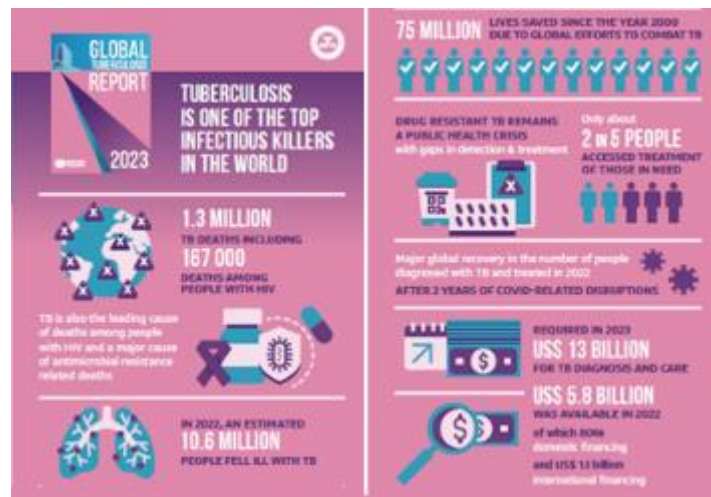
2024 Asia-Pacific Human Development Report

- ❖ India has emerged among top countries with high income and wealth inequality.
- ❖ But the share of the population living in multidimensional poverty fell from 25 to 15 per cent between 2015-16 and 2019-21.

- ❖ In India, between 2000 and 2022, per capita income soared from USD 442 to USD 2,389.
- ❖ Whereas, between 2004 and 2019, poverty rates (USD 2.15 per day) plummeted from 40 to 10 per cent.
- ❖ Poverty remains persistently concentrated in states that are home to 45 per cent of the country's population but contain 62 per cent of its poor.
- ❖ India is expected to contribute 24 per cent to the global middle-class growth (192 million people).
- ❖ More than 185 million people continue to live in extreme poverty -- earning below USD 2.15 a day in the region.



WHO Global report on TB 2023



- ❖ India accounted for the highest number of tuberculosis (TB) cases in the world in 2022.
- ❖ It represents a staggering 27 percent of the global burden.

- ❖ From 192 countries and areas, 7.5 million people were diagnosed with TB in 2022.
- ❖ Overall, 30 high burden TB countries accounted for 87 per cent of the world's TB cases in 2022.
- ❖ Among the top eight high burden countries, Indonesia (10%), China (7.1%), the Philippines (7. %), Pakistan (5.7%), Nigeria (4.5 %), Bangladesh (3.6%), and the Democratic Republic of Congo (3.0%) are included.
- ❖ India recorded 2.8 million (28.2 lakh) TB cases in 2022, with a case fatality ratio of 12 per cent.

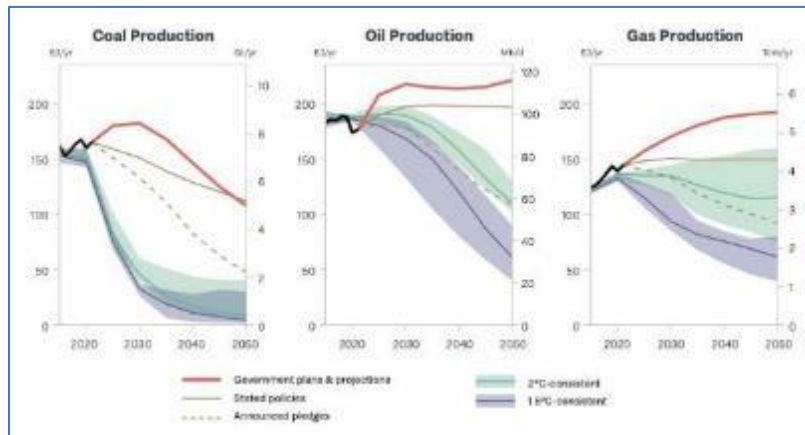
QS Asia University Rankings 2024

Indian Universities in QS World University: Asia 2024 - Top 200					
2024	2023	Change	QS World	Institution	Location
40	40	0	149	Indian Institute of Technology Bombay (IITB)	Mumbai
46	46	0	197	Indian Institute of Technology Delhi (IITD)	Delhi
53	53	0	285	Indian Institute of Technology Madras (IITM)	Chennai
58	52	6	225	Indian Institute of Science	Bangalore
59	61	2	271	Indian Institute of Technology Kharagpur (IIT-KGP)	Kharagpur
63	66	3	278	Indian Institute of Technology Kanpur (IITK)	Kanpur
=94	85=	9	407	University of Delhi	Delhi
111	124+	13	364	Indian Institute of Technology Guwahati (IITG)	Guwahati
116	114	2	369	Indian Institute of Technology Roorkee (IITR)	Roorkee
117	119	2	606	Jawaharlal Nehru University	Delhi
149	185+	36	777	Chandigarh University	Chandigarh
163	173	10	888	Vellore Institute of Technology (VIT)	Vellore
=171	205+	34		Bharathiar University	Coimbatore
=179	185+	6	427	Anna University	Chennai
186	200=	14	1100	Amity University	Noida
=187	181	6	847	University of Calcutta	Kolkata
=199	207+	8	1084	Benaras Hindu University	Varanasi

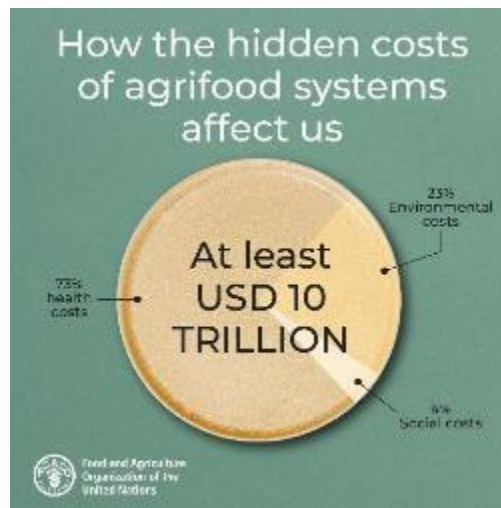
- ❖ Asia by Quacquarelli Symonds (QS) is out and it features 148 Universities from India.
- ❖ In Asia, overall list has 856 Universities being listed in total.
- ❖ The Indian Institute of Technology Bombay (IIT Bombay) grabbed the top spot in India with the 40th position.
- ❖ It is followed by IIT-Delhi at the 46th position and IIT-Madras at the 53rd position.
- ❖ Vellore institute of technology (163), Bharathiyar University (171), Anna university (179) are got place from Tamil Nadu.
- ❖ With 148 universities in the ranking list, India also becomes the country in Asia with the highest number of universities being featured.
- ❖ It is surpassing China with 133 and Japan with 96 universities.
- ❖ IIT Bombay also secured the 149th position in the QS World University Ranking 2024.

2023 Production Gap Report

- ❖ This report is jointly prepared by the Stockholm Environment Institute (SEI), Climate Analytics, E3G, the International Institute for Sustainable Development (IISD), and the UN Environment Programme (UNEP).
- ❖ The Planned fossil fuel production is expected to exceed the limits for a 1.5°C temperature rise by 110% and for a 2°C rise by 69%.
- ❖ Major producer countries have not committed to reduce coal, oil, and gas production in line with limiting warming to 1.5°C.
- ❖ 20 major producer countries Altogether account for 82% of production and 73% of consumption of the world’s fossil fuel supply.
- ❖ Many countries are promoting gas as a “bridge” or “transition” fuel, but with no apparent plans to transition away from it.



State of Food and Agriculture Report 2023



- ❖ The Food and Agriculture Organization (FAO) released a new report titled ‘The State of Food and Agriculture 2023’.
- ❖ Approximately 29.6% of the global population, corresponding to 2.4 billion people, experienced moderate or severe food insecurity in 2022.
- ❖ Among them, roughly 900 million individuals (11.3% of the global population) faced severe food insecurity.
- ❖ Among the nine South Asian countries, India had the third highest prevalence of undernourishment (233.9 million) in the total population, after Afghanistan and Pakistan,
- ❖ The biggest hidden costs (more than 70 percent) are driven by unhealthy diets, high in ultra-processed foods, fats and sugars.
- ❖ These costs reach over USD 7 trillion annually and have far-reaching consequences.
- ❖ The majority of hidden costs were generated in upper-middle-income (39%) and high-income countries (36%), with lower-middle-income countries at 22% and low-income countries at 3%.
- ❖ India's total hidden costs in agrifood systems were approximately USD 1.1 trillion, ranking as the third-largest globally after China and the United States.
- ❖ The burden of disease (productivity losses from dietary patterns) accounted for the largest share (60%) of hidden costs in India.
- ❖ It is followed by social costs of poverty (14%) and environmental costs from nitrogen emissions (13%).

Inclusiveness Index 2023



- ❖ India is ranked 117th in the list of 129 countries in the world in the inclusiveness index.

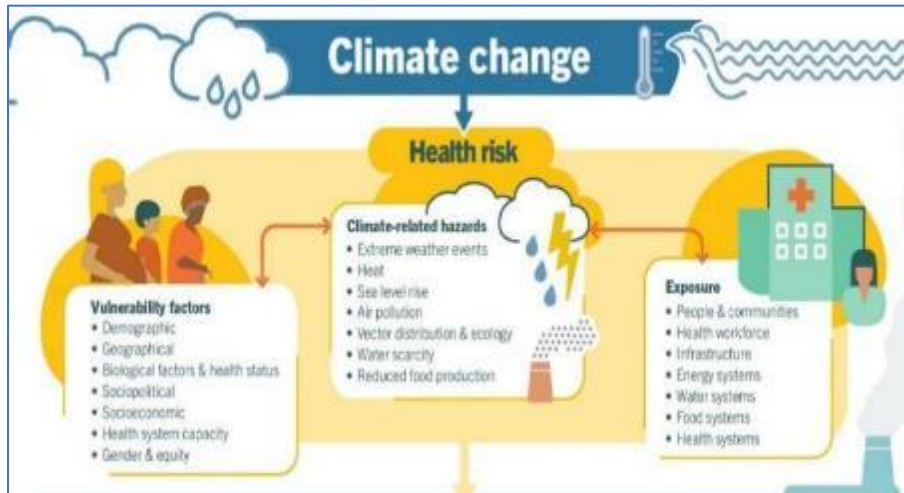
- ❖ It is published by the Othering and Belonging Institute (OBI) at California University, United States.
- ❖ Smaller countries like Bangladesh (106) and Israel (115) were placed better than India.
- ❖ The index examines inclusivity in terms of race, religion, gender, sexual orientation, disability, and the general population using several measures.
- ❖ India was ranked last (129) in religion inclusiveness, 121st in gender, 108th in disability, 87th in race, 40th in the general population, and 39th in LGBTQ.
- ❖ New Zealand finished first in the index for the second consecutive year.
- ❖ Portugal recorded its best showing by securing second place (up from 5th place in 2022) followed by the Netherlands in the third place.
- ❖ Iran was placed at the bottom of the global list.

Towards Eliminating Plastic Pollution by 2040 Report

- ❖ OECD released the interim report named “Towards Eliminating Plastic Pollution by 2040: A Policy Scenario Analysis.”
- ❖ In 2022, 21 million tonnes (MT) of plastics leaked into the environment globally.
- ❖ If the plastics use would continue to grow, leading to a 50 per cent increase in leakage of macroplastics into the environment by 2040.
- ❖ It is meaning about 30 MT of plastic would leak into the environment, of which 9 MT would enter aquatic environments.
- ❖ The elimination actions of this would cost 0.5 per cent of global GDP in 2040.
- ❖ Investment needs for waste collection, sorting and treatment amounting to over \$1 trillion between 2020 and 2040.



Countdown on Health and Climate Change



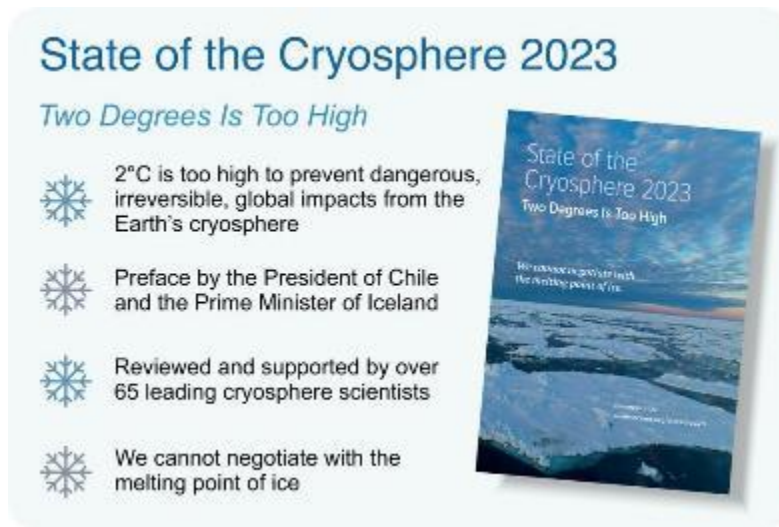
- ❖ The new global projections are part of the 8th annual report of the Lancet Countdown on Health and Climate Change.
- ❖ If temperatures rise by 2°C (over pre-industrial levels) by the end of the century then yearly heat-related deaths are projected to increase 370% by mid-century.
- ❖ India suffered a \$219-billion potential association income loss due to exposure to high temperatures.
- ❖ Also, 191 billion potential labour hours were lost due to heat exposure in 2022, a jump of 54 per cent from 1991-2000.
- ❖ Agricultural workers were hit the hardest, seeing 64 per cent of the potential hours lost and 5.5 per cent of the potential income losses in 2022.
- ❖ Globally, heat-related deaths of people older than 65 have increased by 85 per cent since the 1990s.

World Energy Employment 2023



- ❖ The International Energy Agency released the ‘2nd edition of the World Energy Employment (WEE 2023) report.
- ❖ Overall global energy employment in 2022 reached almost 67 million.
- ❖ It is a growth of 3.4 million from pre-pandemic levels.
- ❖ Solar PV is the largest employer among energy sectors, with approximately 4 million jobs.
- ❖ China had the largest increase in clean energy jobs and the most significant decrease in fossil fuel employment from 2019-22.
- ❖ India generated the fourth- highest number of new clean energy jobs during 2019-22.
- ❖ India ranks third in the number of energy workers globally, following China and the Asia- Pacific regions.

State of the Cryosphere 2023 Report

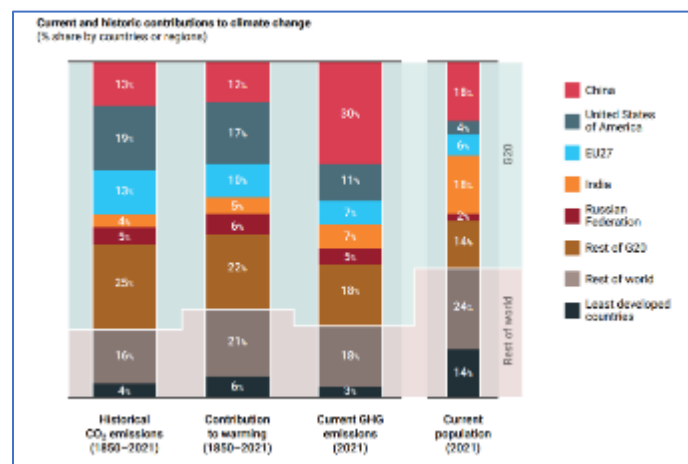


- ❖ International Cryosphere Climate Initiative released this report.
- ❖ The current temperature rise of 1.2°C affects many glaciers of the northern Andes, East Africa, and Indonesia are disappearing rapidly.
- ❖ Swiss glaciers lost 10 per cent of their remaining ice over just two years.
- ❖ Sea ice around Antarctica hit an all-time low summer and winter record this year.
- ❖ Water temperatures in parts of the Arctic and North Atlantic were 4-6°C higher than normal.
- ❖ The atmospheric carbon dioxide concentrations were 50 per cent above pre-industrial levels in 2023.

- ❖ At 424 parts per million, CO₂ concentration was higher than at any point in at least three million years.
- ❖ Earth's ice sheets lost 7,560 billion tonnes of ice between 1992 and 2022.
- ❖ Ice sheets in Greenland and parts of Antarctica could contribute between 12-20 metres of sea-level rise at 2°C.

14th Emissions Gap Report 2023

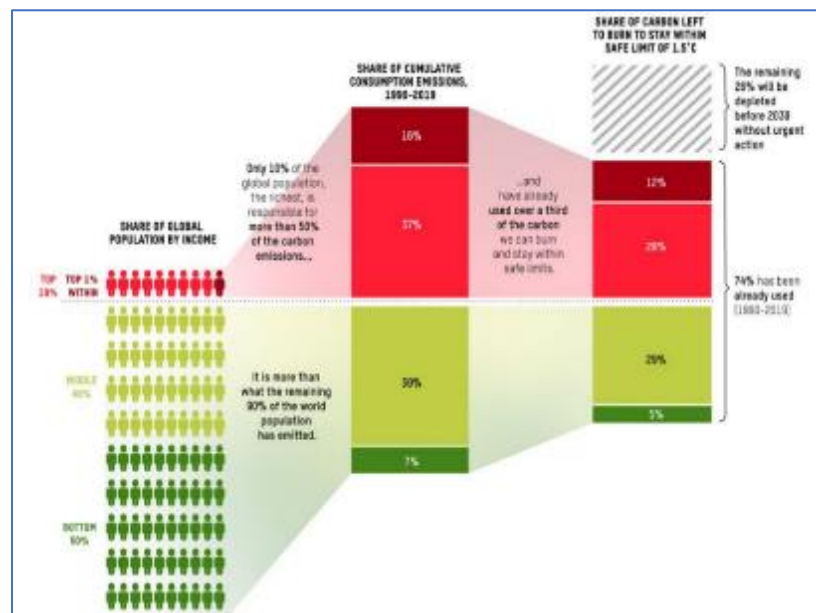
- ❖ Recently, the UNEP has released a report titled 'the Emissions Gap Report 2023: Broken Record – Temperatures hit new highs, yet world fails to cut emissions (again)'.
- ❖ There is only a 14 per cent chance of limiting global warming to 1.5 degrees Celsius over pre-industrial levels.
- ❖ The global top 10 per cent income bracket generates a staggering 45-49 per cent of total emissions, while the bottom 50 per cent contributes a mere 7-13 per cent.
- ❖ To limit warming to 1.5-2°C, substantial emission cuts of 28-42% by 2030 are necessary.
- ❖ G20 countries currently accounts for 76% of global emissions.
- ❖ In 2022, energy supply was the largest source of emissions at 20.9 GtCO₂e (36% of the total).
- ❖ September 2023 was the hottest September ever recorded.
- ❖ In 2022, global emissions peaked at 57.4 gigatonnes of carbon dioxide equivalent.



Oxfam report 2023

- ❖ The Oxfam report titled, 'Climate Equality: A Planet for the 99%' is based on research with the Stockholm Environment Institute (SEI).

- ❖ The carbon emission of the world's super-rich 1% is equivalent to two-thirds or five billion people of the global population.
- ❖ The carbon emissions by the richest of individuals, 77 million globally, surged to 16% of total CO2 emissions globally in 2019.
- ❖ The outsized emissions by the rich people are enough to cause 1.3 million deaths due to heat.
- ❖ 60% tax on the incomes of the richest 1% population would help in cutting emissions by more than the total emissions in the United Kingdom.
- ❖ Additionally, raising \$6.4 trillion a year to pay for the transition away from fossil fuels to renewable sources of energy will contribute to this goal as well.
- ❖ It would take about 1,500 years for someone in the bottom 99 per cent to produce as much carbon as the richest billionaires do in a year.



Butterfly Migration in Tamil Nadu 2023

- ❖ Butterfly migration from the Eastern Ghats and plains towards the Western Ghats, an annual phenomenon coinciding with the onset of the Northeast monsoon, was below par this year.
- ❖ Large scale movement of butterflies towards the west not recorded till date since September, possibly due to below normal rainfall in west zone districts.
- ❖ Before the onset of the Northeast monsoon, butterflies from the subfamily Danainae, such as Blue Tiger, Dark Blue Tiger, Double-branded Crow, and Common Crow (commonly known as 'Tigers and Crows'), leave these hills and fly towards the west.

- ❖ But observers saw only a low scale migration of Tigers and Crows since September this year.
- ❖ Tamil Nadu had a rainfall of 92% of its normal level (June-September 2023).
- ❖ While the districts involved in the migratory movement in the west zone, especially Salem and Namakkal, had a deficit of 7% and 10%.



Melanistic pelicans



- ❖ Two pelicans with aberrant plumage were reportedly spotted at Pallikaranai marshland recently.
- ❖ These pelicans, brownish in colour, were near a flock of spot-billed pelicans but appeared to be isolated from them.
- ❖ The brown pelican is a different species that lives in the southern coasts of the United States and are not migratory.
- ❖ In 2005, two unusual, brightly-coloured pelicans were sighted at Pulicat lake and Nelapattu bird sanctuary.
- ❖ The brown could be melanism – a condition that causes birds to have an excess of dark pigmentation.

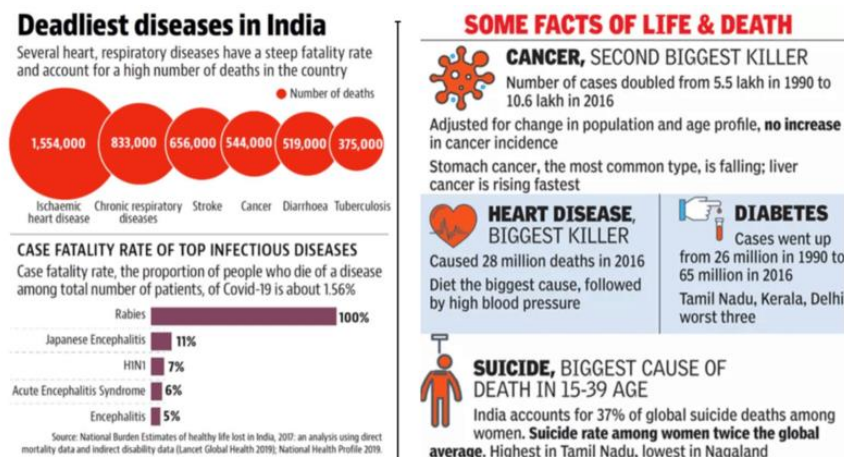
STATES

Hostile Activity Watch Kernel (HAWK) system

- ❖ The Karnataka Forest Department, along with the Wildlife Trust of India, has launched the Hostile Activity Watch Kernel (HAWK) system.
- ❖ It is a specialised software platform to monitor all aspects of forest and wildlife crime.
- ❖ The system would help the department monitor activities such as the death of wildlife, suspected criminal activities, and the movement of suspicious vehicles.



Highest cancer rate in India

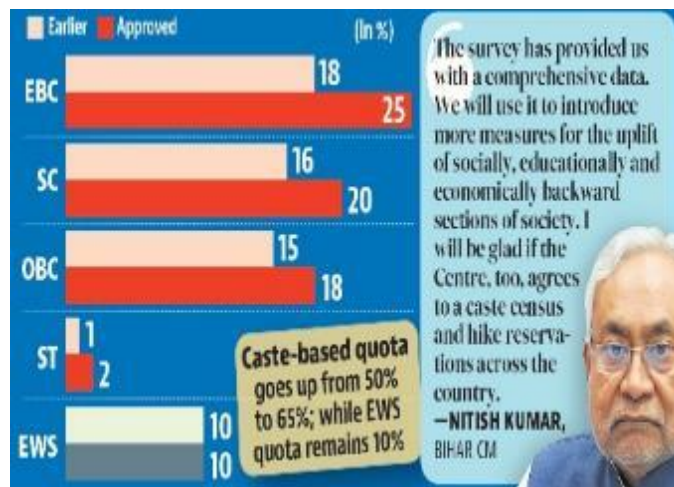


- ❖ Despite being the country's second least populated State, Mizoram exhibits the highest incidence rate of cancer in India.
- ❖ Stomach cancer emerging as the primary cause of cancer-related deaths among men, while lung cancer plays a parallel role among women.
- ❖ One in nine people across India are likely to develop cancer in their lifetimes.

- ❖ Lung and breast cancers were the leading sites of cancer in males and females, respectively.
- ❖ Among childhood (0-14 yr) cancers, lymphoid leukaemia (boys: 29.2% and girls: 24.2%) was the leading site.
- ❖ The incidence of cancer cases is estimated to increase by 12.8 per cent in 2025 as compared to 2020.

Increasing reservation ratio

- ❖ The Reservation Amendment Bill, seeking an increase in reservations in government jobs and educational institutions in Bihar, was passed recently.
- ❖ It aims to raise quotas for Other Backward Classes, Scheduled Castes and Scheduled Tribes in the state.
- ❖ This will increase reservations for the SC, ST, OBC and Extremely Backward Classes, to 65 per cent in the state.
- ❖ This is increase from the 50 per cent ceiling set by the Supreme Court.
- ❖ Currently, there is 18 per cent reservation for EBCs, 12 per cent for OBCs, 16 per cent for SCs, 1 per cent for STs and 3 percent for women from backward classes in Bihar in state jobs and educational institutions.
- ❖ The new proposal is SC- 20%, ST - 2%, OBC and EBC- 43%.



GPS tracker anklets

- ❖ In a first, Jammu and Kashmir Police have introduced GPS tracker anklets to monitor the terror-accused people on bail in the union territory.
- ❖ With this, the J&K police department became the first in India to be using GPS tracker anklets.

- ❖ The GPS tracker anklet is already in use in Western countries such as the USA, United Kingdom, South Africa, Australia, and New Zealand.
- ❖ They used this to track the movement of accused persons on bail, parole, and house arrest and accordingly de-congests prisons to a large extent.

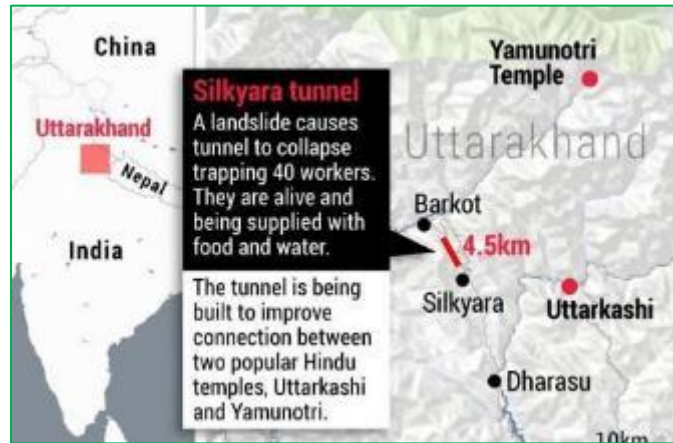


Nagaland Municipal Bill 2023

- ❖ The Nagaland Assembly passed the Nagaland Municipal Bill, 2023 and retained 33 per cent reservation for women.
- ❖ Earlier, the House had withdrawn the Nagaland Municipal Act, 2001 by voice vote.
- ❖ Several Naga organisations claimed that the reservations for women in the Urban Local Bodies (ULBs) would go against their community's customary laws.
- ❖ Since then, no civic body election has been conducted in the northeastern state.
- ❖ The provision for one-third reservation of the offices of the Chairperson in the ULB for women, which was there in the earlier Municipal Act, was also not included in the Nagaland Municipal Bill, 2023.
- ❖ The elected body of a particular Municipal or Town Council would decide on taxes or fees in their own jurisdiction.



Uttarkashi Tunnel Collapse



- ❖ An under-construction tunnel on the Brahmakhal - Yamunotri National Highway in Uttarkashi district partially collapsed.
- ❖ The tunnel is meant to connect Silkyara to Dandalgaon in Uttarakhand's Uttarkashi.
- ❖ It is being built under the Char Dham Road Project and aims to reduce the journey from Uttarkashi to Yamunotri Dham by 26 kilometres.

Private sector quota in Haryana

- ❖ The Punjab and Haryana High Court quashed a law passed by the Haryana government in 2020 that provided 75% reservation in private jobs to residents of the state.
- ❖ A government cannot discriminate against individuals simply because they do not belong to that state.
- ❖ The Haryana State Employment of Local Candidates Act, 2020 is to be violative of Part III of the Constitution.
- ❖ The Act reserved 75% of jobs in the private sector that offered a monthly salary of less than Rs 30,000 (originally Rs 50,000) for residents of Haryana.

WHAT'S THE QUOTA LAW

<ul style="list-style-type: none"> ● Provides for 75% reservation in new employment to local candidates in the private sector ● Law applicable for a period of 10 years ● Unskilled, semi-skilled and skilled jobs where gross monthly salary is not more than ₹30,000 will come under the ambit of the law 	<ul style="list-style-type: none"> ● Employers will have the option to recruit local candidates from one district to the extent of only 10% ● The law also contains a bail-out clause for the industry if suitable local candidates are not available for a particular category of the industry
--	---

Best State in Inland Fisheries

- ❖ Uttar Pradesh was honored with the Best State-Inland Fisheries Award at the Global Fisheries Conference 2023.
- ❖ The state's impressive fish production growth was reaching over 9.1 lakh metric tonnes this year.
- ❖ This was 8 lakh metric tonnes in the previous year.
- ❖ Fish seed production has seen a significant rise from around 27,128 lakh metric tonnes to approximately 36,187 lakh metric tonnes.

State fish of Gujarat

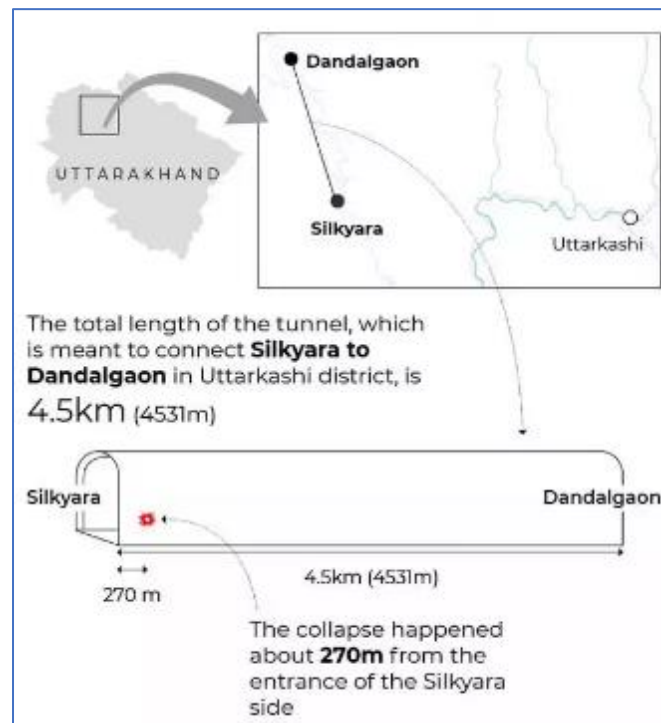
- ❖ Ghol fish was declared the state fish of Gujarat by Chief Minister during a two-day Global Fisheries Conference India 2023 in Ahmedabad.
- ❖ Ghol fish is one of the largest fish found in India.
- ❖ The fish is found in the marine areas of Gujarat and Maharashtra in a golden-brown colour.
- ❖ The fish is valuable and is in demand because of its meat and air bladder.
- ❖ Ghol fish is used to make beer and wine and its air bladder is used in pharmaceuticals.



Uttarakhand Tunnel Crash rescue

- ❖ A successful rescue operation by NDRF and SDRF teams has led to the extraction of all the 41 workers who were trapped inside the Silkyara tunnel in Uttarakhand.
- ❖ The authorities, till now, have used multiple techniques to bring the workers out of the tunnel section.
- ❖ Among the different rescue techniques, rat-hole mining (manual drilling) is considered to be the most dangerous and risky.

- ❖ Rat-hole miners were the last resort of the rescue operation after the US-made auger machine was extracted from the tunnel after it went kaput.
- ❖ Rat-hole mining is a method of taking out coal by digging small pits.
- ❖ It involves manually digging up small tunnels, around 3-4 feet, through which workers enter and extract coal.
- ❖ But it was banned by NGT in 2014 as a coal-extracting method for being unscientific.
- ❖ Rat hole mining is largely prevalent in Meghalaya, particularly West Jaintia Hills, East Jaintia Hills and West Khasi Hills.



Bihar's demand for Special Category Status

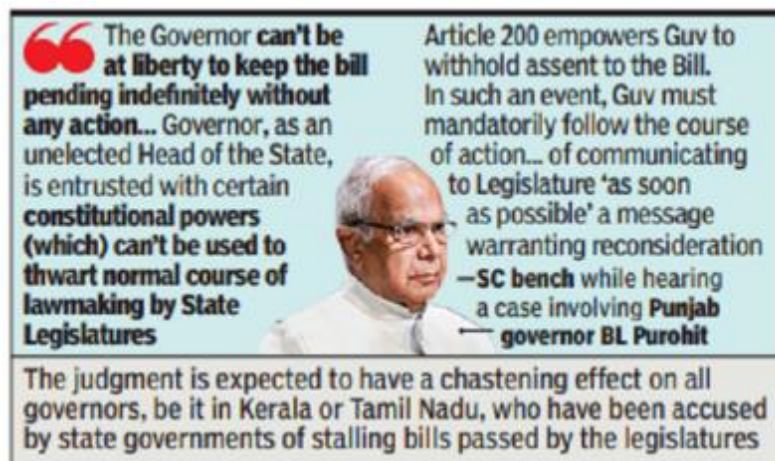
- ❖ The state Cabinet passed a resolution seeking the grant of special category status (SCS) to Bihar.
- ❖ The demand comes in the backdrop of the findings from the "Bihar Caste-based Survey, 2022".
- ❖ It revealed that nearly one-third of Bihar's population continues to live in poverty.
- ❖ Special category status is a classification granted by the Centre to assist the development of States that face geographical or socio-economic disadvantages.
- ❖ The SCS was introduced in 1969 on the recommendation of the fifth Finance Commission (FC).

- ❖ Five factors such as
 - Hilly and difficult terrain
 - Low population density and/or sizeable share of tribal population
 - Strategic location along international borders
 - Economic and infrastructural backwardness and
 - Non-viable nature of state finances, are considered before granting SCS.



SC on Punjab Governor

- ❖ The Supreme Court, has clarified that the rejection of a Bill by a Governor does not mean its death.
- ❖ A law proposed by a state legislature is not extinguished merely because the Governor refuses to sign his/her assent.
- ❖ Article 200 of the Constitution provides the Governor with three options when presented with a Bill — consent to the proposed law, withhold consent, or reserve the Bill for the consideration of the President.
- ❖ The court clarified that the Governor cannot choose between letting a Bill die after rejecting it and sending it back to the House for re-legislation.



“The Governor can't be at liberty to keep the bill pending indefinitely without any action... Governor, as an unelected Head of the State, is entrusted with certain constitutional powers (which) can't be used to thwart normal course of lawmaking by State Legislatures

Article 200 empowers Guv to withhold assent to the Bill. In such an event, Guv must mandatorily follow the course of action... of communicating to Legislature 'as soon as possible' a message warranting reconsideration —SC bench while hearing a case involving Punjab governor BL Purohit

The judgment is expected to have a chastening effect on all governors, be it in Kerala or Tamil Nadu, who have been accused by state governments of stalling bills passed by the legislatures



PERSONALITIES, AWARDS AND EVENTS

Chinese Premier Li Keqiang

- ❖ Former Chinese Premier Li Keqiang passed away recently.
- ❖ Li was nominally China's No. 2 leader until late last year.
- ❖ He served as the country's premier – traditionally in charge of the economy – for a decade from 2013 to March this year.
- ❖ He became the governor of Henan province in 1998.
- ❖ He was China's youngest-ever governor at the time.
- ❖ Later, he became a part of the CCP Politburo's Standing Committee in 2007.

2023 Mahatma Awards

- ❖ Digital transformation solutions company UST has won the 2023 Mahatma Awards.
- ❖ They are awarded for their sustainable and impactful contributions to corporate social responsibility (CSR) in areas such as education, health, livelihood, environment, and disaster relief.
- ❖ This award is an initiative of Aditya Birla Group, the award was presented on Gandhi Jayanti.

Wildlife Photographer of The Year 2023

- ❖ 6 Photographers from India win Wildlife Photography Awards.
- ❖ Sriram Murali has received the Wildlife Photographer of the Year award in the 'Behaviour: Invertebrates' category for his photograph of the Anamalai Tiger Reserve Forest in Tamil Nadu.
- ❖ Vishnu Gopal won the Animal Portraits Category prize.
- ❖ Other winners were Nejob Ahmed, whose image featured a distressed tiger among anxious people on the fringes of Assam's Orang National Park.
- ❖ Raj Mohan's photograph of the Pallikaranai marshes, a Ramsar site, enveloped in flames from burning rubbish.
- ❖ Vihaan Talya Vikas, 10-year-old from Bengaluru, is clinching the top prize in his category.
- ❖ This prize is often referred to as the 'Oscars of Photography'.
- ❖ It serves as a global platform for showcasing the world's most exceptional wildlife photography.



Rohini Nayyar Prize

- ❖ Social worker Deenanath Rajput was awarded the Rohini Nayyar Prize for Outstanding Contribution to Rural Development.
- ❖ It is recognising his efforts in changing the lives of over 6,000 tribal women in Chhattisgarh by establishing a farmers producers organisation (FPO).
- ❖ This is the second edition of the Rohini Nayyar Prize.
- ❖ It was instituted in the memory of the eponymous economist and administrator who passed away in 2021.

Champions of the Earth Award 2023

- ❖ The United Nations Environment Programme (UNEP) announced a Champions of the Earth 2023 recently.
- ❖ The winners are
 - Josefina Belmonte Belmonte, mayor of Quezon City in the Philippines (Policy Leadership),
 - The UK-based Ellen MacArthur Foundation (Inspiration and Action),
 - China's Blue Circle (Entrepreneurial Vision),
 - José Manuel Moller of Chile (Entrepreneurial Vision) and
 - Council for Scientific and Industrial Research (Science and Innovation)
- ❖ The annual Champions of the Earth award is the UN's highest environmental honour.
- ❖ It has recognised 116 laureates: 27 world leaders, 70 individuals and 19 organisations since its inception in 2005.

Golden Globe Race

- ❖ 2 women navy officers trained to undertake the first women solo-circumnavigation as part of the Navy's 'Sagar Parikrama'
- ❖ This will be the fourth edition of the solo circumnavigation voyage of the Navy.
- ❖ The voyage will see a woman naval officer sail around the world, solo and without stops.
- ❖ The two officer's lieutenant commander Dilna K, and lieutenant commander Roopa Alagiri samy selected for training.

NASA astronaut Thomas Kenneth Mattingly



- ❖ Ken Mattingly, an astronaut, passed away recently.
- ❖ He is remembered for his efforts on the ground that helped bring the damaged Apollo 13 spacecraft safely back to Earth.
- ❖ He played a key role in the rescue by helping the crew conserve power during re-entry into the atmosphere.

Hindu Businessline - Changemaker awards

- ❖ Businessline Changemaker Awards was conceptualised to recognise and reward the extraordinary thinkers and achievers of our times whose work has positively impacted the world.
- ❖ Changemaker is the rare one in a million human, the dreamer, the doer who ushered in change that transformed the lives of millions with their revolutionary ideas.
- ❖ Winners
 - Reserve Bank of India - Changemaker of the Year 2023
 - AMUL- Iconic Changemaker
 - HerKey and Educate Girls (Joint Winners) - Changemaker: Social Transformation.
 - Stellapps Technologies - Changemaker: Digital Transformation

- Pradhan Mantri Jan Dhan Yojana - Changemaker: Financial Transformation.
- Shrinidhi RS - Young Changemaker

Earthshot prize 2023

- ❖ This year's winners were chosen from a shortlist of 15 finalists by Prince William and the Earthshot Prize Council.
- ❖ This is also called as the "Eco Oscars".
- ❖ The competition is based around five "Earth shots," or environmental goals.
- ❖ S4S Technologies, an Indian full-stack food-processing, solar-tech platform, is among the five winners.
- ❖ The other winners of the 2023 prize
 - South American forest protection initiative Accion Andina;
 - US-based Boomitra, a land restoration incentivizing organization
 - Battery recycling project GRST from Hong Kong; and
 - US-headquartered WildAid Marine Program which is combatting illegal fishing.

Eco warriors award 2023



- ❖ This award honours the exceptional individuals and initiatives that have made significant contributions to environmental conservation and sustainable practices.
- ❖ It is India's first ever dedicated awards show for Indian Forest Service Officers.
- ❖ It is conceptualized by Indian Masterminds, a platform dedicated to the Indian Bureaucrats.
- ❖ Awardees are
 - 'Forest Protection' - Vasu Kanojia, DFO, North Seoni, Madhya Pradesh.



- 'Wildlife Conservation' - Dr. Mohan Ram, Gir Forest, Gujarat.
- 'Wildlife Protection' - Ritesh Sarothiya, Regional Deputy Director, Delhi.
- 'Best Use of Technology for Conservation' - Biswajit Mishra, Bengaluru.
- Award for Community Connect' - Millo Tassar, Conservator of Forests in Arunachal Pradesh.

Freedom fighter N Sankaraiah (102)

- ❖ Freedom fighter and senior-most Communist leader in the country N. Sankaraiah passed away recently at Chennai.
- ❖ He is one of the founding members of the Communist Party of India (Marxist).
- ❖ He was among the 32 national council members of the Communist Party of India (CPI), who left the party over ideological differences, which led to the formation of the CPI(M) in 1964.
- ❖ Sankaraiah was elected to the Tamil Nadu Assembly in 1967, 1977 and 1980.
- ❖ He was also secretary of the party's state committee from 1995 to 2002.
- ❖ Earlier in 2021, Sankaraiah was conferred with the Thagaisal Thamizhar Award by Chief Minister.

The Infosys Prize 2023

- ❖ Infosys Science Foundation (ISF) announced the winners of the Infosys Prize 2023.
- ❖ The winners of Infosys Prize are given in six categories –
 - Engineering and Computer Science - Sachchida Nand Tripathi, IIT-Kanpur,
 - Humanities - Jahnvi Phalkey, founding director, Science Gallery Bengaluru
 - Life Sciences - Arun Kumar Shukla, Professor, IIT-Kanpur
 - Mathematical Sciences - Bhargav Bhatt
 - Physical Sciences - Mukund Thattai, NCBS, Bengaluru
 - Social Sciences - Karuna Mantena, Columbia University.

Former RBI Governor S Venkitaramanan

- ❖ Former Governor of the Reserve Bank of India S Venkitaramanan passed away recently.
- ❖ He was a member of the Indian Administrative Service and prior to taking up the role of RBI Governor.



- ❖ He had served as the Finance Secretary and later as an Adviser to the Government of Karnataka.
- ❖ He had served the RBI between December 1990 and December 1992.

2023 Kenneth Building award

- ❖ Bina Agarwal, a professor at the University of Manchester, received the Kenneth Boulding Award in Ecological Economics along with David Barkin in Colombia.
- ❖ The International Society for Ecological Economics presented this award.
- ❖ This is awarded for their significant contributions to ecological economics, focusing on environmental governance, agrarian change, and social equity in developing countries.

19th Asian Power awards 2023

- ❖ This award recognizes and celebrates the innovative and ground-breaking projects and initiatives in the power sector.
- ❖ It is dubbed as the "Oscars" of the power industry.
- ❖ GAIL India Limited won the 'Innovation Award – India' and 'Midstream Project of the Year – India' award.
- ❖ BPCL, ONGC, DigiGrid, Adani Electricity and Kirloskar Brothers limited are the other winners in various categories.

Shanti Swarup Bhatnagar award 2022

- ❖ Rajnish Kumar, a faculty member in (IIT Madras), has bagged the Shanti Swarup Bhatnagar award in the field of engineering for the year 2022.
- ❖ He has been pursuing research on sequestering carbon dioxide (CO₂), a process by which carbon is returned to earth.
- ❖ Currently, India produces 2.8 billion tonnes of CO₂ a year.
- ❖ It costs ₹4.50 to capture one kg of CO₂ from point source today.
- ❖ This means, to produce 1 kilowatt hour of electricity one has to roughly, on an average, produce 1 kg of CO₂ by coal.


51st International Emmy award

- ❖ India's comedian Vir Das won the International Emmy for Comedy.
- ❖ He became the first comedian from the country to win the International Emmy Awards for his Netflix stand-up show.

- ❖ He shared the trophy with popular British teen sitcom 'Derry Girls' Season 3.
- ❖ Acclaimed producer Ekta Kapoor was honoured with the International Emmy Directorate Award.
- ❖ This is awarded for her 'trailblazing career and impact on the Indian television landscape'.

Justice Fathima Beevi

LIFE THROUGH THE YEARS

<ul style="list-style-type: none"> ● April 30, 1927: Born in P'Thitta to Annaveettil Meera Sahib and Khadeeja Beevi ● 1950: Graduated from Government Law College, Thiruvananthapuram, becoming the first woman in the state to secure a law degree ● Topped Bar Council exam ● Enrolled in Bar Council ● 1958: Served as Munsiff in the Kerala Subordinate Judicial Services ● 1968: Appointed subordinate judge in Kerala ● 1972: Appointed chief judicial magistrate ● 1974: Appointed district & sessions judge ● 1980: Served as judicial member of the Income Tax Appellate Tribunal 	<ul style="list-style-type: none"> ● 1983: Elevated to the High Court as a judge ● 1984: Becomes a permanent judge at the High Court <div style="text-align: center; margin: 10px 0;">  </div> <ul style="list-style-type: none"> ● 1989: Retires from High Court ● 1989: Appointed judge in the Supreme Court, becoming the first Muslim woman judge in 	<ul style="list-style-type: none"> any higher judiciary ● 1992: Retires from top court ● 1993-1997: Serves as a member of the National Human Rights Commission ● 1997: Assumes role of Tamil Nadu governor Rejects mercy petitions of four accused in the Rajiv Gandhi assassination case Administered oath of office and secrecy to former TN CM J Jayalalitha swiftly after the AIADMK secured a majority in the Assembly elections in May 2001, a move that stirred controversy ● 2001: Resigns from governor's post ● November 23, 2023: Breathes her last at Travancore Medicity Hospital, Kollam
---	--	--

- ❖ Justice M. Fathima Beevi, the first woman judges to be appointed to the Supreme Court of India, passed away recently.
- ❖ She was also the first Muslim woman judge to be appointed to any higher judiciary.
- ❖ She becoming the first woman to receive a Bar Council gold medal.
- ❖ SC since its inception, and in over 71 years, had appointed only 11 lady judges, starting from M Fathima Beevi in 1989.
- ❖ Upon her retirement, she first served as a member of the National Human Rights Commission.
- ❖ Later in 1997, she was appointed as the Governor of Tamil Nadu.
- ❖ She became the first Muslim woman to hold the governor's office and Tamil Nadu's first and only female governor.



- ❖ She resigned from the post of Governor of Tamil Nadu after rejecting the mercy petitions filed by four condemned prisoners in the Rajiv Gandhi assassination case.

Nandini Azad

- ❖ Nandini Azad, has been re-elected to the International Raiffeisen Union (IRU) Board for the second term.
- ❖ She is the president of the Indian Co-operative Network for Women (ICNW) and the Working Women's Forum (India).
- ❖ On September 2018, she was the first woman to join the IRU Board.
- ❖ IRU is a worldwide association of national cooperative organisations that is regarded as 'Father of Cooperatives', has 53 member organisations.
- ❖ Ms. Azad is a Global Coordinator of Cooperatives, a prestigious nomination by the World Farmers Organisation in Rome.

BBC 100 Women 2023 List

- ❖ BBC's 100 Women 2023 list highlights the women's rights and diverse life experiences of inspiring women globally.
- ❖ It includes three Indian women viz. Actress Dia Mirza, Cricketer Harmanpreet Kaur, Photographer Arati Kumar- Rao, and Tibetan Buddhist nun Jetsunma Tenzin Palmo.
- ❖ Actress Mirza, serving as a Goodwill Ambassador of the UNEP, actively advocates for issues such as climate change, clean air and wildlife protection.
- ❖ Kaur recently made history by becoming the first Indian woman to be named one of Wisden's five Cricketers of the Year.
- ❖ Arati Kumar-Rao has been recognised for her impactful work documenting the changing landscape caused by climate change across South Asia.

PRSI National Awards 2023

- ❖ The newsletter of Hyderabad Airport Metro Ltd (HAML) won the Public Relations Society of India (PRSI) national award.
- ❖ HAML shared the first prize with ITC Ltd.
- ❖ Garden Reach Shipbuilders and Engineers (GRSE) Limited has bagged awards for five distinct categories
- ❖ The PRSI Awards is an annual recognition program that acknowledges outstanding achievements in the field of public relations and corporate communications.

SPORTS

Asian Para Games 2023 – China

- ❖ India finished the Asian Para Games 2023 with a best-ever medal tally of 111 medals.
- ❖ It includes 29 gold, 31 silver and 51 bronze.
- ❖ India's this record-breaking medal, which is more than the 72 medals in 2018.
- ❖ The Indian contingent's 29 gold medals were a new record, and in 2014, they only won three golds.
- ❖ Women formed 37 percent of the Indian contingent in Hangzhou, winning 40 medals out of the 111 hauls.

Rank	Country	Gold	Silver	Bronze	Total
1	China	214	167	140	521
2	IR Iran	44	46	41	131
3	Japan	42	49	59	150
4	South Korea	30	33	40	103
5	India	29	31	51	111

Angelo Mathews - 'Timed out'

- ❖ Sri Lankan all-rounder Angelo Mathews became the first cricketer to be dismissed timed out in ODI cricket.
- ❖ 'Timed out' is one of the 10 ways in which a batter can be adjudged out according to the laws established by Marylebone Cricket Club (MCC).
- ❖ After a wicket falls, a new batter gets 120 seconds (2 minutes) to take guard for the next ball.
- ❖ In case she/he fails to take strike for the next ball within this stipulated time, she/he can be adjudged out.

Raja Bhalindra Trophy

- ❖ The recently concluded 2023 National Games had 11,000 athletes from across India participated in 45 different sports.
- ❖ Maharashtra finished with a total of 228 medals, including 80 gold, 69 silver and 79 bronze medals.

- ❖ SSCB (Services Sports Control Board), run by Indian Armed Forces, finished second, bagging 66 gold, 27 silver and 33 bronze medals.
- ❖ Haryana were third in the standings with 62 gold, 54 silver and 73 bronze.
- ❖ Maharashtra claimed the prestigious Raja Bhalindra Singh Rolling Trophy for the overall championship, which they hadn't achieved since 1994.

Asian Archery Championships 2023

- ❖ Asian Archery Championships 2023 was held in Bangkok, Thailand.
- ❖ India won three gold, one silver and three bronze.

Name	Event	medal
Parneet Kaur	women's compound	Gold
Aditi Swami, Priyansh	mixed compound	Gold
Parneet Kaur, Jyothi Surekha Vennam, Aditi Swami	women's compound team	Gold
Jyothi Surekha Vennam	women's compound	Silver
Abhishek Verma	men's compound	Bronze
Tisha Punia, Bhajan Kaur, Ankita Bhakat	women's recurve team	Bronze
Abhishek Verma, Prathamesh Fuge, Priyansh	men's compound team	Bronze

World Cup 2023



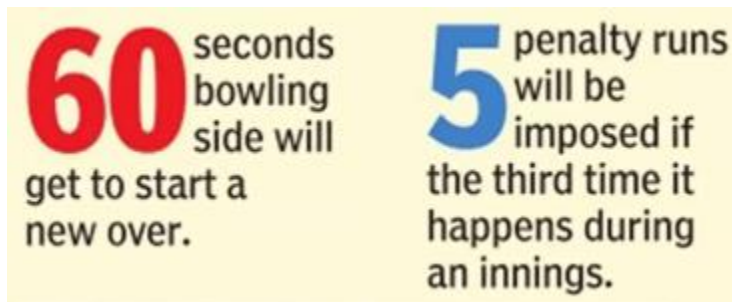
- ❖ Australia defeated India by six wickets to win their sixth ODI World Cup in Ahmedabad, Gujarat.
- ❖ India had won 10 successive matches before losing the 2023 World Cup final.
- ❖ Australia had won their first World Cup in 1987.
- ❖ And then followed it up with three successive titles in 1999, 2003 and 2007.
- ❖ It also won in the 2015 title.



- ❖ India has won this in 1983 and 2011.
- ❖ Australia had defeated India in the final of the 2003 ODI World Cup.
- ❖ Travis Head of Australia was man of the match in Final while Virat Kohli of India was the player of the series.

Stop Clock to Regulate Pace of Play

- ❖ The ICC board has introduced a stop-clock system to prevent teams from wasting time.
- ❖ Under this regulation, this will come into effect from December 1 and continue till April 2024.
- ❖ The clock will be used to regulate the amount of time taken between overs.
- ❖ Once an over is finished, the fielding team will have to be ready within 60 seconds to bowl the next over.
- ❖ A five-run penalty will be imposed the third time it failed to do so in an innings.

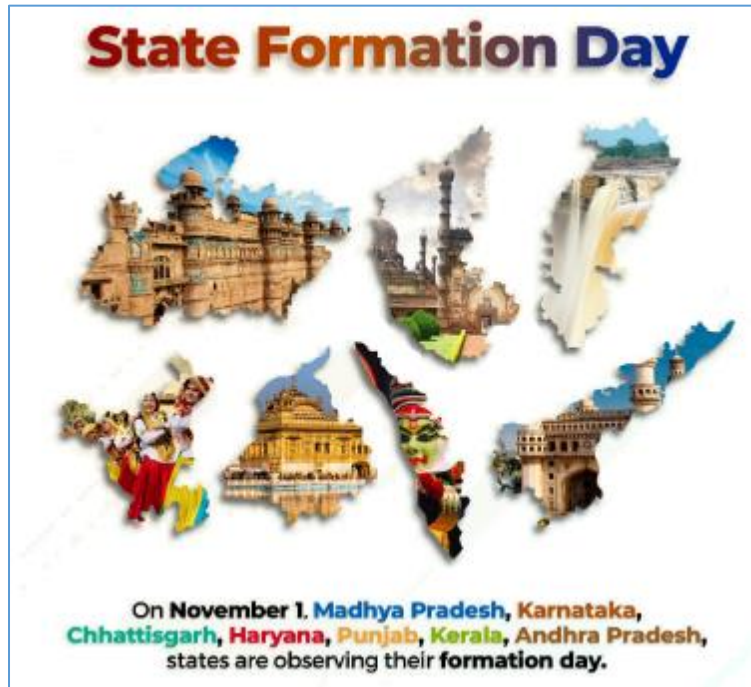


IMPORTANT DAYS

Vigilance Awareness Week 2023

- ❖ The Central Vigilance Commission is observing the Vigilance Awareness Week 2023 from 30th October to 5th November, 2023.
- ❖ Theme of the event is "Say no to corruption; commit to the Nation."
- ❖ The extent of the black economy in India is estimated to be 62% of the GDP — generating (ay 2016-17 levels) about Rs 93 lakh crores.
- ❖ India has been ranked 73 out of 99 countries in the Corruption Perception Index.

State Formation Day 2023 - November 01



- ❖ November 1 marks the formation day for eight Indian states - Andhra Pradesh, Chhattisgarh, Haryana, Karnataka, Kerala, Madhya Pradesh, Punjab and Tamil Nadu.
- ❖ Tamil Nadu was created on 1 Nov 1956 with the name Madras State.
- ❖ It was renamed later to Tamil Nadu in July (18) 1967.
- ❖ Andhra Pradesh was formed on 1 Nov 1956 after it was bifurcated from United Andhra Pradesh.
- ❖ Chhattisgarh was formed as a state on 1 Nov 2000.
- ❖ Haryana was formed as a state on 1 Nov 1966 after it was carved out of the former state of East Punjab on a linguistic basis.
- ❖ Karnataka came into existence on 1 Nov 1956 as Mysore state.
- ❖ It was later renamed Karnataka in 1973.
- ❖ Kerala was formed on 1 Nov 1956 following the passage of the States Reorganisation Act.
- ❖ Madhya Pradesh state was formed on 1 Nov 1956 following the reorganisation of the states.
- ❖ Punjab Day is also celebrated across the state on November 1 marking the formation of the state under the Punjab Reorganisation Act (1966).

International Day to End Impunity for Crimes against Journalists 2023 - November 02

- ❖ The day came into existence when the United Nations General Assembly (UNGA) passed a resolution in December 2013.
- ❖ The day draws attention to impunity, i.e., culprits going unpunished, to crimes against journalists.
- ❖ Theme for 2023 is “Violence against journalists, the integrity of elections, and the role of public leadership”
- ❖ 117 journalists were killed in 2020-2021.
- ❖ In 2020 and 2021, Latin America and the Caribbean accounted for 38% of killings, followed by Asia and the Pacific with 32% of killings.
- ❖ In 2021, the percentage of women among all journalists killed almost doubled, rising to 11% from 6% the previous year.

International day against violence and bullying at school including cyberbullying 2023 - November 02

- ❖ In 2019, 193 UNESCO Member States declared the first Thursday of November as this International Day observance.
- ❖ This day was recognizing that bullying in schools and cyberbullying is an infringement of children's and adolescents' rights to education and to health and well-being.
- ❖ Theme for 20203 is - No place for fear: Ending school violence for better mental health and learning.



Zojila Day 2023 - November 01



- ❖ This day celebrates the gallant action by Indian troops in 'Operation Bison' in 1948.
- ❖ It was launched on the icy heights of Zojila pass, the gateway to Ladakh.
- ❖ This battle was also historic for the reason that tanks were used for the first time at such heights.
- ❖ Zojila is a pass connecting the Kashmir Valley with the cold Indus valley desert in Ladakh region.

International Day for Biosphere Reserves 2023 - November 03

- ❖ It aims to raise awareness of the importance of biosphere reserves and to promote their conservation and sustainable use.
- ❖ According to UNESCO, there are currently 748 biosphere reserves across 134 countries, including 22 transboundary sites.
- ❖ They impact the lives of more than 250 million people in 134 countries; 12 sites can be found in India alone.
- ❖ Recently, UNESCO and India conducted the 10th South and Central Asian Biosphere Reserve Network Meeting (SACAM) in Chennai, With the theme “Ridge to Reef.”

World Tsunami Awareness Day 2023 - November 05

- ❖ The aim of the days is to build a culture of tsunami and coastal hazards awareness for all peoples at risk.
- ❖ Tsunamis, born from diverse underwater disturbances, are formidable natural disasters with the potential to inflict massive harm.

- ❖ They typically result from underwater disturbances, including earthquakes, volcanic eruptions, landslides, and even extraterrestrial collisions.
- ❖ Theme for 2023 is “Fighting Inequality for a Resilient Future.”

World Day of Romani Language 2023 - November 05

- ❖ UNESCO proclaimed the World Day of Romani Language in 2015.
- ❖ It aims to promote the preservation of Romani language and culture, improve the well-being of Romani people, and recognize the importance of all languages.
- ❖ The Romani language has about 33,000 words and it represents a good basis for its modernization and final standardization.

International Day for Preventing the Exploitation of the Environment in War and Armed Conflict 2023 - November 06

- ❖ The day is aimed at raising awareness about the devastating effects of war on the environment.
- ❖ The United Nations established this day in order to raise awareness about the problem and to ensure the protection of the environment during war.
- ❖ It highlights the connection between environmental safeguard and peace as part of peace-building.

National Cancer Awareness Day 2023 - November 07

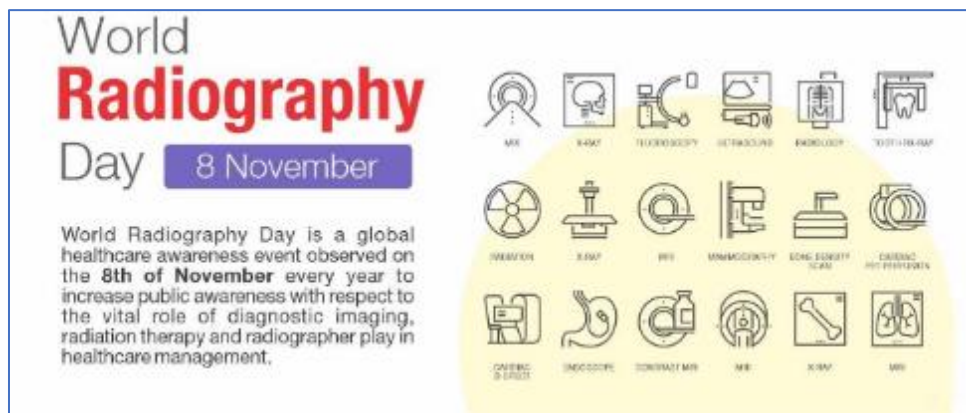


- ❖ This day is observed in India every year since 2014 to create public awareness about early detection, prevention, and treatment of cancer.
- ❖ It aims to inform and educate masses about cancer, its treatment, and how early action can drastically improve survival rates.

- ❖ Cancer is the second leading cause of death worldwide, representing nearly 1 in 6 deaths globally.
- ❖ One in 10 Indians would develop cancer in their lifetime and one in 15 would die of it.

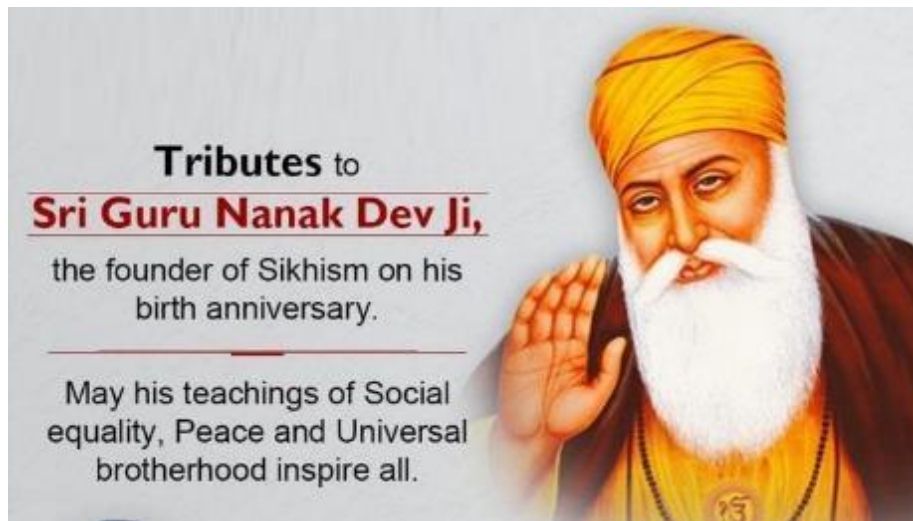
World Radiography Day 2023 - November 08

- ❖ The day aims to create awareness about the crucial role of radiographers in the healthcare system.
- ❖ On November 8, 1895, Wilhelm Conrad Roentgen, a German physicist discovered x-radiations.
- ❖ Radiography is the science of using radiation to provide images of tissues, organs, bones and vessels inside the human body.
- ❖ The theme for 2023 is "Celebrating patient safety."



Guru Nanak Dev's Birth Anniversary - November 08

- ❖ The first Sikh guru, Guru Nanak, was born on Guru Nanak Jayanti, also known as Guru Nanak's Prakash Utsav.
- ❖ It is celebrated to mark the anniversary of their first Sikh Guru who played an important role in shaping and strengthening the Sikh community.
- ❖ Guru Nanak is believed to have founded Sikhism.
- ❖ According to the Nanak shahi calendar, Guru Nanak was believed to have been born on April 14, which is Vaisakhi.
- ❖ However, some Sikh communities hold the belief that Guru Nanak was born on the full moon day of Kartik, the lunar month that falls between October and November.



World Town Planning Day 2023 - November 08

- ❖ It aims to celebrate how good planning improves the lives of people and benefits society at large, creating places where to live, work and play together.
- ❖ Argentinian professor Carlos María della Paolera started World Town Planning Day in Buenos Aires in 1949.
- ❖ This year's theme is Learn Globally, Apply Locally.

National Legal Services Day 2023 - November 09

- ❖ This day marks the adoption of the Legal Services Authorities Act 1987.
- ❖ It was officially enacted on the same date in 1995.
- ❖ This day serves to raise awareness about the availability of free legal aid for all citizens, regardless of their background or identity.

World Usability Day 2023 - November 09

- ❖ Every year on the second Thursday of November, the world observes World Usability Day.
- ❖ The goal of this day is to bring together various communities that can work together to make the world a better place to live.
- ❖ This day also focuses on the responsibility of every user to demand better quality products.
- ❖ Theme for 2023 is 'Collaboration and Cooperation'.

World Quality week 2023



- ❖ This week annually observed across the globe on the 2nd week of November to recognise the achievements of quality professionals.
- ❖ This serves as a platform to recognise and celebrate the efforts of individuals and organisations that are committed to delivering high-quality products and services.
- ❖ The theme of 2023 is “Quality: realising your competitive potential”.

International Week of Science and Peace – November 09/15

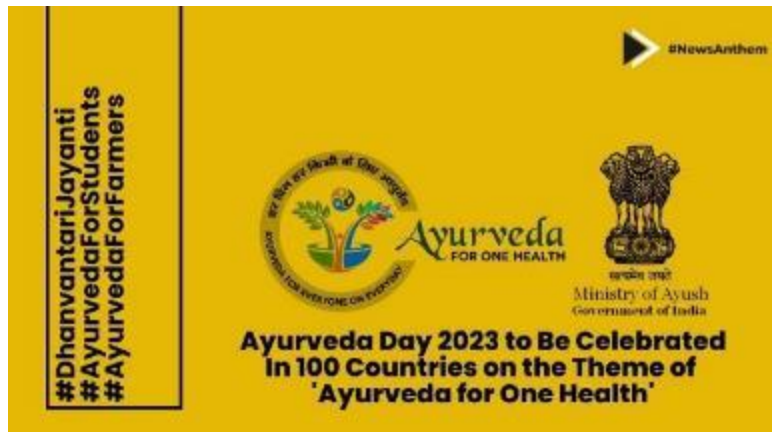
- ❖ This International Week was first observed during 1986 as part of the observance of the International Year of Peace.
- ❖ This week observed take place each year during the week in which 11 November falls.
- ❖ The Week encourages greater academic exchanges on a subject of universal importance while also generating greater awareness of the relationship of science and peace among the general public.



World Science Day for Peace and Development 2023 - November 10

- ❖ It highlights the important role of science in society and also emphasises the importance and relevance of science in our daily lives.
- ❖ The idea for this day emerged from the 1999 World Conference on Science in Budapest, Hungary.
- ❖ The theme for 2023 is "Building Trust in Science".

National Ayurveda Day 2023 - November 10



- ❖ This year National Ayurveda Day was observed globally in approximately 100 countries.
- ❖ The aim of the day is to raise awareness about the value of Ayurveda in improving health and daily life.
- ❖ This day is celebrated annually on Dhanvantari Jayanti (Dhanteras).
- ❖ The theme of 2023 is 'Ayurveda for everyone on every day.'

World Public Transport Day 2023 - November 10



- ❖ World Public Transport Day was first celebrated on November 10, 2005.
- ❖ This day aims to raise awareness of the benefits of public transport, such as reducing traffic congestion, air pollution, and greenhouse gas emissions.
- ❖ This is the initiative of the International Association of Public Transport (UITP).
- ❖ The theme of 2023 is 'Invest in Public Transport'.

World Immunization Day 2023 - November 10

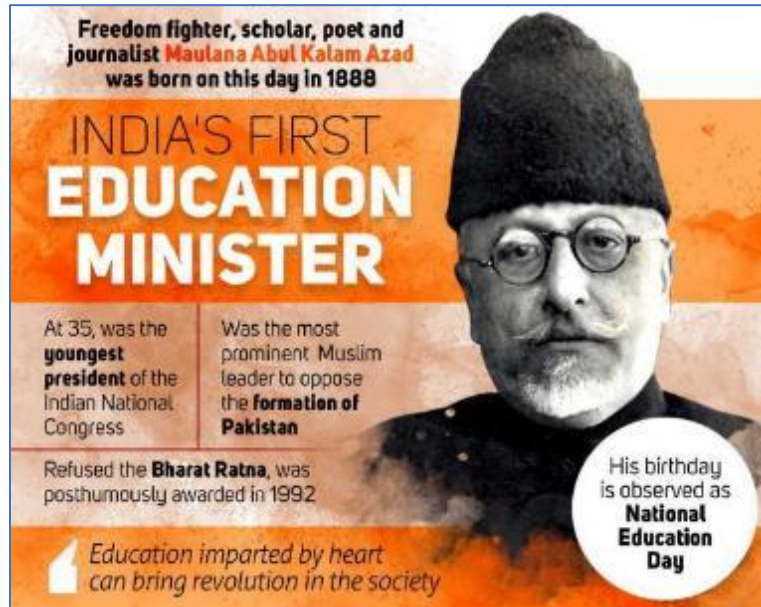


- ❖ This day intended to create awareness of the significance of immunisation by getting timely vaccination and how it can be prevented from different diseases.
- ❖ As per the WHO, vaccinations prevent approximately 35 to 50 lakh deaths annually and protect children not only from diseases like measles, polio, tetanus, and diphtheria.
- ❖ In 2022, about 84% of infants worldwide (11 crore) received three doses of the diphtheria-tetanus-pertussis (DTP3) vaccine.

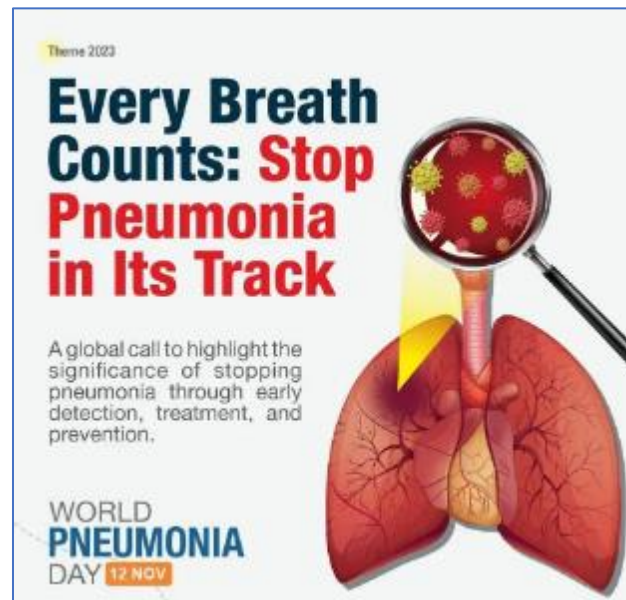
National Education Day 2023 - November 11

- ❖ This day mark the birth anniversary of Maulana Abul Kalam Azad who was the first education minister of independent India.
- ❖ He served as the education minister from August 15, 1947 to February 2, 1958.
- ❖ He was responsible for setting up the top education bodies including the All-India Council for Technical Education (AICTE) and the University Grants Commission (UGC).

- ❖ He also established the first Indian Institute of Technology – IIT Kharagpur.
- ❖ The Indian Council for Cultural Relations (ICCR), Sahitya Academy, Lalit Kala Academy, Sangeet Natak Academy and Council of Scientific and Industrial Research (CSIR) were also set up under his guidance.



World Pneumonia Day 2023 - November 12



- ❖ On 12 November 2009, the first World Pneumonia Day was observed.
- ❖ Pneumonia is a treatable disease, yet a child dies from it every 20 seconds around the world.



- ❖ This day provides a significant platform to educate the public about the disease, its symptoms, and possible treatment options.
- ❖ This year theme is "Every Breath Counts: Stop Pneumonia in Its Track".

World Kindness Day 2023 - November 13

- ❖ This day aims to raise awareness of acts of kindness in the community, emphasising the power of positivity and the compassion that unites us all.
- ❖ This day dates back to 1997 when the World Kindness Movement held its first conference in Tokyo, Japan.
- ❖ The theme for the year 2023 is "Be Kind Wherever Possible."

World AMR Awareness Week 2023 - November 18/24

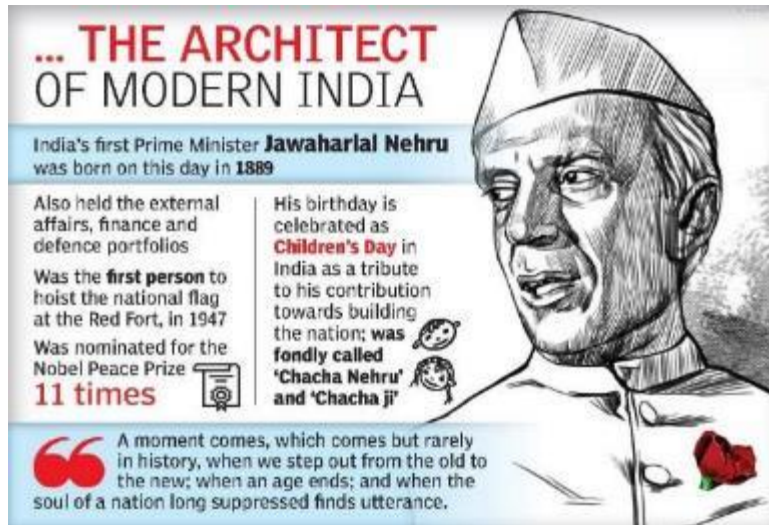
- ❖ Antimicrobial Resistance (AMR) occurs when bacteria, viruses, fungi and parasites no longer respond to antimicrobial agents.
- ❖ It is a global campaign to raise awareness and understanding of AMR and promote best practices among One Health stakeholders to reduce the emergence and spread of drug-resistant infections.
- ❖ The theme for WAAW 2023 will remain "Preventing antimicrobial resistance together", as in 2022.

International Day against Illicit Trafficking in Cultural Property 2023 - November 14

- ❖ UNESCO adopted resolution for this day during its 40th General Conference in 2019.
- ❖ It aims to drawing more attention to this crime and the ways to combat it.
- ❖ It also highlights the importance of international cooperation and proactive measures through the Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property (1970).

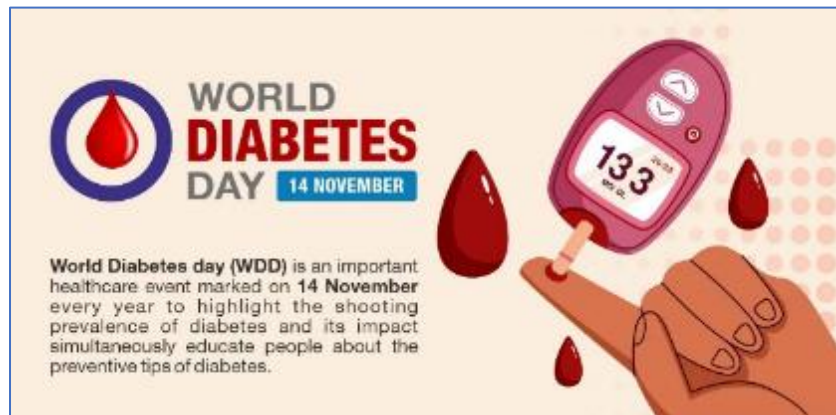
National Children's Day - November 14

- ❖ The day is celebrated to honour Pandit Nehru, who was also popularly known as 'Chacha Nehru'.
- ❖ This is due to his love for children and his dedication to nurturing young minds.
- ❖ In 1957, November 14 was officially declared Children's Day in India.
- ❖ The theme of this year's Children's Day, 'For every child, every right'



World Diabetes Day 2023 - November 14

- ❖ This day aims to raise global awareness about diabetes.
- ❖ It is initiated by the International Diabetes Federation and the World Health Organization.
- ❖ The day serves to educate and advocate for better access to healthcare, medication, and support for those affected by diabetes worldwide.
- ❖ More than 100 million Indians suffer from diabetes and close to 140 million are prediabetic.
- ❖ Theme of this year is “Access to diabetes care”.



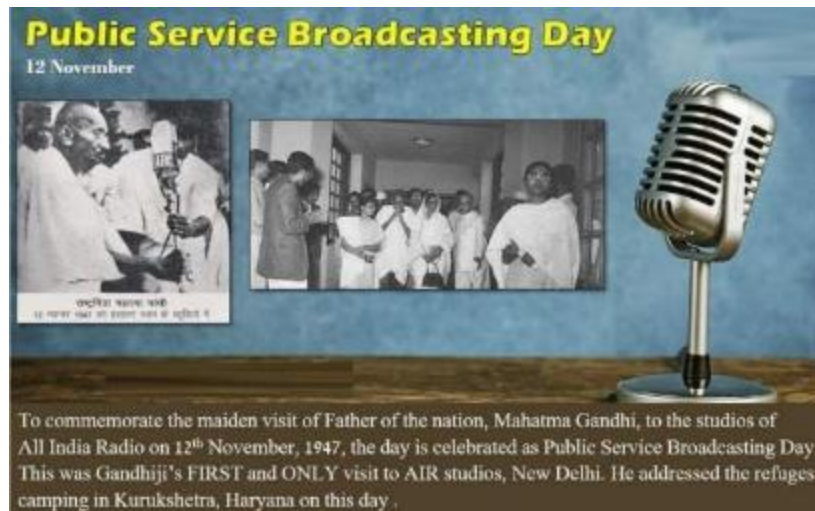
Jharkhand Foundation Day 2023 - November 15

- ❖ In 2000, Jharkhand emerged as the 28th independent state.
- ❖ It was carved out of the southern part of Bihar after the Parliament passed the Bihar Reorganisation Act of 2000.

- ❖ This day also celebrates the birth anniversary of Birsa Munda, a popular tribal leader.



Public service broadcasting day 2023 - November 12



- ❖ The day is celebrated every year to commemorate the only visit of MK Gandhi to the studio of All India Radio, Delhi in 1947.
- ❖ He addressed the displaced people, who had temporarily settled at Kurukshetra in Haryana after partition.
- ❖ The day was officially declared as Public Service Broadcasting Day in 2001.

International Day of Tolerance 2023 - November 16

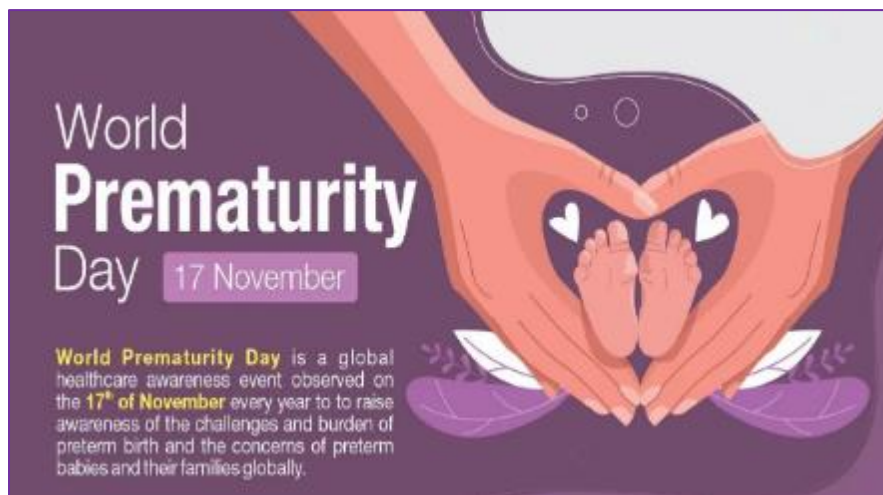
- ❖ International Day for Tolerance was initially established by the United Nations in 1996.
- ❖ It aims to promote understanding among cultures and foster respect for diversity.

- ❖ This day is observed in commemoration of the adoption of the Declaration of Principles on Tolerance by UNESCO member states on November 16, 1995.

National Press Day 2023 - November 16

- ❖ This day is observed to commemorate the establishment of the Press Council of India (PCI) in 1966.
- ❖ It is a statutory body which was established to ensure the freedom of the press and to maintain and improve the standards of journalism.
- ❖ The quasi-judicial body was re-established in the year 1979 under the Press Council Act, 1978.
- ❖ The theme for 2023 is “Media in the Era of Artificial Intelligence”.

World Prematurity Day 2023 - November 17

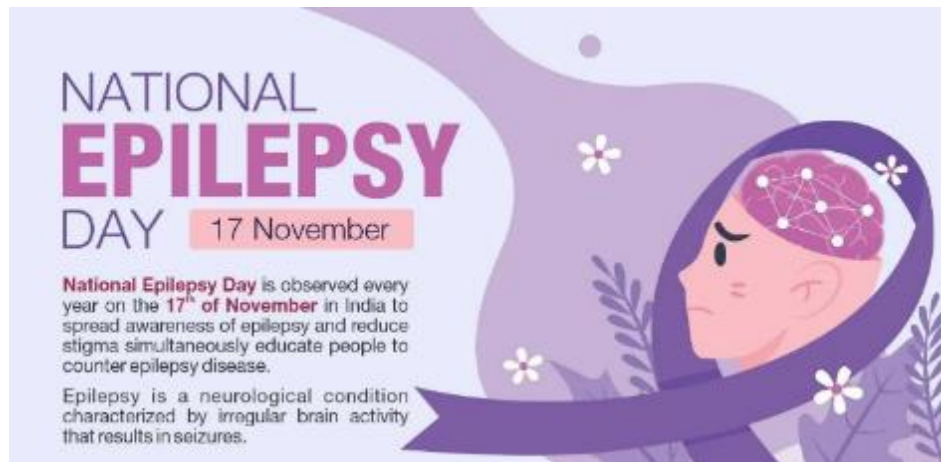


- ❖ This day raises the global awareness of the challenges for women and babies associated with preterm birth, and celebrates the lives of preterm infants.
- ❖ Preterm birth is a leading cause of death among children under five.
- ❖ Around 15 million babies (one in ten) born prematurely worldwide every year.
- ❖ Prematurity is the broad category of newborns born before 37 weeks of gestation.
- ❖ This year theme is "Small actions, BIG IMPACT: Immediate skin-to-skin care for every baby everywhere".

National Epilepsy Day 2023 - November 17

- ❖ It aims to raise awareness around epilepsy and also its impact on people, families and the society.

- ❖ The day was first observed by the Epilepsy Foundation of India and was established by Dr Nirmal Surya.
- ❖ A persistent brain illness called epilepsy is marked by periodic "fits" or "seizures."
- ❖ Around 50 million people worldwide are affected by epilepsy.
- ❖ And India accounts for nearly 10-20 percent (5-10 million) of the global burden of epilepsy.



National Newborn Week 2023 - November 15/21

- ❖ It aims to raise awareness about the importance of newborn care for child survival and development.
- ❖ Every year, 26 lakh babies die within the first 28 days of life, typically most of them dying within the first week, and an additional 26 lakh stillbirths occur.
- ❖ In 2014, India was the first country to launch the India Infant Action Plan (INAP).
- ❖ In 2021, an e-event for National Newborn Week was hosted by MoHFW



World Chronic Obstructive Pulmonary Disease Day 2023 - November 18



- ❖ World COPD Day is celebrated every year on the third Wednesday of November across the world.
- ❖ It is a global healthcare event to raise awareness of Chronic Obstructive Pulmonary Disease (COPD).
- ❖ The theme for 2023 "Breathing is Life - Act Earlier".

National Naturopathy Day 2023 - November 18

- ❖ It aims to raise awareness of the benefits of drug-free therapy in promoting good mental and physical health.
- ❖ Naturopathy holds a significant place in the realm of alternative medicine.
- ❖ Its core philosophy revolves around treating illnesses and fostering overall well-being by harnessing the healing potential of natural elements.
- ❖ It often intertwined with Ayurveda due to similarities in principles, objectives, and rules.
- ❖ The theme for this year is "Naturopathy for Holistic Health".



World Day for the Prevention of and Healing from Child Sexual Exploitation, Abuse, and Violence 2023 - November 18



- ❖ It is a global initiative to raise awareness about the devastating impact of child sexual exploitation, abuse, and violence (CSEAV),
- ❖ The adoption of the Convention on the Rights of the Child (CRC) in 1989 marked a significant turning point in the issue of CSEAV.
- ❖ In 1996, the World Congress against Commercial Sexual Exploitation of Children was held in Stockholm, Sweden.
- ❖ The theme for 2023 is “Strengthening Prevention: A Collective Responsibility.”

National Naturopathy Day 2023 - November 18

- ❖ The day was declared by the Ministry of AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy) in 2018.
- ❖ It was on this day in 1945 when MK Gandhi became lifetime Chairman of the All-India Nature Cure Foundation Trust.
- ❖ The National Institute of Naturopathy (NIN), Pune has released a book on Naturopathy Day titled as ‘Gandhi the Healer’.
- ❖ Theme of this year is “Naturopathy for holistic Health”.
- ❖ MK Gandhi himself was a proponent of this practice.
- ❖ He wrote a book called Nature Cure.
- ❖ He helped set up Nisargopachar Ashram, a naturopathy centre, at Urulikanchan near Pune.

Women Entrepreneur's Day 2023 - November 19

- ❖ It aims to recognise the achievement of women entrepreneurs and to support the efforts of women to build their business ventures.
- ❖ This global initiative was established by the Women's Entrepreneurship Development Organization (WEDO).
- ❖ The first Women Entrepreneurship Day was observed in New York City in 2014.
- ❖ Theme of 2023 is "Let's make a better future".

International Men's Day 2023 - November 19

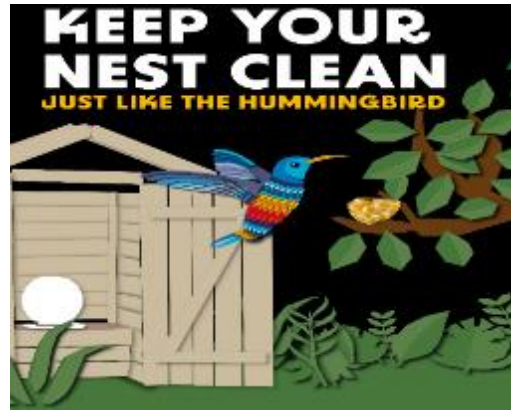
- ❖ It celebrates the contributions men make to society, families and communities around the world.
- ❖ Thomas Oaster was the founder of this Day in 1992.
- ❖ First International Men's Day observed in 1999.
- ❖ The theme for 2023 is 'Zero Male Suicide'.

National Integration Day 2023 - November 19



- ❖ This day marks the birth anniversary of the first woman Prime Minister of India, Indira Gandhi.
- ❖ The day aims to motivate people about keeping unity, peace, love, and brotherhood among them.
- ❖ The day is used to dissuade the youth of our country to engage with anti-social elements and other anti-national activities which may threaten the unity of the nation.

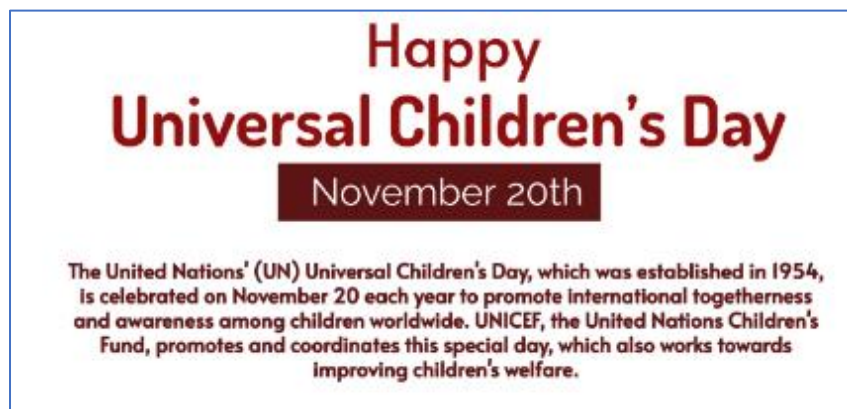
World Toilet Day 2023 - November 19



- ❖ In 2001, the NGO World Toilet Organisation declared November 19 as World Toilet Day.
- ❖ The hummingbird is the symbol of World Toilet Day and World Water Day 2023.
- ❖ Theme for this year is 'Accelerating Change'.

Universal Children's Day 2023 - November 20

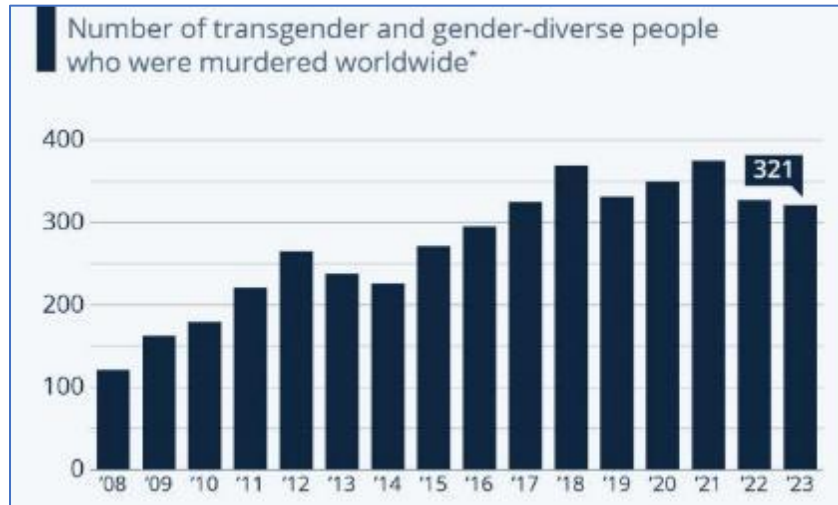
- ❖ This day commemorates the Declaration of the Rights of the Child by the UN General Assembly on the same day on 1959.
- ❖ It was first established in 1954 as Universal Children's Day.
- ❖ The theme for this year is 'For every child, every right'.



Transgender Day of Remembrance 2023 - November 20

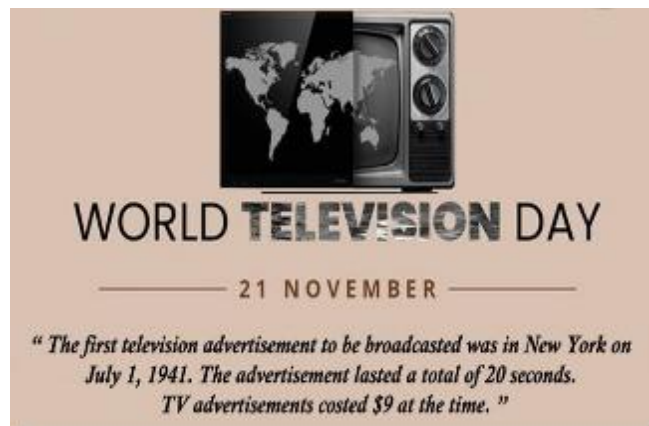
- ❖ This day is observed after the murder of trans-woman Rita Hester in November 1998.
- ❖ It aims to honour the memory of the many transgender people whose lives have been cut short due to anti-transgender violence.

- ❖ In 2023, Brazil was once more home to the highest number of trans people reported killed, at 100 people.



World Television Day 2023 - November 21

- ❖ This day highlights the importance of television as something beyond an electronic tool.
- ❖ On November 21, 1996, the United Nations held the first World Television Forum.
- ❖ TV was invented by a Scottish engineer, John Logie Baird, in 1924.
- ❖ It was introduced in India on September 15, 1959, in New Delhi.



World Day of Remembrance for Road Traffic Victims 2023 - November 21

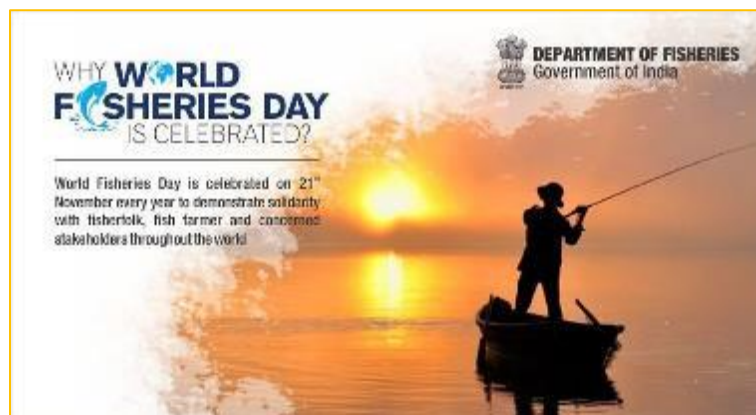
- ❖ The World Day of Remembrance for Road Traffic Victims was started by Road Peace in 1993.
- ❖ In 2005, the United Nations endorsed it as a global day to be observed every third Sunday in November each year.

- ❖ Theme of this year is 'Remember. Support. Act'.
- ❖ Every 24 seconds someone dies on the world's roads, with over 90% of fatalities taking place in low- and middle-income countries.
- ❖ In India, 1.68 lakh people died on the spot due to road accidents in 2022.



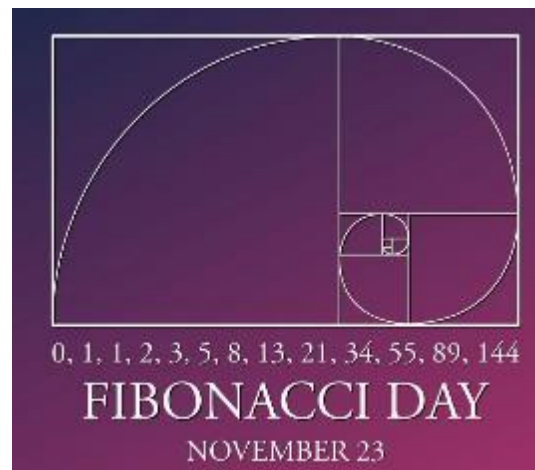
World Fisheries Day 2023 - November 21

- ❖ This day aims to demonstrate solidarity with all fisher folk, fish farmers and concerned stakeholders throughout the world.
- ❖ It started in 1997 where "World Forum of Fish Harvesters & Fish Workers" met at New Delhi.
- ❖ This event is leading to formation of "World Fisheries Forum" with representatives from 18 countries.
- ❖ They have signed a declaration advocating for a global mandate of sustainable fishing practices and policies.
- ❖ The event aims to draw attention to overfishing, habitat destruction and other serious threats to the sustainability of our marine and freshwater resources.



Fibonacci Day 2023 - November 23

- ❖ November 23 is celebrated as Fibonacci day because when the date is written in the mm/dd format (11/23).
- ❖ The digits in the date form a Fibonacci sequence: 1,1,2,3.
- ❖ Fibonacci sequence is a series of numbers where a number is the sum of the two numbers before it.
- ❖ The Fibonacci sequence was introduced to the West by Italian mathematician Leonardo Fibonacci in his book “Liber Abaci” in 1202.



World Heritage week 2023 - November 19/25

- ❖ The week aims to promote the conservation of culture and heritage across the globe.
- ❖ It celebrates the heritage sites recognised by the United Nations Educational, Scientific and Cultural Organization (UNESCO).
- ❖ World Heritage sites are those places or monuments which hold cultural, historical, scientific or other forms of significance.
- ❖ The World Heritage Convention was adopted by the Member States of UNESCO in 1972.

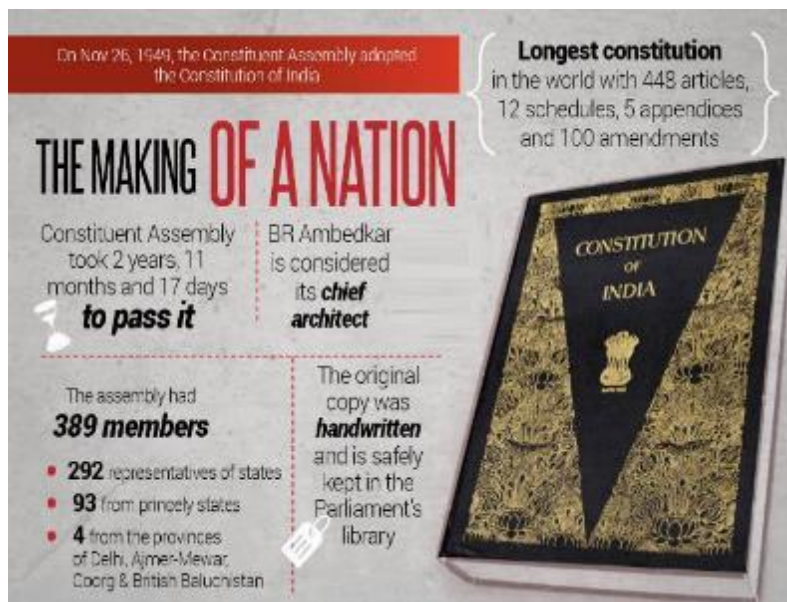
International Day for the Elimination of Violence against Women 2023 - November 25

- ❖ It aims to create awareness about the ways by which we can come together to stop violence.
- ❖ In 1979, the UNGA adopted the Convention of the Elimination of All Forms of Discrimination against Women but violence against women.

- ❖ Theme of this year is 'UNITE! Invest to prevent violence against women and girls'.



Constitution Day or Law Day 2023 - November 26



- ❖ India celebrates Constitution Day or Samvidhan Divas on November 26.
- ❖ This day marks the day when India adopted its constitution in the year 1949.
- ❖ Articles 5, 6, 7, 8, 9, 60, 324, 366, 367, 379, 380, 388, 391, 392, 393, and 394 of the constitution came into force on the same day.

- ❖ The Constitution came into force on January 26, 1950.
- ❖ The completion of the draft had taken 2 years, 11 months and 18 days.

National Milk Day 2023 - November 26



- ❖ National Milk Day commemorates the birth anniversary of Dr. Verghese Kurien.
- ❖ He is known as the 'Father of White Revolution in India'.
- ❖ He is famous for his 'Operation Flood', which is known as the world's largest agricultural program.
- ❖ He also played a key role in the establishment and success of Amul Brand.
- ❖ Operation Flood was launched on 13th January, 1970.
- ❖ It was the world's largest dairy development programme.
- ❖ India became the largest producer of milk in 1998, surpassing the U.S.
- ❖ Now, India's dairy industry is one of the largest self-sustaining sectors, contributing 4.5% to the GDP of India.

World Sustainable Transport Day 2023 - November 26

- ❖ Sustainable transport encompasses the use of energy-efficient, low or zero-emission, and affordable modes of conveyance.
- ❖ This includes a range of vehicles from manual bicycles to electric scooters, bikes, and cars, as well as the utilization of alternative fuels like biodiesel, ethanol, and hydrogen.

- ❖ This initiative celebrates such modes of transport which help in energy conservation and protection of the planet and its resources.
- ❖ The United Nations General Assembly (UNGA) declared this day on May 16, 2023.

World Tourism Day 2023 - November 27

- ❖ It aims to promote the importance of tourism all over the world and make people aware of the fun and joy related to traveling.
- ❖ This day marks the anniversary of the adoption of statutes by the World Tourism Organisation.
- ❖ The World Tourism Organisation announced this Day in 1979.
- ❖ The theme for this year is Tourism and Green Investments.

Red Planet Day 2023 - November 28



- ❖ This day mark the launch of Mariner 4, the first aircraft to land on Mars in 1964.
- ❖ Mariner 4 helped humans see images showing lunar-type impact craters, some of them touched with frost.
- ❖ Mars is known as the Red Planet because its surface is coated in rusty red soil, rock and dust formed of iron oxide.
- ❖ The Red Planet has two moons, called Deimos and Phobos.
- ❖ It is the fourth planet from the sun. Mars is approximately 227,936,637 kilometres (141 million miles) from the sun and from Earth.
- ❖ It would take 300 days (about eight months) to reach it.

International Jaguar Day 2023 - November 29

- ❖ It brings attention to the myriad conservation efforts led by governments, organisations and individuals.
- ❖ In 1973, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) classified jaguars as an endangered species.
- ❖ The date, November 29, was chosen to coincide with the birthday of Liso, a jaguar rehabilitated by the Belize Zoo, in Central America.

International Day of Solidarity with the Palestinian People 2023 - November 29

- ❖ On that day, in 1947, the Assembly adopted the resolution on the partition of Palestine.
- ❖ In 1977, the General Assembly called for the annual observance of this day.
- ❖ The UNGA has organised an exhibit to commemorate the Palestinian Nakba (catastrophe), event which took place during the 1948 Arab-Israeli war.
- ❖ During this time more than half of the Palestinian people were expelled from, or fled their homes and became refugees.
- ❖ Before the Nakba, Palestine was a multi-ethnic and multi-cultural society.
- ❖ 2023 marked the occasion of 75th Anniversary of the Palestinian Nakba



Day of Remembrance for all Victims of Chemical Warfare 2023 - November 30

- ❖ The day aims to encourage efforts for eliminating the use of chemical weapons and remember those who have suffered because of such warfare.

- ❖ It also aims to raise awareness about chemical weapons and the international laws against them.
- ❖ The first international agreement limiting the use of chemical weapons can be traced back to 1675 between France and Germany.
- ❖ The Chemical Weapons Convention was adopted in 1993.
- ❖ It came into force on April 29, 1997.



MISCELLANEOUS

QR codes on Food Products

- ❖ The Food Safety and Standards Authority of India (FSSAI) has recommended the inclusion of a QR (quick response) code on food products for accessibility by visually impaired individuals.
- ❖ These new QR codes should encompass comprehensive details about the product, including, ingredients, nutritional information, allergens, manufacturing date, best before/expiry/use by date, allergen warning, and contact information for customer enquiries.
- ❖ A QR code is a type of two-dimensional matrix barcode, invented in 1994, by the Japanese company Denso Wave for labelling automobile parts.
- ❖ The U.S., India, France and the U.K. are among the top users of QR code, according to reports.

Hurun India's Philanthropy List for 2023

THE TOP 10 IN THE EDELGIVE HURUN INDIA PHILANTHROPY LIST 2023					
Rank	Name	Donation (INR Cr)	Change %	Primary Cause	Company
1	Shiv Nadar & family	2,042	76%	Arts, Culture & Heritage	HCLTech
2	Azim Premji & family	1,774	267%	Education	Wipro
3	Mukesh Ambani & family	376	-8%	Healthcare	Reliance Industries
4	Kumar Mangalam Birla & family	287	18%	Education	Aditya Birla
5	Gautam Adani & family	285	50%	Education	Adani

- ❖ Shiv Nadar, the founder of HCL Technologies, has retained the title of the country's most generous man with 2,042 crore donations.
- ❖ He has topped the list for the third time in five years
- ❖ He is followed by Wipro founder Azim Premji.
- ❖ Mukesh Ambani and Kumar Mangalam Birla, came third and fourth on the list.

Old Iron Age geoglyph circle



- ❖ A geoglyph in the form of a circle, said to be 3,000 years old, has been unearthed in the Medchal-Malkajgiri district of Telangana.
- ❖ The geoglyph spans 7.5 metres in diameter and has a perfect circular shape.
- ❖ Surrounding the circle is a 30-centimetre-wide rim, and within the circle are two triangles.
- ❖ It is a first-of-its-kind discovery in Telangana.

- ❖ The team identified several grooves.
- ❖ They believe it to be from the Neolithic period, dating to 4000 BCE
- ❖ It is located five metres away from the geoglyph.

Outdoor working and skin cancer

- ❖ About one in every three deaths that take place from nonmelanoma skin cancer is reportedly caused by working outdoors under the sun.
- ❖ The World Health Organization has cautioned regarding this in a joint report along with the International Labour Organization (ILO).
- ❖ Nonmelanoma skin cancer "refers to a group of cancers that develop in the upper layers of the skin.
- ❖ The two main subtypes of this cancer are basal cell carcinoma and squamous cell carcinoma."
- ❖ As per the report, in 2019, an estimated 28 per cent of the global working-age population was exposed to solar ultraviolet radiation while working outdoors.
- ❖ Nearly 19,000 people from 183 countries succumbed to nonmelanoma skin cancer in 2019.
- ❖ More than half of these fatalities, about 65 per cent, were males.



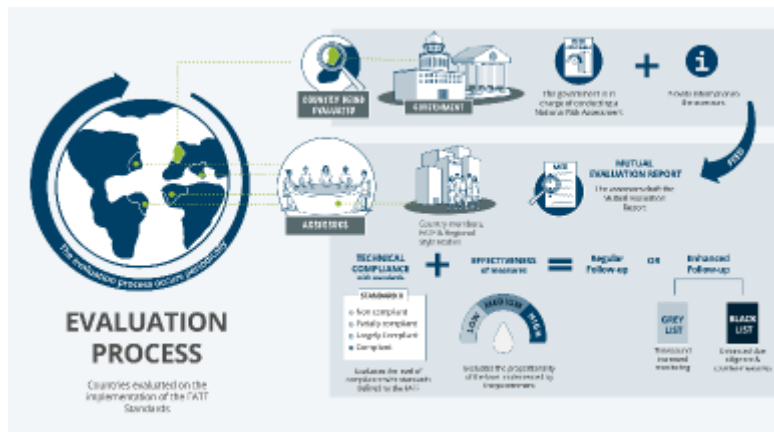
Airgun Surrender Abhiyan initiative

- ❖ The Airgun Surrender Abhiyan initiative of Arunachal Pradesh Government has been selected as India's best success story on wildlife conservation to present in the UNESCO's International Conference on Biosphere Reserves.
- ❖ The Airgun Surrender Abhiyan is an initiative of the Department of Environment, Forest and Climate Change of the state Government.

- ❖ Under the scheme people were invited to voluntarily surrender their Airguns and licensed guns to stop the use of these guns to kill birds and other wild animals.
- ❖ The programme was officially launched on March 17, 2021.

FATF On-Site Review in India

- ❖ A Financial Action Task Force (FATF) team is visiting India as part of the process to conduct the country's mutual evaluations.
- ❖ The FATF team is carry out an assessment of anti-money laundering and terror financing measures taken by the country.
- ❖ FATF comprises 39 members and sets international standards to prevent illegal activities, including drugs, human trafficking and other crimes.
- ❖ FATF has two types of lists viz. Grey List and Black List.
- ❖ Myanmar, Iran, and North Korea are on its 'Black List'.



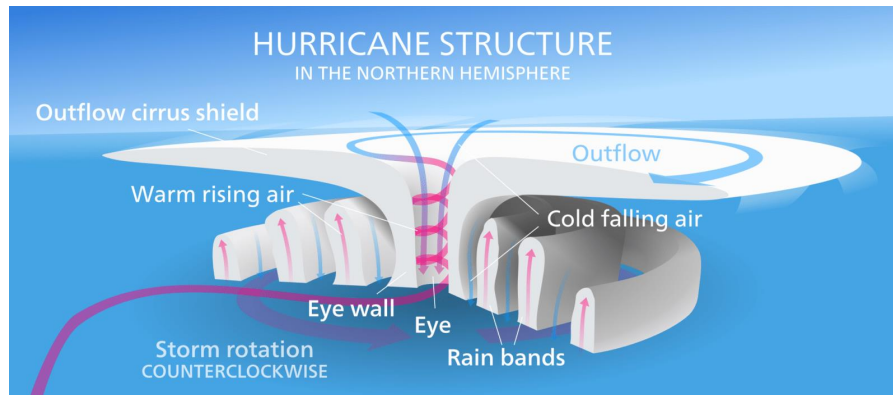
Kavro Doma 360



- ❖ Kanpur-based MKU Limited has unveiling of the Kavro Doma 360 at Milipol Paris.

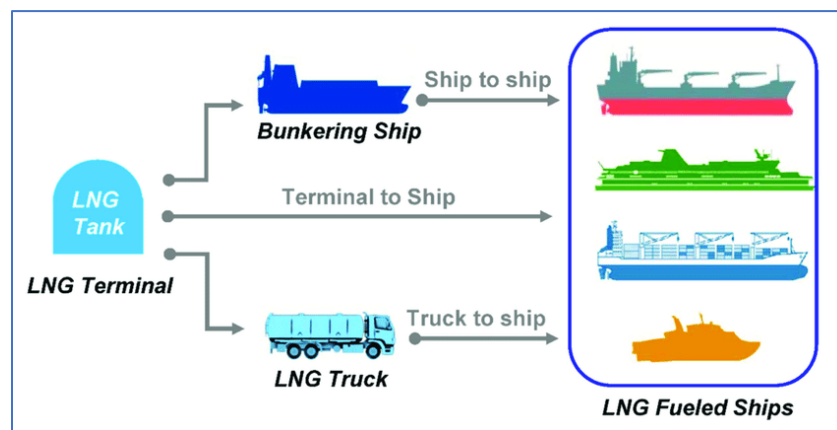
- ❖ This is the first time in the world a ballistic helmet offers uniform protection in all 5 zones of the head.
- ❖ It protects against threats like the AK-47 MSC, M80 NATO BALL, and M193 rifle bullets.

Cyclone Midhili



- ❖ Cyclone Midhili, crossed the Bangladesh coast weakened from a 'deep depression' into a 'depression'.
- ❖ Cyclone Midhili is the second cyclonic formation to hit the Bangladesh coast in quick succession after cyclone Hamoon.
- ❖ The name 'Midhili' was given by the Maldives.
- ❖ Countries affected by the Arabian Sea and Bay of Bengal cyclones rotationally give names of cyclones in a sequence.

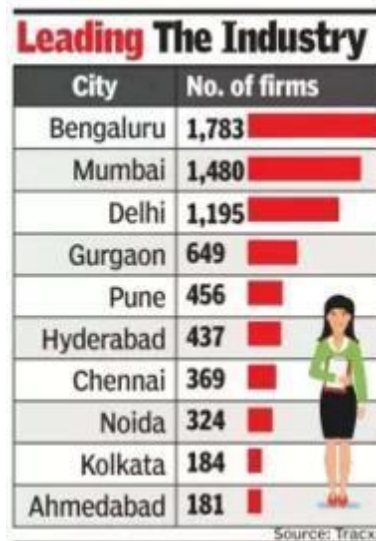
Ship-To-Ship LNG Transfer



- ❖ India's leading gas company, GAIL, has achieved a milestone by conducting the world's first ship-to-ship liquefied natural gas (LNG) transfer.

- ❖ This move aims to optimise shipping costs and reduce emissions.
- ❖ The innovative approach resulted in the reduction of 7,000 tonnes of CO2 emission and reduced the voyage duration from 54 to around 27 days for GAIL's chartered vessel.

Women-Led Startups



- ❖ Bengaluru is home to 1,783 women-led startups followed by Mumbai and Delhi at 1,480 and 1,195 respectively.
- ❖ Noida, Kolkata, and Ahmedabad, took the eighth, ninth and tenth spots, with 324, 184 and 181 women-led startups.
- ❖ India's startup ecosystem is the third-largest hub globally after the US and China.
- ❖ India has more than 61,400 startups.

COVID-19 vaccines and sudden deaths

- ❖ Cases were of hospitalised individuals aged 18-45 years without any known co-morbidity, who suddenly died of unexplained causes between October 2021 and March 2023.
- ❖ The ICMR study found that most sudden deaths were due to cardiac reasons, but may not have been the result of a cardiac arrest, which is why called as sudden deaths.
- ❖ But, COVID vaccination was not found to be the contributing factor for sudden deaths.



ICMR Investigation on anecdotal reports of sudden deaths among healthy young adults in India

Case Control Study done on?

- 729 CASES
- 2916 CONTROLS
- 18-45 AGE GROUP

Who was at risk?

Some healthy individuals aged 18-45, with no underlying health issues who died suddenly from unexplained causes between October 1, 2021, and March 31, 2023.

What was the concern?

These deaths raised concerns that these cases might be related to COVID-19 infection or COVID vaccination. The study was conducted to investigate the contributing factors.

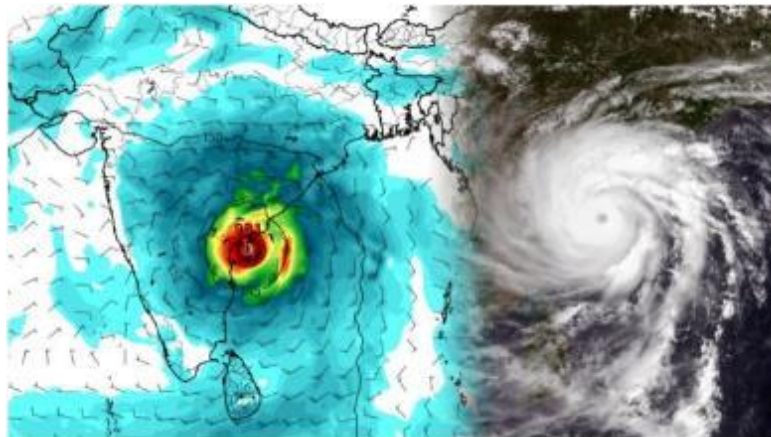
Patient evaluation on?

- Medical & family history
- Smoking & alcohol consumption
- Intensity of physical activity
- Hospitalisation due to Covid
- Covid vaccination status

Conclusion

Past COVID-19 hospitalization, family history of sudden deaths, binge alcohol drinking, increase unaccustomed activity was associated with higher risk of sudden death.

Cyclone 'Michaung'



- ❖ Cyclonic storm 'Michaung' may evolved over the Southwest and adjoining Southeast Bay of Bengal.
- ❖ This cyclonic storm is poised to be the fourth to hit the Bay of Bengal this year, marking the sixth storm overall in Indian waters.
- ❖ The affected regions are anticipated to include India, Bangladesh, and Myanmar.
- ❖ The name Michaung was proposed by Myanmar.

★ ★ ★ ★ ★ ★ ★ ★ ★ ★